Bottoms, Hollows, and Flats: Making and Remaking the Lower Section of the American City

by

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SUBMITTED TO THE DEPARTMENT OF URBAN STUDIES AND PLANNING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

> DOCTOR OF PHILOSOPHY IN URBAN AND REGIONAL PLANNING AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

> > September 2010

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Submitted to the Department of Urban Studies and Planning on August 20, 2010 in Partial Fulfillment of the Requirements for the degree of Doctor of Philosophy in Urban and Regional Planning

ABSTRACT

This dissertation is an urban environmental history of the low-lying American slum. Using qualitative research methods, I investigate the historical phenomenon of topographically based, socio-economic segregation in cities, and how urban actors first created these places then remade them. I examine six low-lying urban neighborhoods in the United States: "The Bottoms" in Columbus, Ohio; "Frog Hollow" in Hartford, Connecticut; "The Flats" in Los Angeles, California; "Black Bottom" in Nashville, Tennessee; "Swede Hollow" in St. Paul, Minnesota; and, "Foggy Bottom" in Washington, D.C.

The first part of the thesis examines how land and factory owners, real estate developers, and speculators made urban lowlands into residential districts nicknamed bottoms, hollows, and flats beginning in the late nineteenth century. I argue that the deliberately incomplete implementation of urban interventions such as sewerage, water supply, and flood protection created interstitial spaces for stigmatized residence. Considered potentially threatening strangers, foreign immigrants, black migrants, and poor country whites were forced down into the lowlands, which functioned as containment zones within the internal structure of the city.

The second part of the thesis details three modes of remaking the lowlands: slum clearance, zoning, and big projects. Late nineteenth century attempts to remove residents and eliminate slums encountered resistance from voters and city officials due to concerns that displaced undesirables would move into their city spaces. By the 1920s, zoning helped to ease middle and upper class fears of invasion by promulgating rules to protect neighborhoods of single-family homes. After 1937, the federal government funded resident removal and physical redevelopment through public housing, highways, and the urban renewal program, erasing the old lowland slums.

The history of urban lowlands highlights the low-lying landscape as an urban nexus point, revealing an inherent conflict between urban actors over containment of the poor versus the redevelopment of stigmatized districts. Planners intervene in this conflict, and assist in the repeated remaking of desirable and undesirable city spaces. The thesis draws connections among physical planning, social inequality, natural processes, and urban space in lowlands of unique interest to scholars and practicing planners in an era of renewed interest in the environment of cities.

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Research for this project took me to public libraries, historical archives, colleges and universities, and lowlying urban neighborhoods around the United States. I am grateful for the assistance of many talented, patient, and helpful librarians and archivists, as well as professors, students, advocates, and planners. Special thanks go to Nick Taggart and Julie Callahan at the Columbus Metropolitan Library who provided assistance in locating maps, vertical files of newspaper clippings, city records, the 1908 Plan of Columbus, and numerous other documents and sources. Glen Creason at Los Angeles Public Library was tremendously helpful in directing me to an incredible variety of detailed and useful maps. Michael Holland at Los Angeles City Archives seemed to be able to efficiently locate and immediately place before me almost any kind of record, from maps to legal records to pertinent secondary sources. In May 2010, it was a great pleasure to return to the American Swedish Institute in Minneapolis, Minnesota, and I'm very grateful to President and Chief Executive Officer Bruce Karstadt, Director of Programs and Exhibits Nina Clark. and archivist Virginia Taylor for their assistance. Debbie Miller of the Minnesota Historical Society Library and Brenda Miller at the Hartford History Center, Hartford Public Library both wrote very detailed answers to my research questions via email so that I could make the best use of my limited research time in those two cities. In Cambridge, Peter Cohn at MIT's Rotch Library was endlessly helpful. I still remember our first conversation about the project, discussing Washington D.C.'s Foggy Bottom neighborhood and my early ideas about low-lying places in cities.

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During my travels, my friends John and Julia Hesse-Moline hosted me in their house in St. Paul, visited Swede Hollow with me, and generally showed me a wonderful time. In Los Angeles, Frank Parrello, Alexis

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My sister Catherine Moga Bryant hosted me on my travels, too, talked to me over the years about the West Bottoms in Kansas City, and shared her own research ideas with me. Her geography thesis on flooding, community, and sense of place in a low-lying, rural, North Carolina town was frequently on my mind during this project, as I wondered about how residents felt about the places they lived in years past. My brother Erik Moga had me laughing, suggesting arcane terms and phrases for inclusion in the text such as "the apoplexy of the urban condition." He also provided for the last minute conversion of graphic files into a format I could use. My Mom and Dad provided incredible amounts of support and encouragement over five years at MIT, helping me with expenses, logistics, brainstorming, and in so many other ways. I am so thankful to have such fantastic parents. My wife Leigh has been, as always, steady, witty, loving, thoughtful, and supportive. She's been by my side during this entire time, writing her own dissertation in urban and regional planning—in our two-dissertation household! I'm so happy to be her partner, amazed by our journey together so far, and excited about the new adventures ahead of us.

PREFACE

New Orleans was one of many inspirations for this research. In Fall 2005, as I started the Ph.D. program in the urban studies and planning at MIT, I watched news of Hurricane Katrina, the flood that followed, its aftermath, and the beginnings of rebuilding. I had visited New Orleans several times before, read about its history, and wrote papers about it as an urban planning student. I felt great affection for the place and its people and as the news got more and more disturbing as the weeks went on that autumn, the government's failed responses infuriated me. I started thinking a lot about the connections between low-lying places, race, poverty, flood risk, and urban development.

At the same time, I was in enrolled in Anne Spirn's seminar class, Urban Nature and Human Design. As I read her work on buried floodplains in Roxbury and West Philadelphia, I was suddenly struck by the sense that natural processes, poverty, and urban development patterns were interconnected in ways that few people seemed able to comprehend, or perhaps were willing to acknowledge. I remembered work I had done as a community outreach worker for five years in a low-income community in Minnesota—a creek ran right through the middle of the apartment complex, basement apartments frequently flooded, and the site was hemmed in by a highway on one side and an airport on the other. I began thinking of it as low-lying land for the first time.

I thought about a place in Kansas City, where my sister had once lived, called the "West Bottoms." I thought back to my experiences on the Board of Trustees of the American Swedish Institute and a new permanent exhibit called "Swedish Life in the Twin Cities"—featuring an area of houses built in a ravine

where poor immigrants lived. It was called Swede Hollow. And I began making connections with many other places I had visited, researched, worked in, or read about, too—the low-lying neighborhoods next to the Los Angeles River; Foggy Bottom in Washington D.C., a strange name that had intrigued and puzzled me since I was a kid growing up in the area; and, Frogtown in St. Paul, another unusual name of the same type.

All these ideas swirled together at first, and I was unsure what to make of them. In Spring 2006, when it came time to write a brief description of what topic I had in mind for my dissertation, I wrote that I would conduct "an investigation of the historic development of one or more low-lying poor neighborhoods in American cities" and "explore the interconnections between socio-economic status, race, terrain, and planning." The title, I thought, would be "The Bottoms: Lowlands, Water, Disease, Race, Poverty, and Planning." As it turned out, the title would change, and there were many twists and turns along the way before I presented the topic in my dissertation proposal defense in December 2008, but that's where it started—an unusual combination of current events, a sense of injustice, reflections on past experience, and the excitement and sense of possibility that one gets when encountering new ideas for the first time.

The names provided the entry to the topic, and, as reflected in the final product, they continue to fascinate me. Reading Irving Allen Lewis's *The City in Slang* provided a key insight and the inspiration for the title bottoms, hollows, and flats were colloquial names for stigmatized, low-lying places, words that combined social and physiographic description. Along the way, the project continued to turn up surprises, new examples of the phenomenon, and a glint of recognition from many people I talked to—"Oh, I know a place like that," many said to me. In a literal sense, the project also took me to new places, including a four-week road trip through Scranton, Pittsburgh, Youngstown, Columbus, Cincinnati, Louisville, Lexington, Nashville, Atlanta, Columbia, Raleigh-Durham, and Richmond. Two places I visited on that trip would become key

components of the dissertation: Columbus and Nashville. It is my hope that this research encourages others to investigate this phenomenon and to cross disciplinary boundaries between water and poverty research, community development and landscape studies, geography and sociology.

INTRODUCTION

~~~~~ Chapter 1 ~~~~~~~

Lowlands and Highlands

In the colloquial language of American city form, "the bottoms" once meant both alluvial land and the place where poor people lived. Low-lying, poorly drained, and flood-prone, these city districts were often immediately adjacent to hilltop neighborhoods with names like Quality Hill or The Heights, and separated by a tall bluff or steep incline. While real estate developers employed highland names as a common marketing device for middle and upper class suburban subdivisions, journalists, reformers, and neighbors used lowland names like bottom, hollow, and flat as slang terms for slums. In the nineteenth and early twentieth century, urban lowland residential districts became ubiquitous: they served as containment areas for many desperately poor people seeking opportunity in the city, finding housing nowhere available but in the topographical low zones.

Speculators, boosters, builders, and engineers transformed low-lying wet places into urban districts with earthen levees, concrete channels, brick-lined culverts, iron rails, stone foundations, and wooden houses. They made lowlands into poor neighborhoods to facilitate industrial development and social segregation. Landlords, property owners, and city leaders facilitated these settlement patterns. Ethnic, racial, and religious prejudice combined with municipal neglect to force the poor into "the bottoms." Some poor people squatted, building their own simple dwellings on available undeveloped lands, while others rented small houses or rooms. Some lowland residents owned their own dwellings, paying rent on the land they

occupied, others paid relatively high rents for a poorly maintained, shared room in a dilapidated building. Poor people lived in the lowlands, and they were regarded as strangers by the larger society: foreigners speaking unfamiliar languages with unusual customs, foods, clothing, and beliefs; former slaves and free blacks seeking opportunity in the city; poor country whites fleeing rural poverty.

Squatters, speculators, informal laborers, house builders, job seekers, railroad company men, and factory owners developed lowland areas into residential zones during the period of rapid industrial growth of the nineteenth century city. They built in ravines, on mud flats, under bridges, and along riverbanks, on poorly drained or flood prone land. Over time, below the bluff, across the river, or on the other side of the tracks became a place for people denied access to more affluent parts of the city, forced down by a combination of lack of housing, racial and ethnic prejudice, and municipal neglect. The "strangers," urban newcomers arriving from the countryside or from abroad, settled downstream from mills, slaughterhouses, and tanneries, and alongside railroad tracks at the river's edge. They sought out what housing opportunity they could find in little houses on steep hillsides, cottages perched on rocky terrain, shacks deep in a ravine, or other types of shelter on available lands. Factories, depots, and warehouses crowded up against urban rivers and streams, which provided water as a source for manufacturing processes and as a conduit for disposing of waste products. Low-lying slums became a defining element in the new urban landscape of the railroad-industrial city, a vertical stratification of city life.

From the 1870s onward, bottoms, hollows, and flats became a fixture of city life. The new districts often had platted streets, factories with jobs, and housing for workers, overlaying a geometric pattern of human development on top of a natural area defined by the curving lines of watercourses, hills, or bluffs. The nineteenth-century urban landscape that came to be defined by "factory, railroad, and slum" was dramatically evident in the lowlands, where factories, warehouses, and poor-quality housing were

constructed next to the tracks on the low-lying flat ground.<sup>1</sup> Some exceptions, such as difficult to reach high places, could be poor or working class neighborhoods. These types of places attracted unique reputations as notable counter-examples or inversions of the usual trend (often with unusual names like Poverty Hill), but the association between low places and "slums" was the dominant one. Forged by industrial-residential development patterns, lowland slums persisted well into the twentieth century.

Reformers urged city officials to "clean up" the slums, but property owners often had a vested interest in maintaining the status quo, at least until a more profitable land use came along. Over time, reformers, planners, and concerned citizen groups successfully eliminated some of the lowland "slums," taking advantage of new rules and regulations like zoning. In an era of limited municipal power and professed faith in private solutions and laissez faire capitalism, elected officials were reluctant to interfere with property rights. But an even greater barrier to removal was the fear of middle and upper class homeowners that lowland residents might invade their neighborhoods if displaced. Devastating urban floods in the 1910s and 1920s brought new attention to the lowlands, just as planners tended to designate them as apartment districts or industrial areas on newly instituted zoning maps. Slum clearance, public housing, redevelopment, flood control, and highway construction programs of the New Deal and urban renewal eras taracted lowlands, physically transforming them, dispersing populations. Immigration restrictions and mass suburbanization further reworked the urban landscape. A century later, their histories have been forgotten or erased. The history of these places brings into sharper focus the connections between physical planning, social inequality, and urban space that is particularly applicable to practicing planners in an era of renewed interest in the environment of cities.

These broad patterns of urban lowland development and the practice of labeling urban districts as bottoms, hollows, and flats, reflect the complexity of social-physical-natural interactions of place and the historical

significance of topography in shaping patterns of social segregation and urban poverty. As these neighborhoods became a fixture of the new urban landscape, city dwellers adopted new ways of talking about the emerging "ethnic" lowland slums by using pejorative labels and inventing new place names.

...vertical metaphors place the rich on high ground or the poor on low, and this is historical fact in many cities. Horizontal or lateral figures of speech usually place the rich and poor neighborhoods either on this or that side of, in front or in back of, or near to or far from features of the urban environment that symbolize class divisions. These features are usually a dirty, noisy, or malodorous industrial activity, such as railroad tracks, stockyards, or the gas works... Vertical classifications of rich and poor areas reflect the historical tendency for the rich and powerful to build on high ground, leaving, if not forcing, the poor to live on low ground, such as in bottoms, hollows, and flats, often on the other side of the tracks.<sup>2</sup>

Bottoms, hollows, or flats were commonly used words for places where poor people lived in the city.<sup>3</sup> Negative associations with low or down are a common part of American speech, such as "low status." Linguist George Lakoff and philosopher Mark Johnson argue that this metaphor is one in which "spatialization is so essential a part of a concept that is difficult for us to imagine any alternative metaphor that might structure the concept."<sup>4</sup> They provide several examples to illustrate the general rule that "HIGH STATUS IS UP; LOW STATUS IS DOWN": "He has a *lofty* position. She'll *rise* to the *top*. He's at the *peak* of his career. He's *climbing* the ladder. He has little *upward* mobility. He's at the *bottom* of the social hierarchy. She *fell* in status."<sup>5</sup>

These names constituted a new language reflecting a new socio-spatial understanding of the industrial city, an uneven physical landscape with slums in low places. They expressed both topography and poverty in one phrase, fusing together pejorative cultural associations and ascribing marginality. City dwellers used landscape names to represent the people who lived there. Urban lowlands were clearly bounded and demarcated, and they were isolated. As urban districts they became associated with the characteristics of the people that lived there, with city dwellers labeling them with ethnic and racial descriptors, animal names, or adjectives associated with poor air quality or other environmental conditions. Black Bottom

(Nashville, Philadelphia, Detroit, and elsewhere), Russian Bottoms (Lincoln, Nebraska), Swede Hollow (St. Paul), Bohemian Flats (Minneapolis), Smoky Hollow (Youngstown, Ohio), Skunk Hollow (Pittsburgh), Frog Hollow (Hartford), Foggy Bottom (Washington D.C.), West Bottoms (Kansas City), Shockoe Bottom (Richmond), and Tortilla Flats (Ventura, California and elsewhere) are a few of the more prominent English language examples. Many districts also acquired names in the languages spoken by residents and immigrants such as *Svenska Dalen* (Swedish for Swede Hollow, St. Paul), *El Hoyo* (Spanish for "The Hole"—East Los Angeles), or *Basso La Vallone* (Italian for "Down in the Hollow," Pittsburgh). Other districts were simply known as The Bottoms (Columbus, Ohio) or The Flats (Los Angeles). City dwellers mixed and mingled descriptors of land and water features, some of them older terms and place references, with ethnic labels and sobriquets to describe the lower section of the American city. The resulting place names, while often offensive and derogatory, spoke powerfully to the emergence of the new residential-industrial zones inhabited by marginalized strangers.

In contrast, the highlands offered a residential environment that was less noisy, odiferous, and dangerous. Describing the Twin Cities of Minneapolis and St. Paul, architectural historian Larry Millet explains how topography became associated with class, representing a new social geography of the city.

The hierarchy of altitude was especially strong in the Twin Cities in the late nineteenth century. While the rich resided in their mansions on Summit Hill in St. Paul and Lowry Hill in Minneapolis, the poorest Twin Citians were tucked away—out of sight and mind—in deep holes like Swede Hollow or on the floodplains below the river bluffs. Isolated from the city by barriers of language, culture, and geography, these enclaves were often identified with a particular ethnic group, although most were actually quite diverse in their makeup.<sup>6</sup>

As Millet explains, often the reasons for settlement had more to do with access to work and affordability in the industrial city than any "natural" connection between the poor and low places. Along the Mississippi . . River, he writes, "land was so cheap that even the poorest families could build homes of their own."<sup>7</sup>



Figures 1 and 2: Advertisement for Boyle Heights, a subdivision of Los Angeles, as it appeared in the Los Angeles Herald, 1906; Advertisement for Congress Heights, a streetcar suburb of Washington D.C., from the Washington Times, 1902. Note the reference to high land and health, a common theme found in these advertisements. In Washington D.C.'s Congress Heights, the promoter informs us, "health is wealth."

Writers like Sinclair Lewis observed this phenomenon, generalized it, and made it a part of American

literature and culture. Geographer William Meyer described Lewis's setting for the novel Babbitt.

The Midwestern city of Zenith, from what we know of it, had a clear residential pattern during the 1920s: income and status rose with altitude. The lower classes dwelt in the lowlands near the Chaloosa River. The development of Floral Heights, commanding a view of the city from a hillside, catered to the middle class. The city's wealthiest families lived on Ridge Crest Road, its name denoting a topographic summit and suggesting a social one. The most attractive new suburbs were springing up in an outlying area of wooded hills. Even advertisements for the cemetery emphasized its elevation and view. Zenith existed only in the novels of Sinclair Lewis... But if it was a creation of fiction, it was not one of fantasy.<sup>8</sup>

Lewis's readers were familiar with the ups and downs of city terrain, and they recognized the social meaning of topographical and spatial difference. In the smaller scale of many nineteenth and early twentieth century cities, the spatial segregation of the poor was visibly interconnected with the features of the natural landscape. Lowlands became associated with industrial pollution, noise, crime, disease, and flood danger, "the heights," "highlands," and hilltops became desirable residential subdivisions.

Of course, the pattern of low-income residence in low-lying areas was never absolute. Indeed, while many low-income people ended up in the bottoms, it was not the only place for the poor. Likewise, some low-lying places have historically been associated with high-income residence, such as coastal areas and lakefronts. Comparing income-related residential characteristics by elevation or altitude yields a matrix with four cells, as seen in Table 1.

Table 1: A Simple Classification of Topography, Wealth, and Place Names

|      | High elevation                                      | Low elevation               |
|------|-----------------------------------------------------|-----------------------------|
| Rich | The Heights<br>Highlands<br>Hilltop<br>Quality Hill | Waterfront Property         |
| Poor | Poverty Hill                                        | Bottoms<br>Hollows<br>Flats |

In studies of Worcester and Boston, Massachusetts, Meyer found several historical examples of high elevation, low status residential areas.<sup>9</sup> Sociologist Irving Allen Lewis explains that "[t]he metaphor, too, is sometimes turned on its head and denotes poor areas as if they were on a hill—and sometimes they actually were. High elevations in certain geographic surroundings can be undesirable places to live for a variety of reasons, such as difficult access, and locally symbolize low status."<sup>10</sup> He adds that in New York, Vinegar Hill and Dutch Hill were considered undesirable, but "[t]he hill more usually was a high-status place to live, as on Washington Heights."<sup>11</sup>

It should also be noted that in many cities across the country, cities cut down hills to fill in marshy land, improve traffic flow, and eliminate steep slopes.<sup>12</sup> For example, Boston's hill cutting and land making began in the eighteenth century. "In 1799, the Mount Vernon Proprietors bought John Singleton Copley's property on the Trimountain, at the time mainly upland pasture; four years later, [they] had fifty to sixty feet sliced off the top of Mount Vernon, carted down the hillside in a gravity railroad, and dumped in the water at the base."<sup>13</sup> Perhaps the most famous example of making new land is Boston's Back Bay. Begun in 1858, and lasting almost forty years, developers brought gravel by railroad nine miles from Needham to fill the marshes and construct a new exclusive residential district. Filling in areas as large as the Back Bay and cutting down hills were expensive propositions, ones beyond the scope of resources of smaller cities, but the motivation and intent to remake the landscape, especially for residential real estate development, was commonplace. As we shall see, developers and engineers modified the urban landscape of city after city by constructing culverts, drains, flumes, canals, embankments, levees, and bridges.

At the same time, the low-lying American slum was ubiquitous. Indeed, dramatic achievements in civil engineering such as new bridge spans literally bypassed the lowlands, creating new vantage points for looking down on the poor people living below. Like other slums, the lowlands were separated from other

parts of the city, a change from earlier building practices when the poor tended to live in alleys or smaller dwellings at the interior of a city block.<sup>14</sup> Figure 3 shows how physiographic, socio-economic, and built environment characteristics defined the urban lowland slum, as distinguished from other lowland and poor landscapes of the American city.



Figure 3: Urban bottoms, hollows, and flats as the intersection of three characteristics: poverty, urban residential land use, and low topography. Note that non-urban lowlands, non-poor urban lowlands, and slums on other types of terrain are not considered part of the phenomenon to be investigated.

For some city residents, the slum became a place to visit for charity work, entertainment, or exploration yielding the term "slumming."<sup>15</sup> "By the 1880s the middle classes, through their agents of social control, had seen to it that most low forms of prostitution, gambling, and illegal drinking had been driven into the slums. The well-to-do had to go slumming to find low forms of vice and entertainment."<sup>16</sup>

As landscapes, these districts provoked debate about the proper relationship between built areas and open spaces in the city. As lived environments, they aroused racist, anti-immigrant fears about disease, housing conditions, and moral behavior. As planning problems, they attracted the attention of sanitarians, housing reformers, and landscape architects—the same professionals that would establish urban planning as a discipline in its own right. As urban places, they were mythologized, despised, and constantly subjected to calls for resident removal and dispersion.

Urban lowlands like "the Bottoms" have historically suited various human needs: economic, political, and social. Real estate speculators, park advocates, and civic leaders, among many others, have viewed the low-lying landscape as a template upon which to create something useful, profitable, or beneficial to the city. In this way, lowlands are no different from other places in the city. What is unique about urban lowlands, however, is the set of constraints and opportunities they represented to city builders and urban reformers in the nineteenth and twentieth centuries. The physical features of the land became attributes of "site" that defined their real estate value as well as potential uses. The dictates of each particular macroeconomic phase or technological era, whether it be the fundamental necessity of river-based transportation and commerce, the economic urgency and pressures related to developing new railroad connections, or the rapid growth in the urban population and the need for housing spurred by industrial development, influenced how social elites, city officials, and powerful industrial and corporate interests saw the lowlands.

#### Case Selection and Methods

This dissertation analyzes six case study sites: the Bottoms, Columbus, Ohio; Frog Hollow, Hartford, Connecticut; The Flats, Los Angeles, California; Black Bottom, Nashville, Tennessee; Swede Hollow, St. Paul, Minnesota; and, Foggy Bottom, Washington, D.C. I chose the number of cases (six) in order to have a large enough sample to examine a variety of conditions, but not so many as to make in-depth, qualitative research infeasible. Individual cases were selected based on five characteristics: urban setting (not rural or small town); low topography (observable physiographic characteristics); neighborhood scale (one of several neighborhoods with a city); named bottom, hollow, or flat (not necessarily in current use); and history of poverty and/or reputation as a slum district (as documented in secondary sources and/or local histories).

The set of cases was chosen to include examples from different regions of the United States as well as to include both flat cities and hills cities (see Table 3). Cases that were too small in scale (a small cluster of homes, for example) or too large in scale (an entire city or region) were rejected. In addition, a month-long field investigation trip to sites in the Eastern United States and preliminary research were conducted to determine the suitability of the cases for in-depth research. Nashville's Black Bottom was chosen from the compiled list of multiple Black Bottom neighborhoods around the United States due to its age and urban setting: research indicated that it was one of the oldest and largest neighborhoods with this name, and its presence was perhaps one reason why the name became widespread historically.

| #  | Place Name                                          | City             | State             |     | #  | Place Name                          | City        | State        |
|----|-----------------------------------------------------|------------------|-------------------|-----|----|-------------------------------------|-------------|--------------|
| 1  | American Bottoms<br>(region)                        | N/A              | Illinois          |     | 31 | Foggy Bottom                        | Washington  | D.C.         |
| 2  | Anacostia Flats                                     | Washington       | D.C.              |     | 32 | Frog Hollow                         | Hartford    | Connecticut  |
| 3  | Black Bottom                                        | Columbia         | South<br>Carolina |     | 33 | Fulton Bottom                       | Richmond    | Virginia     |
| 4  | Black Bottom                                        | Detroit          | Michigan          |     | 34 | Goose Hollow                        | Portland    | Oregon       |
| 5  | Black Bottom                                        | Jacksonville     | Florida           |     | 35 | Happy Hollow                        | Omaha       | Nebraska     |
| 6  | Black Bottom                                        | Lakeland         | Florida           |     | 36 | The Hollow                          | Bridgeport  | Connecticut  |
| 7  | Black Bottom                                        | Nashville        | Tennessee         |     | 37 | Mosquito Flats                      | lowa City   | lowa         |
| 8  | Black Bottom                                        | Philadelphia     | Pennsylvania      | No. | 38 | North Bottoms                       | Lincoln     | Nebraska     |
| 9  | Bohemian Flats                                      | Minneapolis      | Minnesota         |     | 39 | Panther Hollow                      | Pittsburgh  | Pennsylvania |
| 10 | The Bottom                                          | Alexandria       | Virginia          |     | 40 | Rock Island<br>Bottom               | Fort Worth  | Texas        |
| 11 | The Bottom                                          | Charlottesville  | Virginia          |     | 41 | Russian Bottoms<br>or South Bottoms | Lincoln     | Nebraska     |
| 12 | The Bottom<br>(also First Bottom,<br>Second Bottom) | Cincinnati       | Ohio              |     | 42 | Scranton Flats                      | Scranton    | Pennsylvania |
| 13 | The Bottoms                                         | Baton Rouge      | Louisiana         |     | 43 | Sheridan Hollow                     | Albany      | New York     |
| 14 | The Bottoms                                         | Battle Creek     | Michigan          |     | 44 | Shockoe Bottom                      | Richmond    | Virginia     |
| 15 | The Bottoms                                         | Columbus         | Ohio              |     | 45 | Skunk Hollow                        | Pittsburgh  | Pennsylvania |
| 16 | The Bottoms                                         | Durham           | North<br>Carolina |     | 46 | Slocum Hollow                       | Scranton    | Pennsylvania |
| 17 | Buttermilk Bottom                                   | Atlanta          | Georgia           |     | 47 | Smoky Hollow                        | Youngstown  | Ohio         |
| 18 | Chicago Bottoms                                     | Lexington        | Kentucky          |     | 48 | Southside Flats                     | Pittsburgh  | Pennsylvania |
| 19 | Cow Hollow                                          | San<br>Francisco | California        |     | 49 | St. Paul's Bottom                   | Shreveport  | Louisiana    |
| 20 | Crawfish Bottom or<br>"Craw"                        | Frankfort        | Kentucky          |     | 50 | Swede Hollow                        | St. Paul    | Minnesota    |
| 21 | Davis Bottom                                        | Lexington        | Kentucky          |     | 51 | Tanyard Flats                       | Atlanta     | Georgia      |
| 22 | East Bottoms                                        | Kansas City      | Missouri          | 140 | 52 | Tortilla Flats                      | Ventura     | California   |
| 23 | Eastman Flats                                       | Minneapolis      | Minnesota         |     | 53 | Trimble Bottom                      | Nashville   | Tennessee    |
| 24 | Felony Flats                                        | Portland         | Oregon            |     | 54 | Village Bottoms                     | Oakland     | California   |
| 25 | Felony Flats                                        | Spokane          | Washington        |     | 55 | West Bottoms                        | Kansas City | Missouri     |
| 26 | The Flats                                           | Cleveland        | Ohio              |     |    |                                     |             |              |
| 27 | The Flats                                           | Los Angeles      | California        |     |    |                                     |             |              |
| 28 | The Flats                                           | Rochester        | New York          |     |    |                                     |             |              |
| 29 | The Flats                                           | Wilmington       | Delaware          |     |    |                                     |             |              |
| 30 | Fickett Hollow                                      | Los Angeles      | California        | 1   |    |                                     |             |              |

Table 2: A Partial List of Bottoms, Hollows, and Flats as Historic Urban Place Names in the United States

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Figures 4 and 5: Distribution of identified urban neighborhoods named bottoms, hollows, and flats (top map) compared to location of the six case study sites: Los Angeles, St. Paul, Nashville, Columbus, Washington D.C., and Hartford (bottom map).

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Research on the six case study sites included field observations, site photography, and interviews. Historical sources consulted included primary sources in archives and libraries, local histories, and other secondary sources. Archival research included visits to the Columbus Metropolitan Library, Ohio History Center, City of Columbus, Hartford Public Library, Los Angeles Public Library, Los Angeles Tax Assessor Map Archive, Los Angeles City Archives, Nashville Public Library, Metropolitan Archives (Nashville/ Davidson County), Tennessee State Library and Archives, St. Paul Public Library, American Swedish Institute, Minnesota Historical Society, and the Library of Congress. Newspaper research involved internetbased and microfilm searches of the *Columbus Dispatch, Ohio State Journal, Hartford Courant, Los Angeles Times, Los Angeles Herald, Nashville American, Nashville Banner, The Tennessean, St. Paul Daily Globe, St. Paul Pioneer Press, Washington Post, Washington Times, New York Times, Atlanta Constitution*, and other newspapers. Maps consulted included Sanborn fire insurance maps, real estate maps, topographical maps, tax assessor maps, zoning maps, plat maps, street maps, parcel maps, and GIS maps. Additional sources included correspondence, student reports, dissertations, city plans, legal records, and city directories.

## Hills Cities and Flat Cities

Looking at the city as a unit, as an area of terrain with varying altitudes and physiographic features, it is commonly said that there are "hills cities" and "flat cities." San Francisco, Seattle, and Pittsburgh are regarded as three of the hilliest cities in the United States. In these places, hills and valleys are unavoidable. Topography is omnipresent, a part of the place. Steep slopes traversed by cable cars or funicular railways, staircases or even ladders, became part of the city fabric and the city identity. In some cities, topography has been considered like a constructed feature, a stage for city life, a backdrop, or a

setting. In Cincinnati, local historians have referred to the city's site as a "natural amphitheater" with hills on three sides and an opening to the river.<sup>17</sup> Topography and city interconnect making each city unique. In "flat cities" like Chicago or Columbus, Ohio, elevation is typically disregarded as a factor in city form. Nevertheless, small differences in topography may influence where water flows and what areas flood. All cities are three-dimensional; some cities simply have a greater range of altitudinal variation.

| Flat                                                                                              | Intermediate                                                                            | Steep<br>Los Angeles<br>Washington D.C.<br>Boston<br>Seattle<br>San Francisco<br>Pittsburgh |  |  |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|--|
| New York<br>Chicago<br>Detroit<br>Louisville<br>Houston<br>Miami                                  | Philadelphia<br>Cleveland<br>Baltimore<br>Atlanta<br>Minneapolis/ St. Paul<br>St. Louis |                                                                                             |  |  |
| Garden Grove CA<br>New Orleans<br>Norfolk VA<br>Phoenix<br>Buffalo<br>Columbus OH<br>Rochester NY | Milwaukee<br>Denver<br>Portland OR<br>San Antonio<br>San Jose<br>Hartford<br>Nashville  | Oakland<br>Cincinnati<br>San Diego<br>Kansas City<br>Omaha<br>Duluth<br>Yonkers             |  |  |

Table 3: Selected Cities from Arlinghaus and Nystuen's Classification of Terrain Peer Groups<sup>18</sup>

Table 3 shows a typology classifying cities by altitudinal variation developed as part of a study of bus routes. The authors studied the effect of terrain on citywide bus systems, creating a measure of relative hilliness of cities in order to produce comparison or "peer" groups.

In this dissertation, case studies have been chosen to reflect a range of terrain conditions, including some cities characterized by little variation in altitude across the city and other cities with a high variation and steep slopes. According to Arlinghaus and Nystuen's classification, for instance, Columbus is a flat city; Hartford, Nashville, and St. Paul are intermediate cities; and, Los Angeles and Washington D.C. are cities

with steep terrain. It should be noted that Arlinghaus and Nystuen developed their measure in the 1980s, after significant cutting and filling occurred in many cities. It is also the case that some cities sorted into different categories here share significant terrain characteristics, such as Philadelphia and Washington D.C.: both located on the piedmont-coastal plain fall line. The typology is employed here only as one possible, simple measure of city terrain type.

#### Urban Nature

The combination of built form with natural features and ecological systems that results from human action expressed in cities may be called architecture, cityscape, urban nature, or landscape. The built environment and social character of various districts of the city are interrelated with natural features and systems. The city is not simply built on the land, it is where land and water (and air) come together, creating riverfronts, harbors, dumping places, railroad districts, parks, and neighborhoods.

In *The Granite Garden*, Anne Whiston Spirn described the common failure to appreciate natural processes in cities and warned of the dangers of neglecting nature's power.

Nature pervades the city, forging bonds between the city and the air, earth, water, and living organisms within and around it. In themselves, the forces of nature are neither benign nor hostile to humankind. Acknowledged and harnessed, they represent a powerful resource for shaping a beneficial urban habitat; ignored or subverted, they magnify problems that have plagued cities for centuries, such as floods and landslides, poisoned air and water. Unfortunately, cities have mostly neglected and rarely exploited the natural forces within them.<sup>19</sup>

The dangers posed by floods and other hazards have been a particular and long-lasting concern for city builders. The hardest hit areas are often the low-lying "natural-process lands" along the riverfront, the

bottoms and flats.<sup>20</sup> Likewise, low areas alongside creeks and streams in ravines and gullies may be

subject to destructive downhill flows. Urban lowlands are part of the city and part of nature.<sup>21</sup>

In cities across the United States, low-lying landscapes were transformed in the late-nineteenth and early-

twentieth centuries with continuing implications for urban neighborhoods and human wellbeing in cities.

Spirn documented these changes in one urban neighborhood over more than a century.

Take the example of the Dudley Street neighborhood in the Roxbury section of Boston... The neighborhood consists of four distinct physiographic units: the lower slopes of a broad plateau; a knoll; a flat lowland; and a valley that separates the two higher land forms. In the 18<sup>th</sup> and 19<sup>th</sup> centuries, the landscape of this neighborhood consisted of estates and farms; the valley bottom was the floodplain of a large stream. Between 1854 and 1906, the landscape changed dramatically. The estates and agricultural fields were replaced, first by large, single-family homes, then by smaller, attached houses, commerce and industry. The stream in the central valley was visible on maps as late as 1884. By 1906, however, most of the floodplain had been filled and built upon, and the stream was buried underground in a large sewer. Between 1964 and 1986 this process was reversed, as the neighborhood became subject to disinvestment and abandonment. Although 30% of the land in the entire neighborhood is now vacant, 90% of the old floodplain is vacant, and only 20% of the knoll is vacant; almost all of those vacancies occurring on the lower slopes. This pattern is repeated in Boston's other inner-city neighborhoods... <sup>22</sup>

In subsequent research, Spirn found a similar historical process at work in the Mill Creek neighborhood of Philadelphia, where she founded the West Philadelphia Landscape Project.

Spirn's analysis of the long process of landscape change over time in Dudley Street in Boston and Mill Creek in West Philadelphia powerfully demonstrates the significance of urban lowlands to cities. Beginning in the mid-1980s, she documented how "valley bottoms" were systematically built over in the late nineteenth and early twentieth centuries, often with poorly-constructed multi-family housing; how these houses and apartment buildings frequently subsided, flooded, or collapsed; how floodplain processes continue when creeks and streams are put underground in pipes; and how vacant land in these areas represents a potential resource for addressing environmental problems such as combined sewer overflows and as inspiration for future planning and design, if natural processes are taken into consideration.<sup>23</sup> She coined the term "buried floodplain" to describe this phenomenon.<sup>24</sup>

As Spirn has shown, environmental, social equity, and physical planning issues are deeply intertwined within urban lowlands and cities. This thesis builds upon Spirn's path-breaking lowland work, extending it to describe the phenomenon in six other cities, examining historic and cultural aspects such as the language of lowlands, drawing connections, and offering an analytical history of the forces and interests that conspired to produce deliberately incomplete development in these areas.

In the historical processes of laying out cities, and especially in their subsequent building and rebuilding, topographical and natural features like bluffs and river bottoms, ravines and creeks, plateaus and hilltops became the setting and the backdrop, as well as the architect or designer's "site," for human building activities. The urban landscape is comprised of built as well as un-built, "natural," or "open space" features. The city presents a complex, ever-changing tableaux of spatial relationships over time. Urban lowlands are a unique part of the city fabric in that they are the location of waterways, as well as constructed urban systems of water supply, waste disposal, and drainage. Historically they have been simultaneously centrally-located and socially marginal. Low-lying places once defined by small creeks, streams, brooks, or runs that flowed across the surface of the land, down towards the river or the harbor, were remade. Urban systems replaced natural ones to facilitate waste disposal and flood control objectives.

Low-lying topography is not a person—it does not have agency. People made these decisions in relation to factors as diverse as design trends, engineering technologies, building practices, available materials, economy, and cultural and social understandings. Ideas in architecture and town planning also played a role. Likewise, the social meanings of those built districts, zones, and neighborhoods were also diverse.

Nevertheless, the pattern that developed from the process of city growth and expansion in the nineteenthcentury city: the lowlands became the domain of the poor.

#### Floodplains

Bottoms, hollows, and flats are often referred to as floodplains, a powerful term with its own history. The *Oxford English Dictionary* and *Merriam-Webster Dictionary* date the first use of the term to 1873, but it was not until the 1930s that the phrase began to be widely used (and spelled as floodplain rather than flood plain) in the United States.<sup>25</sup> Geographer Gilbert White pioneered research on floods and human responses to them.<sup>26</sup> In the simplest definition, the floodplain is an area of land that floods. Stated in terms of natural processes, floodplains can be defined as "natural detention areas for storm water."<sup>27</sup>

White used the term "flood plain" as early as 1937, when he published "Notes on Flood Protection and Land-Use Planning" and served as the Secretary of the Water Resources Committee of the Natural Resources Committee under President Franklin D. Roosevelt.<sup>28</sup> Assigned the task of reviewing flood control proposals, White became skeptical of the approaches being used.<sup>29</sup> He wrote at the time: "Floods are natural phenomenon; flood damages are the products of human action. With few exceptions, major flood flows result from natural, hydrological events; and with few exceptions the damages... are the price of man's encroachment upon natural flood plains."<sup>30</sup>

According to White, a floodplain is not necessarily coterminous with the area where alluvium is deposited or the same as "a plain built up by stream deposition."<sup>31</sup> In his "highly influential University of Chicago

dissertation," published in 1945 under the title Human Adjustment to Floods: A Geographical Approach to

the Flood Problem in the United States, White gave a detailed definition of the term.<sup>32</sup>

The term <u>flood plain</u> is used to mean that land outside of a stream channel described by the perimeter of the probable limiting flood. It is land which is not covered by the stream at low flow or average flow, but which has been flooded in the past or may be flooded in the future. It has no other essential feature; it may be broad or narrow, frequently flooded or rarely flooded. In this sense, every stream which floods also has a flood plain... This definition of flood plain differs from that commonly employed by geomorphologists, who use it to mean the alluvial floor of a valley... Indeed, none of the common geological classifications of streams or valleys is of special significance in a broad approach to the flood problem. From the standpoint of human adjustment to flood hazard, it makes little difference whether a segment of a stream valley is consequent of subsequent, mature or old, rejuvenated or drowned. The significant physical features are the width of the plain, its slope, its underlying materials, and its position in the stream system (emphasis in original).<sup>33</sup>

White defined the differences between narrow flood plains ("an average width of less than 120 feet"), medium flood plains ("an average width of more than 120 feet and less than one-half mile"), and broad flood plains ("an average width of more than one-half mile").<sup>34</sup> He noted that "120 feet... is the average width of the necessary right of way for a single-tract railroad together with a two-lane highway, and it also coincides roughly with the minimum width of fields for effective cultivation in many parts of the United States" and "[o]ne-half mile is selected as a convenient limit diversion between medium and broad flood plains of urban occupancy adjacent to a highway and a railway, or for a square-shaped farm having an area of 160 acres."<sup>35</sup>

White's analysis is relevant to this investigation in two ways: first, it provides context for understanding the idea of "floodplains" in historical perspective as an analytical concept, and later as a land use planning tool, that researchers developed decades after major flood events in many American cities; second, it suggests the state of floodplain research at the time that many urban lowlands were cleared and redeveloped. In 1958, the University of Chicago published a second influential analysis of floodplains by White and several colleagues titled *Changes in Urban Occupance of Flood Plains in the United States*.<sup>36</sup> As the following case studies demonstrate, the occupants of many of these low-lying urban neighborhoods were historically the

poor and marginalized. By the 1950s, however, many cities were in the process of removing these residents and remaking the lowlands. Finally, White's analytical framework, combined with Spirn's "buried floodplain" concept, provides a way to assess smaller-scale, hybrid landscapes where nineteenth century systems of engineered drainage and sanitation interact within natural processes in urban neighborhoods.

## The Lower Section and the Whole of the City

Models of urban form typically represent the American city as a flat plane with streets, blocks, and districts arrayed across a two-dimensional space. Rarely is the city depicted in three dimensions other than with contour lines on a topographical map. Yet, the city itself stands on an infinitely varied surface, one that reveals much about ecology and morphology, as well as building practices and historical patterns of urban real estate development. A city is tall and short, high and low, with constructed views, overlooks, and vantage points. Underlying the built features of the city are hills, bluffs, mesas, outcroppings, and gradual or steep slopes, as well as low-lying land along creeks and streams, land upon river banks and bottomlands, and land down in valleys, dales, and ravines.

Planners, architects, and landscape architects often refer to the relative advantages or disadvantages of a particular building site, but in a broad sense the whole city is a three-dimensional site. Vincent Scully described architecture as a way to make meaning out of nature, a process that results in the city as a whole.

The shape of architecture is the shape of the earth as it is modified by the structures of mankind. Out of that relationship, human beings fashion an environment for themselves, a space to live in, suggested by their patterns of life and constructed around whatever symbols of reality seem important to them. Most of all, that environment and those structures invest the vast indifference of nature with meanings intelligible to, indeed imagined by, mankind, and they involve in the end all

those complex relationships of human buildings with each other that shape within nature a new manmade topography: the human city entire.<sup>37</sup>

Americans have made and remade lowlands into a "manmade topography." Urban lowlands are a physically and socially constructed place—one imbued with cultural meaning reflecting the way we interact with one another and the way we build and understand cities as places to live.

Views and vistas reflect one key aspect of city form. Buildings sited on peaks, points, and hilltops become prominent landmarks. Lowland building sites, in contrast, often occupy prominent positions by virtue of their relationship to water, open spaces, or visibility along an open plain. The bend in a river or a slightly elevated point amongst a flat plain may also be prominent sites. However, inside a basin or a hollow, or below the grade of the rest of the city, buildings, blocks, or indeed entire neighborhoods may be hidden, tucked away, less visible in the city framework. Bowls, depressions, holes, ravines, dales, and valleys may become the hiding places of the city.

They often became known as slums, a concept that has been central to urban planners' definition of what is good and bad in the city, theories of the internal structure of cities, and notions of how to make a better city. The word has its English language roots in the early nineteenth century and, as Allen explains, has historic associations with lowlands.

*Slum* entered British English about 1825, although not American English until about 1870. The word is of unknown origin and so it the subject of much speculation. Yet we can reasonably posit that *slum* originally meant a small, low, unclean, and possibly wet place of human resort and was later extended to an urban area of such buildings... the history and connotations of *slum* all indicate a negative idea (emphasis in original).<sup>38</sup>

By the 1937, when slum clearance became an explicit goal of federal policy, the word slum had an official definition: "The term 'slum' means any area where dwellings predominate which by reason of dilapidation, overcrowding, faulty arrangement or design, lack of ventilation, light or sanitation facilities, or any

combination of these factors, are detrimental to safety, health, or morals."<sup>39</sup> Low-lying slums have been closely tied to conceptions of nature in the city, playing a key role in our understanding of healthy and unhealthy places, natural processes and urban systems, scenic and ugly places, and urban hazards.

## Natural Areas and Concentric Zones

Urban theory has been strongly horizontal in its orientation, neglecting the vertical dimension of cities and differences in terrain. Models based on concentric circles, sectors, and multiple centers represent the three classic formulations of how cities grow and expand over time. The most well-known of these diagrams, indeed one of the most famous diagrams in social science, is Ernest Burgess's concentric city model. Associated with the so-called Chicago School of sociology, Burgess and colleagues Robert Park, Roderick McKenzie, and Louis Wirth developed the model based on their studies of Chicago in the 1920s. In "The Growth of the City," Burgess modeled "the typical processes of the expansion of the city" in "an ideal construction" showing the tendency of cities to "expand radially from [the] central business district."<sup>40</sup>

In the expansion of the city a process of distribution takes place which sifts and sorts and relocates individuals and groups by residence and occupation. The resulting differentiation of the cosmopolitan American city into areas is typically all from one pattern, with only interesting minor modifications. Within the central business district or on an adjoining street is the 'main stem' of 'hobohemia,' the teeming Rialto of the homeless migratory man of the Middle West. In the zone of deterioration encircling the central business section are always to be found the so-called 'slums' and 'bad lands,' with their submerged regions of poverty, degradation, and disease, and their underworlds of crime and vice.<sup>41</sup>

Numerous studies by Chicago School theorists would echo the "sifting and sorting" notion, and the model came to be represented by a powerfully simple image: the concentric circle diagram.

In Burgess's abstracted two-dimensional city, or "dartboard" as critic Mike Davis called it, "The Growth of the City" is illustrated in five zones: loop, zone of transition and factory zone, zone of workingmen's homes, residential zone, and commuters zone.<sup>42</sup> No distances are given, and Burgess notes in the text that the diagram was intended to represent a consistent relationship between center and periphery over time. That is, the relationship between the zones was theorized to hold true for Chicago in its "early history" covering a much smaller footprint as well as it was able to characterize the great city of the 1920s: only the size of the city had changed, he argued.<sup>43</sup>



CHART II. Urban Areas

Figure 6: Concentric zone model, as developed by Ernest Burgess, 1925.
Burgess acknowledged that "neither Chicago nor any other city fits perfectly into this ideal scheme," noting that "complications" included "the lake front, the Chicago River, railroad lines, historical factors in the location of industry, [and] the relative degree of resistance of communities to invasion."<sup>44</sup> But in a second diagram, shown in Figure 6, he added Chicago specific names and labels. In "Chart 2: Urban Areas," the words SLUM and VICE, and in smaller letters ghetto, Chinatown, Little Sicily, underworld, and 'roomers,' were added to the "zone in transition."<sup>45</sup> It is these labels that give us a better sense of how the Chicago School sociologists theorized the relationship between slums, immigration, race, and city structure. The use of concentric circles on urban maps was not unusual. It was used as a device to show distances from the city center, for instance (see Figure 7). Burgess and his Chicago School colleagues drew upon this familiar graphic convention and re-purposed the circles to represent aspects of the internal structure of the city.

In addition to noting the place (Chicago), it is also relevant to note the time (1920s) and the purpose (to illustrate *sociological* theory) for which Burgess and his colleagues developed their model. They hoped to explain varying degrees of social disintegration in different geographic areas.<sup>46</sup> Burgess and his colleagues theorized that neighborhoods or "natural areas," as they called them, displayed similar behavioral characteristics with like-minded people drawn together. It was as if a magnetic force drew them there together.

In related investigations, the sociologists divided Chicago into approximately seventy-five "natural areas," later to become known as "community areas."<sup>47</sup> They were smaller units based on Chicago's physical geography, which in theory were distributed across all five concentric zones. The formulation and definition of "natural areas" links together the Chicago School's interest in immigrants and their understanding of the "natural and necessary form" of the metropolis, its extent, and its internal structure.<sup>48</sup>

The word natural had several meanings in this context, alluding all at once to scientific studies of the natural world, physiographic features in the urban landscape, and the inherent, normal, or expected qualities associated with nature. In the same volume that Burgess published the concentric city diagram, Louis Wirth defined "natural areas," referencing the work of ecologists.

Plant ecologists have been accustomed to use the expression 'natural area' to refer to well-defined spatial units having their own peculiar characteristics. In human ecology the term 'natural area' is just as applicable to groupings according to selective and cultural characteristics. Land values are an important index to the boundaries of these local areas. Streets, rivers, railroad properties, streetcar lines, and other distinctive marks or barriers tend to serve as dividing lines between the natural areas of the city.<sup>49</sup>

Metaphors, concepts, and terminology borrowed from plant ecology would become a constant feature in

the writing of these scholars and the model itself would become known variously as "human ecology,"

"social ecology," and "urban ecology." As Raymond Williams famously noted, "the idea of nature... has

been central, over a very long period, to many different kinds of thought."50

The Chicago School model draws upon Social Darwinist ideas, equating "natural" qualities in the evolution

of living things with the "natural" qualities of human societies. Davis provided a trenchant critique of

Burgess, offering up noir L.A. as template in *Ecology of Fear*.

For those unfamiliar with the Chicago school of sociology's canonical study of the 'North American city' (actually, 1920s Chicago generalized as an archetype), Burgess's dartboard represents the spatial hierarchy into which the struggle for the survival of the urban fittest supposedly sorts social classes and their respective housing types. As imagined by academic Social Darwinism, it portrays a 'human ecology' organized by the 'biological' forces of concentration, centralization, segregation, invasion, and succession. My remapping takes Burgess back to the future. It preserves such 'ecological' determinants as income, land value, class, and race but adds a decisive new factor: fear.<sup>51</sup>

Davis sardonically updated Burgess's rings in his own diagram of Los Angeles in the 1990s.

Los Angeles makes for a useful comparison with Chicago, one of the premises behind the emergence of the so-called Los Angeles School in the 1990s and the 2002 publication edited volume *From Chicago to L.A.: Making Sense of Urban Theory*. Editor Michael Dear states in the Preface that one of the goals of the volume is "to jettison an obsolete lexicon of concepts that have hitherto blocked our understanding of Southern California cities."<sup>52</sup> He continues to say Burgess and Park's classic text "retains a tremendous vitality far beyond its interest a historical document," adding that "simply refuting *The City* would be a rather pointless task because so much has changed since 1925."<sup>53</sup>

Dear also lists what he identifies as the assumptions of the Chicago School model: 1) "an individualcentered understanding of the urban condition;" 2) "urban process in The City is typically grounded in the individual subjectivities of urbanities, their personal choices ultimately explaining the overall urban condition, including spatial structure, crime, poverty, and racism;" 3) "a 'modernist' view of the city as a unified whole, that is, a coherent regional system in which the center organizes the hinterland;" and, 4) "a linear evolutionist paradigm, in which processes lead from tradition to modernity, from primitive to advanced, from community to society, and so on."<sup>54</sup>

But Los Angeles was not without its Chicago School-style social ecologists historically. University of Southern California sociologist Emory S. Bogardus offered his own definition of "natural areas" and explanation of the sifting and sorting process in *Introduction to Social Research* in 1936.

People often seem to arrange themselves somewhat like iron filings do under the influence of magnetism... [In] any local community people are found distributed in spatial relationships somewhat after the manner of the 'competitive cooperation' of plant communities. A preliminary examination of the ecology of a social conflict usually reveals natural areas where compatibles and incompatibles live together within boundaries marked off by hills, rivers, railroad tracks and yards, and industrial districts. These natural areas are to be distinguished from administrative and political areas that are set off by unreal and artificial lines on a map.<sup>55</sup>

In planning historian Greg Hise's view, "there was nothing intrinsically 'natural' about the urbanization process in [Los Angeles], however, nor did the industrial districts serve as boundaries for marking off territory for 'compatibles and incompatibles."<sup>56</sup> On the contrary," he argues, "social reformers and activists viewed the planned dispersion of industry as a means *toward* social uplift and improved living conditions for immigrants and working-class Angelenos."<sup>57</sup> Geographers Richard Harris and Robert Lewis made a similar critique of the Chicago School model's failure to explain industrial location, noting that theory doesn't manage to accurately describe Chicago in the 1920s.<sup>58</sup>

But Chicago School theorists also used word "natural" in the phrase "natural areas" to mean "unplanned."<sup>59</sup> The fact that planning, and broadly speaking, government action is missing from the model is notable, and perhaps somewhat ironic considering their use of the word "zones" and the emergence of zoning as a nationwide phenomenon following the 1916 adoption of a comprehensive ordinance in New York City. The protection of zones of single family houses and the designation of industrial areas, core principles at the heart of zoning, were intended to remedy some of the fears of "invasion" prominent in the rhetorical devices used by the Chicago School.

I argue that urban lowlands were not the result natural processes of "sifting and sorting." They were not inevitable, obviously expected, essentially connected, or consonant with any inherent qualities of the city. Rather they were created by human decisions and enforced by people. They were *made*: landscapes transformed into interstitial spaces for stigmatized residence. The lowlands were shaped by human agency, including government investment decisions and, beginning in the 1920s, zoning. Urban lowlands were products of industrial capitalism, and they were made by people, by policies, and by city decision-making processes. They were subject to contingencies, events like floods. People debated the politics of these decisions: what to do (or not do) about "cleaning up," eliminating," or reforming the lowland slum.



Figure 7: Concentric circles show distances from the plaza (location of El Pueblo, the historic center of Los Angeles) on this index to the Sanborn fire insurance maps from 1888. This map preceded the famous concentric zones diagram developed by Ernest Burgess at the University of Chicago by thirty years. Unlike "Burgess's dartboard," it made no pretensions to urban theory. It simply shows scale. "The Flats" are seen here at lower center, east of the Los Angeles River, below the number 14, with only a few platted streets. Macy, Aliso, and First Street served as major routes, crossing the river, and connecting east and west. Landowner, railroad company board member, elected official, and developer William H. Workman subdivided and led the construction of the Boyle Heights neighborhood (lower right). In the years to this map's publication, the business and political center of Los Angeles would gradually move several blocks to the southwest. As planning historian Greg Hise notes, Los Angeles also exhibited patterns of industrial development not accounted for by the Chicago School model.

Lowland slums were natural only in the respect that they were subject to, and defined by, natural processes in the city such as flows of water through creeks and streams, down hillsides, through ravines, and into bottomlands. They were made more vulnerable and inequitable by the decisions of elected officials, speculators, landowners, upper class homeowners, and developers about where to build, where to invest, and where to protect. Indeed, we can see in the Chicago School a tendency *to naturalize* inequities created by prejudice, municipal neglect, and capitalist real estate practices.

The theoretical problems and myopic perspective of the Chicago School theorists in understanding the phenomenon of the lowlands can be clearly seen in Roderick McKenzie's study of "the Bottoms" in Columbus, Ohio. McKenzie studied social life and social cohesion in Columbus, with special attention to the West Side neighborhood known as "the Bottoms." The First Congregational Church of Columbus had invited him to undertake a neighborhood study in 1919, during which period he taught at Ohio State University (1915-1919). McKenzie completed his dissertation at the University of Chicago in 1920, published as a five article series in *The American Journal of Sociology*, and later republished as *The Neighborhood: A Study of Local Life in Columbus, Ohio* in 1923.

McKenzie studied "the Bottoms" as a residential community and "a disintegrated city neighborhood."<sup>60</sup> He estimated that the neighborhood population, spread across eleven precincts, was approximately 11,000 people.<sup>61</sup> After undertaking a massive door-to-door survey, he noted that the neighborhood had more small children and greater percentage of female residents than the city as a whole. "These figures show," he wrote, "that the population of the neighborhood contains more than a normal distribution of the economically weaker age and sex groups. Economic forces tend to distribute a city's population according to the relative strength of families in the competitive process."<sup>62</sup> After finding forty-three "colored" families of one thousand surveyed, McKenzie makes special note of their "significance from the standpoint of neighborhood disintegration and decline," adding "[t]here is perhaps no more valid criterion of the disappearance of neighborhood sentiment in any locality inhabited by American families than to find

colored families dispersed here and there among the white families... the advent of the negro drives the more enterprising white folk to look for new guarters."<sup>63</sup>

McKenzie defined the term slum using a definition provided by the "Division of Immigrant Heritages, Americanization Bureau, New York," adding his own words to supplement it: "Slums have been characterized as 'areas of lost souls and missions,' areas where individuals and family groups are living in enforced intimacy with people whom they naturally shun and avoid; areas where there are no standards of decency or social conduct except as those imposed by outside authority."<sup>64</sup> McKenzie was not unique in this regard. As newspaper reports from other cities show, urban lowland neighborhoods like "the Bottoms" were often defined in behavioral rather than topographical terms.

McKenzie described the neighborhood in starkly pejorative terms, and one gets the distinct impression that "the Bottoms" appealed to McKenzie as a site where the "social disintegration" of the city could be readily observed, catalogued, and mapped.

Description of neighborhood. The neighborhood is located in a flood plane [sic] near the center of the city. It comprises one of the oldest sections of the city and has been subject to periodic floods for years past. It is inhabited by working-class people, chiefly of American origin. Mobility of neighborhood population. The neighborhood serves as a reservoir for the city's human wastes. Families come and go in constant succession, and there are also frequent changes of residence from street to street within the neighborhood. There is a small nucleus, however, of stable superior families. The comparative absence of secondary means of communication, such as telephones and automobiles, makes the less mobile inhabitants-old men, women, and children-completely dependent upon the neighborhood institutions for their associational life. Homes. Most of the homes are obsolete both in structure and fixtures; scarcely 10 percent have electric lights: about half of them are without baths or indoor toilets. Overcrowding is not prevalent except in alley houses. Family life. The neighborhood is a collectivity of very unlike family groups. Superior wholesome families are frequently found living next door to disorderly worthless people. Under such circumstances complete avoidance is practiced. The superior families usually represent early settlers who, on account of property ties, cannot leave their undesirable surroundings. Economic condition. This district represents the lowest economic level in the city. Home ownership is uncommon, and rents average less than fifteen dollars per month. However there are marked differences in the comparative economic status of adjoining families. Family groups in the depth of poverty are frequently found living side by side with families having comfortable incomes. Leisuretime activities. Most of the homes are ill-equipped with facilities for the fruitful utilization of leisure

time. Reading materials are scant or wanting; musical instruments are found only in a small percentage of homes. Outdoor leisure-time activities. The movies are the most popular form of commercialized recreation for mothers and children. The elder males find their chief enjoyment in the neighborhood saloons, with the youth, for the most part, patronize the uptown poolrooms and dance halls.<sup>65</sup>

In McKenzie's metaphor "reservoir for the city's human wastes," the double meaning is clear and

intentional: "human wastes" equated people with sewage.



Figure 8: Detail from "Map of Columbus, Ohio Showing Racial, National, and industrial Localities 1918," by Roderick McKenzie, published 1923.

McKenzie mapped a neighborhood geography of virtue and depravity co-mingled: saloons, pool rooms, missions, motion picture theaters, tennis courts, churches, vacant spaces, street car lines, and steam railroads (see Figures 9 and 10). He wanted to understand behavior in relation to social disintegration in a particular urban space. He was not interested political, economic, social, or other structural factors that led

to the neighborhood's decline. Notably, he had little to say about the city's response to the deadly flood that

had inundated the neighborhood only a few years prior to his investigations.

McKenzie did describe how the Hilltop neighborhood to the west became a desirable area while "the

Bottoms" sank into degeneracy.

Comparatively speaking the Hilltop is a new section of Columbus. Its chief development as a residential area has taken place during the past fifteen years, but once available for settlement its attractive topographical features made it an eldorado for the better class of home-seekers, with the result that it is now a city of new homes clustered around the few historic residences which graced the landscape in days gone by.<sup>66</sup>

In a subsequent article, he briefly noted the combined effect of the Hilltop's opening as a new real

estate development and the social and demographic changes brought about by the flood.

There is general consensus of opinion among the older settlers that the neighborhoods made a rapid decline immediately following the flood of 1913. At that time many of the more prosperous families moved to other parts of the city, especially to the new addition opened up just then on the Hilltop. Real estate prices declined rapidly, dropping to one-third or one-half their previous values. This in turn brought about an influx of colored and poor white families, with the consequent further deterioration of the neighborhood.<sup>67</sup>

Chicago School theorists like McKenzie saw the lowlands as slums, not as evidence that altitude made a

difference in urban structure. While they may have noted particular neighborhood-level, physical

characteristics not found in other natural areas, as McKenzie does briefly in the Columbus example, one

might assume that these theorists would nevertheless locate slums like urban lowlands within the "zone of

transition" of the concentric city model.



Figure 9: "Map of Neighborhood Surveyed," by Roderick McKenzie, published 1922.





However, McKenzie's study of "the Bottoms" was not the only the discussion of lowlands among the Chicago School theorists. In what might be considered a testament to staying power of the visual image, Burgess wrote a lesser-known piece with references to the significance of topography in city structure, a nuance in his argument that was eclipsed by the famous concentric circle diagram. In a 1929 essay entitled "Urban Areas," Burgess considered "hills cities" an exception to the concentric model—geographer William Meyer termed it "the other Burgess model."<sup>68</sup> Under the heading "Distortions of the Zonal Pattern by Variations in Topography." Burgess wrote that "flat" cities like Chicago should be considered separately from hills cities like Seattle, noting that the rich were more likely to be found on the hilltops.

Elevation, which is a chief factor in complicating the zonal pattern of urban formation just outlined, is absent in Chicago. In cities of hills and valleys like Montreal or Seattle, which have been examined for comparative purposes, it is interesting to note that elevation introduces another dimension into the zonal pattern. In a plains city, the favored residential sections are farthest out; in a hills city, farthest up.<sup>69</sup>

As noted earlier, elevation is not completely absent in Chicago or any other city—the range of variation is merely less noticeable and dramatic. Indeed, as McKenzie unwittingly showed, even in a "flat" city like Columbus one may find the phenomenon of "the Bottoms." Furthermore, many cities fit into the "intermediate" category with mid-range levels of variation in elevation. In the case of urban lowlands, the exception proves as prevalent, relevant, and significant as the rule. Spirn, for example, suggests that the phenomenon of "buried floodplains" is widespread with "[c]reeks, streams, and brooks… buried beneath scores of America's urban neighborhoods."<sup>70</sup>

In the 1930s, "sectoral" theorist and economist Homer Hoyt also observed the significance of altitude in American cities. He argued that flood risk, industry location, and waterfront amenities were key factors in

residential location by socio-economic group. Many cities, he explained, devoted their waterfronts to industry and displayed a distinct pattern of residential movement upwards into hilly areas.

The zone of high rent areas tends to progress toward high ground which is free from the risk of floods and to spread along lake, bay, river, and ocean fronts, where such water fronts are not used for industry. The movement of high grade residential neighborhoods away from river bottoms to higher ground or to wooded hills is illustrated by numerous examples.<sup>71</sup>

Hoyt cited San Francisco, Washington D.C., Kansas City, St. Louis, and Cincinnati as examples of places where settlement, especially the "best areas," historically moved from low to high ground.<sup>72</sup> But elevation was merely one aspect of Hoyt's theory, which gave primary emphasis to the notion of sectoral growth along linear paths radiating outward from the city center.

Hoyt and Burgess shared a focus on the residential location of the upper classes, positing that the wealthy would chose the best sites first and everyone else would select from the rest. As such, they say little directly about the residential location of the poor. Nevertheless, their theoretical framework is clear: either through sifting and sorting or "filtering," the poor would end up in the least desirable locations, especially older areas of the city in "transition." The Chicago School theorists, in particular, were very concerned with physical mobility and the frequency with which people moved within the city. Just as we see in the rhetoric about zoning, which emerged at the same time, professionals and academics expressed the moral necessity and public policy benefits of stability and security—attributes purported to describe suburban districts of single-family homes, but not the slums (where the investigations took place). McKenzie explained the phenomenon in highly moralistic and pejorative terms, suggesting that the physically (but not upwardly) mobile working class and poor population exhibited dubious personal choices, as evidenced by election results!

This process of population-sifting produces not only increasing mobility with approach from the periphery to the center of the formation, but also different cultural areas representing different mores, attitudes, and degrees of civic interest. The neighborhoods in which the settler type of population resides, with their preponderance of women and children, serve as the custodians of the

stabilizing and representative mores. It is in the Seattle neighborhoods, *especially those on the hill-tops, that the conservative, law-abiding, civic-minded population elements dwell.* The downtown section and the valleys, which are usually industrial sites, are populated by a class of people who are not only more mobile but whose mores and attitudes, as tested by voting habits, are more vagrant and radical (emphasis added).<sup>73</sup>

Urban geographers continued where the Chicago School sociologists and economists like Hoyt left off, concluding that "amenities" have assumed increasing importance in the processes of residential selection and location.<sup>74</sup> Harris and Ulman, for example, in their seminal article "The Nature of Cities" advanced the theory of cities with "multiple nuclei." They included this description of "the residential district": "In general, high-class districts are likely to be on *well-drained, high land* and away from nuisances such as noise, odors, smoke, and railroad lines. Low-class districts are likely to arise near factories and railroad districts, wherever located in the city (emphasis added)."<sup>75</sup>

In a 1994 article titled "Bringing Hypsography Back In," Meyer urged urban geographers to examine the relationship between topography and city structure in future research.<sup>76</sup> While the advantages of the highlands as residential areas and the association between altitude and wealth has been described, and in some cases measured, topography has received little attention from urban theorists, with the exception of work by urban environmental historians, urban hazards and water experts, and landscape architects such as Spirn.

## Bottoms, Hollows, and Flats

Local historians, cultural geographers, and journalists like to tell stories about how swampy places, "marshy conditions," and muddy ground contributed to the naming of urban lowlands. In two-part names like Washington's Foggy Bottom, adding fog to a word derived from river bottomland conjured up a swampy

wetness that hung in the air, over river and soggy land alike. Similarly, the frog in Hartford's Frog Hollow modified a term for a basin or "a depression on the earth's surface" to suggest that the amphibian would be at home such a wet place.<sup>77</sup> Interestingly these accounts are almost never precise, always a little fuzzy, with few sources cited and no known dates for the beginning of such usage. They are mythic, evoking a mysterious sense of lost origins and a time long since past. In the case of Black Bottom, a name can also cause controversy and stir up debate about race and racism, pejorative name-calling, appropriation and reappropriation, and sanitization. Over the course of two years, I attempted to track down and document the first use of these terms in six places, perhaps a somewhat futile effort in light of the indeterminacy, or multiple meanings and associations, and the fleetingness of city slang. Investigating Columbus's Bottoms, Hartford's Frog Hollow, Los Angeles's Flats, Nashville's Black Bottom, St. Paul's Swede Hollow, and Washington D.C.'s Foggy Bottom, I found that while some landscapes had been erased, the names were embraced (albeit with new meanings layered on top of old) more often than they were replaced.

The haziness, unfamiliarity, discomfort, and anger sometimes caused by these names is part of the story, as they relate to real histories and lived experiences of people and place as well as imagined places that make for colorful storytelling. Anti-immigrant and racist stereotypes associating low incomes, low class, low status, and low places still sting for many people. Elsewhere the same stereotypes have been reclaimed and repurposed, evoking multiple and sometimes conflicting meanings inside ethnic communities and out.

Bottoms, hollows, and flats became familiar names when people began to label, comment upon, describe, and categorize places *in social terms* according to the association between people and landscape. The addition of racial and ethnic descriptors as modifiers, as in Swede Hollow, further clarified, labeled, and ascribed the *types* of purportedly low status people living in lowland areas. Often, as it turns out, the names stuck, even when the places changed of the people or landscape qualities suggested by a name were no

longer present. For instance, Italians comprised the majority of Swede Hollow residents by the 1920s. The name Little Italy coexisted with Swede Hollow, but never replaced it, perhaps due to the fact that other areas in St. Paul were also known as Little Italy. For middle class residents of the dominant culture, labeling marginality could help elevate one's own status in relation to someone *lower down* on the social spectrum.

The racial aspect of the names is an essential part of this story. By the 1910s, Black Bottom had become a generic descriptor of the poorest or the most notorious section in the lowest part of a city or town that was primarily inhabited by Negroes. It was a common term before ghetto entered everyday language, and not the only term for a poor black neighborhood in an American city before World War II. Fisk University Professor of Social Science George Edmund Haynes described how black people seeking better lives migrated to cities in the North and South, meeting with resistance, and segregated into "Negro neighborhoods."

The white community is thus frequently led to unjust judgments of Negroes and Negro neighborhoods, as seen in the soubriquets of 'little Africa,' 'black bottom,' Niggertown,' 'Smoketown,' 'Buzzard's Alley,' 'Chich-row,' and as indicated by the fact that the individuals and families who live in these neighborhoods are all lumped by popular opinion in one class. Only here and there does a white person come to know that 'there are Negroes and Negroes just as there are white folks and white folks.' The most serious side of this attitude and opinion is, that the Negro is handicapped by them in securing the very things that would help him in working out his own salvation.<sup>78</sup>

As Haynes indicates, the term Black Bottom was only one of many such names prevalent at the time.

In 1923, the eminent sociologist W. E. B. DuBois used the phrase Black Bottom in a similar manner, echoing Haynes's description of black neighborhoods from a decade earlier. Unlike Haynes, however, who decried "sobriquets" and worried about people being lumped together, DuBois suggested that Black Bottom was the type of place where the uniqueness of black neighborhoods and black culture was evident.

This race has the greatest of the gifts of God, laughter. It dances and sings; it is humble; it longs to learn; it loves men; it loves women. It is frankly, baldly, deliciously human in an artificial and

hypocritical land. If you will hear men laugh, go to Guineau, 'Black Bottom,' 'Niggertown,' Harlem. If you want to feel humor too exquisite and subtle for translation, sit invariably among a gang of Negro workers. The white world has it gibes and cruel caricatures; it has its loud guffaws, but to the black world alone belongs the delicious chuckle.<sup>79</sup>

Just two years later, Dr. Robert Moton of Tuskegee Institute offered a contrasting view, arguing the Black

Bottom did not reflect black culture, in that it made it difficult to see Negro "advancement." He identifies

Black Bottom as a stereotypical image of black life.

One must go back from the railroad station, he must leave the downtown streets, he must go beyond 'Black Bottom,' too, if he would get an adequate picture of what negroes in the south are doing for their own advancement, and see the evidences of cooperation between both races toward composing their differences removing misunderstandings and jointly supporting some program that will help the negro to overcome his handicaps and thereby make for the progress and welfare of both races.<sup>80</sup>

Haynes, DuBois, and Moton's references to Black Bottom underline the prevalence of the term, and,

indirectly, provide evidence for the ubiquity of the phenomenon of low-lying poor neighborhoods.

Black Bottom neighborhoods were eventually to be found in Nashville, Tennessee; Philadelphia, Pennsylvania; Detroit, Michigan; Columbia, South Carolina; and Jacksonville, Florida.<sup>81</sup> Philadelphia's Black Bottom was located west of the Schuykill River, in area that "stretched from 32<sup>nd</sup> Street to 40<sup>th</sup> Street, and from University Avenue to Lancaster Avenue," land that today is part of the campuses of the University of Pennsylvania and Drexel University.<sup>82</sup> Spirn reports that the many of the families displaced by university projects and urban renewal relocated to the Mill Creek neighborhood, itself an area sometimes referred to as "The Bottom." In Detroit, Black Bottom was located on the Near East Side, next to Paradise Valley. One local history has described it as "the heart of Detroit's black community" from the 1920s to the 1950s, with Hastings Streets as "its main vein."<sup>83</sup> In the *Journal of American History*, University of Michigan history professor Charles Bright described Black Bottom as "the neighborhood on the near east side where black migrants from the South had been effectively confined" by segregation.<sup>84</sup> "[I]n the 1950s, the city administration attacked what it called 'urban blight' by bulldozing Black Bottom to lay Interstate 75 right

down Hastings Street, obliterating even its memory."85

The stories of how Black Bottom got its name vary in each of these former communities, all now known by other names. In Jacksonville, Black Bottom was said to have gotten its name from muddy smells and

swampy odors.

When John Chaney grew up in the Blodgett Homes housing project on Davis Street in the 1930s and early 1940s, the future legendary Temple University basketball coach had trouble seeing an escape route from the cycle of poverty and hopelessness that surrounded his daily life. The only thing Chaney remembers about the Jacksonville area he lived in before moving to Blodgett was its nickname, 'Black Bottom,' because of the smell from the mud when it was hit by heavy rains.<sup>86</sup>

In Lakeland, Florida, Black Bottom reportedly got its the name to the "absence of streetlights."87

Whites used these names to marginalize and stigmatize African Americans, and to linguistically mark the places

where they lived as black and inferior. In this regard, it should be noted that Black Bottom took on an additional

meaning, and became a nationally known and commonly used term in the 1920s when the "Black Bottom" dance

craze swept the nation. Novelist Zora Neale Hurston, who lived in south Nashville as a young woman, wrote,

...it is interesting to mention Black Bottom. I have read several false accounts of its origin and name. One writer claimed that it got its name from the black sticky mud on the bottom of the Mississippi river. Other equally absurd statements gummed the press. Now the dance really originated in the Jook section of Nashville, Tennessee, around Fourth Avenue. This is a tough neighborhood known as Black Bottom—hence the name.<sup>88</sup>

Thus, Nashville's Black Bottom may very well be one of the earliest and most well known of the

neighborhoods with this name across the South, and later across the country. In any case, race and racism

are closely intertwined with these sites, an issue that becomes very apparent in discussions about "fixing

up" or "cleaning up" these places in the twentieth century.

## A Few Notes on Etymology and Toponymy regarding the Low-lying Landscape

The phrases "river bottoms" and "bottomlands" are old words to describe low landscapes, used well before the terms were given social and cultural meaning in an urban context. In 1755, Dr. Samuel Johnson provided a lowland definition of the term "bottom" in his Dictionary as "a dale; a valley; a low ground."<sup>89</sup> Likewise, the *Oxford English Dictionary* defines the lowland sense of the word as "the bed or basin of a river" or "low-lying land, a valley, a dell; an alluvial hollow," noting that the second definition is used especially in the United States.<sup>90</sup> Bottoms and bottomlands came into common usage in the U.S. in the eighteenth century. Pickering noted a regional difference in how the terms were used: "In *Pennsylvania* and some other States [bottom-lands] is given to rich flat land on the banks of rivers, which in *New England* is generally called *interval-land*, or simply *interval* (emphasis in original)."<sup>91</sup>

The physiographic variety and unique character of different lowland forms is expressed in many terms: alluvial lands, arroyos, backwater areas, basins, bottoms, bowl-shaped depressions, branches, canals, channels, creeks, culverts, dales, dells, flats, floodplains, gulches, gullies, hollows, lowlands, oxbows, ravines, streams, washes, and wetlands. Interestingly, many of these physiographic terms are also *landscape words*. They tell us something about the features of the land, but also the way we label, group together, separate, classify, and differentiate. Many of these words derive from or manifest as uniquely American language, a characteristic sometimes expressly noted in the *Oxford English Dictionary*.

Compound words that include river present a plethora of descriptive terms when examining the low-lying landscape of the city. These features include river banks, river bars, river basins, river beds, river bends, river bottoms, river debris, river flats, river lands, river marshes, and river terraces. "The Bottoms" as a neighborhood name originates in words like river bottoms and bottomlands.

American place names have often included these landscape terms, modifying them, amending them, and adapting them to new purposes. American naming practices also had class connotations, with English names used by Anglophiles to signify status and prestige, particularly in suburban developments as real estate promotion.

Glen, wood, and the others were a treasure-trove in the mid-century. One could be linked with another to make Glendale or Glenwood, Brookdale or Woodside. They went with common words— Hopedale or Broadmead. They were especially good with trees—Elmhurst or Maplewood or Oakmont. One of their devotees was the developer laying out a district for summer homes or for one of the new suburbs which the railroads were making possible. Such names came to enclose New York City like a ring of out fortifications—Oakwood, Hillside, Montclair, Englewood, Scarsdale, Larchmont, Glen Cove, Greenvale, Rosedale, Cedarhurst, Edgemere. The charm of these names was manifold. They were 'poetic.' They brought to mind English country estates... The names were also snobbish and exclusive. Common Americans had post-office addresses ending in Creek, Gap, Bottom, and Bluff; but Dale, Hurst, and Mere were above the mob.<sup>92</sup>

As Stewart points out, Bottom could be the name of an American town, or a rural place.

The United States Geological Survey (USGS) lists all the known geographic features in the country. A search of these place names lists yields hundreds of examples of bottoms, hollow, and flats. Few, however, are urban places which tend to be catalogued under city names. This naming and cataloguing practice points to a difference in understanding between rural and urban places, sparsely populated and "urbanized." Urbanized places are subject to their own logic, and the careful naming and cataloguing of every feature of the physical landscape seems to disappear under the weight of so many other place names: street names, district names, political boundaries, administrative boundaries, neighborhood names, buildings, landmarks, post offices, community centers, etc., etc. The mapmaker is faced with the decision of leaving off as much as putting on.

The language of urban lowlands was not always precise. An area called a hollow in one setting may be referred to as a bottom elsewhere. To a certain extent, these words may be interchangeable in colloquial speech describing the landscape. Regional differences in speech, such as those catalogued and mapped by the *Dictionary of American Regional English*, matter. Changes over time may also be observed, as words like bottom, hollow, and flat are much less frequently spoken today. An editorialist urged New Englanders to "Keep the Homely Names" in an editorial in the *Hartford Courant* in 1936:

[T]here is a flavor to the old names that the moderns with their civic pride cannot get. Hungry Hill, Lamentation Mountain, Roast Meat Hill, Pewter Pot Brook, Dividend Brook—not incidentally, so called because it so frequently runs dry—Ballahack, Break Neck, Cat Swamp, Dry Brook, Frog Hollow, Johnny Cake, Miry Brook—but why continue the list of flavorsome Connecticut names? It is true that we have officially lost Poverty Hollow, which today is one of the five or more Pleasant Valleys in the State, but its loss merely emphasized the value of the remaining names.<sup>93</sup>

However, certain patterns do emerge from a study of these areas that can be useful for analyzing and describing the features of the land, the characteristics of the urban landscape, and the sense of place at the neighborhood scale.

Hollows, for instance, are most often "houses tucked in hillsides."<sup>94</sup> As such, they are usually three-sided landforms with a small creek or stream running down slope to the "open" end. In the urban context, these places were frequently shanty settlements along a creek or stream in the hills "behind" the riverfront or harbor.

Bottoms and flats, on the other hand, when applied to physiographic features, are usually two-sided or foursided. In other words, a bottom may be like a bowl or a basin that appears to be surrounded on all sides by higher ground—although in Columbus, it is a flat, low-lying plain surrounded by the Scioto River on three sides. Bottoms can be both a wide expanse like a plain (from which the phrase floodplain seems to derive or allude to) or smaller areas like a depression or a hole. Flats usually suggest a two-sided feature running one side of a river.

## A Brief Historical Sketch of the Six Case Studies

The case studies I have chosen are neighborhood-scale lowlands within the framework of a larger city that represent the various different permutations of bottoms, hollows, and flats and are located in different regions around the United States. Defined by their relative social as well as physical position compared to other neighborhoods, they were not necessarily the lowest in terms of elevation measures, nor were they the only low-lying places within the city. These places have been identified by toponymy, neighborhood scale, and association with poverty, social marginality, ethnic or racial difference, and/or flood risk. They represent six different regions around the United States: West, Upper Midwest, South, Rust Belt, Mid-Atlantic, and New England. The case studies will be used to compare and contrast the historic development of urban lowlands.

### Case #1: "The Bottoms" in the Flat City of Columbus

"The Bottoms" is a broad, mostly flat plain, more than two miles wide, stretching from the Scioto River in downtown Columbus, Ohio to the "Hilltop" neighborhood on the west (see Figure 8). Columbus, as noted in Table 3, is generally considered a flat city, situated on either side of a dramatic, serpentine curve in the Scioto River, near its confluence with the smaller Olentangy River. Surrounded by the river on three sides, the neighborhood is the site of the founding of the oldest European settlement in the Columbus area,

known as Franklinton and established in 1797. It was annexed to the city between 1859 and 1870, and since that time has often been referred the West Side.



Figure 11: Birdseye view south, showing Ohio State Capitol, Scioto River, and Franklinton ("the Bottoms") in 1845. Source: Ruth Young White, *We Too Built Columbus* (Columbus: Stoneman Press, 1936); notations added.

As noted earlier, sociologist Roderick McKenzie surveyed, mapped, and analyzed the neighborhood beginning in 1919. McKenzie's map labeling the neighborhood "Bottoms" may be the earliest recorded use of that name in print; it was published in a series of five articles in the *American Journal of Sociology* in 1921-22. But, as a local newspaper journalist described it in the 1990s, the term had been in use as long as anyone could remember.

The near West Side, as far back as I can recall, was the Bottoms, because of the lay of the land in relation to the Scioto River. The neighborhood literally is the river's catch basin, as anyone alive in 1913 or 1959 can confirm. West Siders, however, don't like being thought of as the city's basement any more than its rump. So the Bottoms is called Franklinton in front of polite company and preservationists.<sup>95</sup>

In the urban context of Columbus, "the Bottoms" is considered one neighborhood within the city, like Short North, German Village, or Near East, but it remains a term more often spoken than written.

"The Bottoms" retains a stigma, as well as a sense of local knowledge, that requires that it not appear on tourist maps or official publications. A student project in urban planning at Ohio State University picked up on this sense of the term in a 2008 report. The students wrote, "Franklinton has long been associated with poverty, crime, and blight... *hence the persistence of 'The Bottoms' moniker* (emphasis added)."<sup>96</sup>

The neighborhood is clearly defined by the physiographic features of the Scioto River bend and the rise in elevation on the far west side which separates the Bottoms from Hilltop. West Broad Street runs in a long straight line across the length of the neighborhood, serving as its central artery. High points within the neighborhood include Mount Carmel Hospital, which sits on a small natural rise in the land, and a cross-work pattern of constructed railroad and highway embankments which separate the neighborhood into four major sub-areas effectively surrounded by raised earth or levee walls on four sides.

#### Case #2: Hartford's Frog Hollow

Hartford is one of the oldest cities in this set of six, founded as a Dutch trading post near the confluence of the Connecticut and Park rivers in 1623 and named in 1637. Industrialists and real estate developers transformed the Frog Hollow neighborhood into an urban area following the 1855 when Samuel Colt built a

firearms factory in the nearby Charter Oak neighborhood. Located more than a mile away from the banks of Connecticut River, upstream along the Park River (then known as the Little River, and later as the Hog River), the hollow sat between Zion Hill and Capitol Hill.

The earliest newspaper reference to Frog Hollow in the *Hartford Courant* is from 1879: "The place selected for the meetings is the western slope of Zion's hill, near Park street, and overlooking Frog Hollow."<sup>97</sup> By 1919 the name had become well established, and a newspaper journalist, also in the *Courant*, reflected back on the neighborhood's origins and its rapid development in previous decades.

If you were to hark back about half a hark and jump on a Broad street car, and at the end of a twelve minute ride or thereabouts, get off when the conductor announced 'Frog Hollow,' even at that time you would have had to dodge considerable traffic on a disreputably muddy street in order to make a safe landing on the sidewalk. Broad and Park streets, the center of a district commonly known as 'Frog Hollow' by those intimate with its history was, up to about three years ago, the muddiest section of a busy little community in itself that stretches along Park street from Washington to Zion street, and the beginnings of which date back nearly a score of years, when some farsighted business man built a store in the first floor of a tenement house...<sup>98</sup>

In a 1980 account, muddy is replaced by marshy. "Frog Hollow, according to residents whose family stories go back several generations, takes its name from the marshy conditions in the low land near what is now the corner of Broad and Ward streets."<sup>99</sup> The author continues on to describe how Washington Street on the eastern border of the neighborhood was once known as Lafayette Street, the oldest in the area, appearing on "Solomon Porter's 1640 Hartford map... and called Cooper Lane between 1838 and 1851 [when it] was home to a portion of Hartford's early black community."<sup>100</sup>



Figure 12: Birdseye view of Hartford, Connecticut, 1877. Source: Norman B. Leventhal Map Collection, Boston Public Library; notations added.

Frog Hollow was roughly bounded by Washington Street on the east, the rear lots behind Capitol Avenue on the north, the Park River and the New Haven and New York railroad tracks on the west, and Hamilton Avenue and Allen Place on the south. In the late 1930s and early 1940s, the City put the Park River underground with federal assistance. Several decades later, the western edge of neighborhood was further transformed by the construction of Interstate 84. Park Street has continuously served as the main east-route through the neighborhood and its commercial spine.

#### Case #3: The Flats of Los Angeles

When Spanish missionaries came to Southern California they saw the Los Angeles River and its wash as a fertile area that would provide a drinking supply as well as watering for crops. In 1769, Father Juan Crespi described "very large, very green bottomlands' that spread out on both sides of its banks as far south as he could see, 'looking from afar like nothing so much as large cornfields<sup>17101</sup> While the Los Angeles River was not navigable, and often ran very low with a large wash, dry bed, or alluvial fan, it made a suitable place to establish a pueblo on the chain of Spanish colonial settlements in California. Settlers constructed an extensive series of irrigation and water supply ditches known as zanjas to make the most out of the available supply. The lowlands in the wash, the dry but flood-prone bed of the river, became some of the most productive farming areas in Southern California. By the 1870s, a century after Crespi's visit, the "green bottomlands" were planted in orange groves and vineyards, two crops that would become closely associated with California agriculture. Indeed, Southern California became the primary wine-producing region in the state before Northern California, and the Napa and Sonoma valleys in particular, took over.

The earliest references to the Flats as a neighborhood coincide with the arrival of Russian immigrants in the area, leading it to also be referred to as Russian town. A *Los Angeles Times* journalist reported in 1905: "[a]nother company of Russian peasants of the sect of 'Molokans,' or Russian Quakers arrived yesterday in Los Angeles. They were received with a warm welcome by the colony located east of the Los Angeles River in 'the flats' of the Ninth Ward."<sup>102</sup> By the 1930s the area was well known as "The Flats." Sociologist Pauline Young studied the neighborhood, publishing her thesis on religious practice, social cohesion, assimilation, and interaction between the insiders and outsiders in the ethnic enclave. In 1932, the year Los Angeles hosted the Olympics and began to be recognized around the world as a major city, she wrote:

A broad, magnificent new bridge of reinforced concrete spans the Los Angeles River, and connects "down-town" Los Angeles with "The Flats" of which Russian-Town is a part.\* Crossing the bridge, one finds himself on East First Street, in the center of the retail market of the region—grimy store buildings; a variety of small Mexican and Armenian cafes, where one eats and talks to the music of a victrola or a radio; a row of confectionary shops, soft-drink parlors, pool halls, where young men congregate and talk local politics—such politics as The Flats knows...<sup>103</sup>

Constructed in 1929, the First Street Viaduct created that new link, one of five major new bridges

constructed across the river in the area of the Flats in the 1920s and early 1930s. The others were the

Macy Street bridge (1926), Seventh Street Viaduct (1927), Fourth Street Viaduct (1931), and Sixth Street

Viaduct (1932).



Figure 13: Birds eye view of Los Angeles, 1877. Collection of the Library of Congress, notation added.

The expression "The Flats" fell out of use after the neighborhood was demolished for the construction of two federal housing projects in 1941. Locally, however, residents kept the name alive, specifically young men who named their street gangs Primavera Flats (for the area around First Street) and Cuatro Flats (for the area around Fourth Street).

Macy Street and Brooklyn Avenue bounded The Flats on the north (the street names were later changed to Cesar Chavez Avenue). Boyle Avenue, at the top of the bluff, was the east boundary, Seventh Street to the south, and the Los Angeles River to the west. The City of Los Angeles allowed the railroad companies to artificially establish the boundaries of the river in 1888 (the river bed would later be altered as well when the city re-engineered the channel through downtown in the 1930s) and the bluff was completely concealed with it was encased in concrete for the Hollywood Freeway in the 1940s. The freeway remade the north end of the neighborhood as well, shrinking the area replacing Aliso Street where it crossed the river. On the south end, the 6<sup>th</sup> Street viaduct soared over the neighborhood connecting downtown directly to the Heights.

# Case #4: Nashville's Black Bottom

In Nashville, the area south of downtown below Broad Street, in the lowlands between Rutledge Hill and downtown became known as Black Bottom in the years following the Civil War. Located just beyond the city's original plat, a small creek known as Wilson's Spring Branch flowed through the small basin on its way to the Cumberland River. Following the Civil War, whites prevented African Americans from living in the desirable sections of the city, forcing them into the lowlands immediately north and south of the raised bluff upon which the downtown area stood. Sharply defined and clearly bounded by higher land on three sides, and the river to the east, the neighborhood became increasingly crowded, dilapidated, and unruly in the early part of the twentieth century. With its location close to the old wharfs, a major railroad depot, and downtown, it became a vice district known for barrel houses offering whiskey, prostitution, and gambling. Black Bottom was also prone to floods.

In Nashville, local historians have provided conflicting interpretations of the name and its origins. The first printed references to Black Bottom began in the 1880s. Several authors claim that the name originates from alluvial black mud, not racial stereotyping or pejorative labeling. The phrase "black bottom" was early associated with riverine landscapes of the Mississippi River and the South, and it referred to soil. But even in this connotation, in the agricultural use of those soils and the labor required to farm them, had associations with African American living places and lived experience. Black bottom meant soil, dirt, and the richness and fertility of the land, but it also meant the lowest place in terms of status and a space of hard work in muddy conditions.

Nashville historians Dan Doyle and Bobby Lovett offer different accounts of the name's origins. In Doyle's account, published in 1985, the neighborhood "became 'Black Bottom' as the Negro took the place of the Irish."<sup>104</sup> In 1999, Lovett argued that the area "received the Black Bottom name because of frequent flooding and the ever-present black mud and stagnant pools of filthy water and not because of the presence of large numbers of blacks."<sup>105</sup>

Repeated attempts to "eliminate" the Bottom were rebuffed by segregationist fears that African Americans would become integrated with the white population. After being zoned industrial in the 1930s, the construction of "black only" public housing projects in other areas of the city, and the inclusion of the area in a downtown redevelopment district, city planners and real estate interests eventually cleared the area of its residential population entirely.



Figure 14: Aerial view of Nashville, postcard, c. 1920, notation added.

Black Bottom was bounded by the Cumberland River on the east, Broad Street on the north, Eighth Avenue (formerly Spruce Street) on the west, and Lea Avenue and Highland Street and on the south. The same approximate boundaries have been maintained since the 1880s, although Broad Street is now known as Broadway.

Case #5: St. Paul's Swede Hollow

In St. Paul, an immigrant enclave of small houses and shacks grew up around Phalen creek deep down in a ravine on the city's East Side. By the 1880s, and possibly earlier, the area would become known as

Swede Hollow. Swedish and Irish immigrants shared space with railroad tracks, and, at the top of the hollow, a large brewery. With water provided by wells and the creek, and the same creek used as a sewer for outhouse wastes, the neighborhood developed without city services.



Figure 15: Birds eye view of St. Paul, Minnesota, 1906. Collection of Library of Congress, notation added.

Phalen Creek descends from the hills northeast of downtown St. Paul to the Mississippi River. The Hollow offered a sheltered ravine with spring water, located close to the developing downtown. It is about three quarters of a mile long with slopes sixty to eighty feet high on either side.<sup>106</sup> The Hollow would come to be defined by it connections to downtown as a railroad corridor, the Hamm Brewery which stood at the top of the Hollow for many years, and the East Side, which became a Swedish area. As former resident Nels Hokanson described it, houses were crowded into the Hollow, sandwiched between the steep hillsides, railroad tracks, and the flowing waters of the creek.<sup>107</sup> At the rim, tenements and other houses looked down into the ravine.

An early printed reference to the neighborhood from 1884 refers to "the ravine known as Swede hollow [with] a nest of fifteen quite comfortable cottages…"<sup>108</sup> But later newspaper reports suggest that small village-like settlement had been known as Swede Hollow for years.

'Swede Hollow'" includes ten acres, and is an open, fan-shaped valley that begins in a narrow strip ay Fourth street, west of Kittson street and the railroad viaducts, and follows up between the immense hills to the north, widening as it goes until at North street, its northern boundary, when the hills circle around and join one another. It is quite a valley. It derived its name years ago, before the city reached out that far, from the fact that the Swede laborers occupied it with their shanties. The squatters increased and soon the shanties grew in numbers and a little settlement was formed.<sup>109</sup>

Geographer David Lanegran explains that Swede Hollow was first settled in the 1840s.

...Swede Hollow or *Svenska Dalen*... is actually the lower portion of Phalen Creek Valley, a narrow ravine about three-quarters of a mile long with sides 60 to 80 feet high. A railway line ran through the valley on its way to Duluth. The Swede Hollow community was first occupied by people other than Swedes. Trappers, lumberman, and casual laborers squatted in the Hollow in the 1840s. The Swede began to occupy the shacks in the 1850s.<sup>110</sup>

The City of St. Paul eventually condemned the area in 1956, and the last wooden shacks were burned to the ground by the city's fire department. Vacant and unused except as an occasional dumping ground, the former neighborhood was effectively erased. Beginning in 1973, the area became known as Swede Hollow Park. Phalen Creek, which had been put in a sewer in 1937 was then partially uncovered, or "daylighted," fifty years later in 1987.<sup>111</sup> Swede Hollow is an example of a ravine community that was eliminated, leaving few traces, but remembered in name. In cities around the country, similar low down areas of housing tucked into hillsides once were well-known "slums" or "foreign colonies" such as Pittsburgh's Skunk Hollow and Portland's Goose Hollow.

Swede Hollow was bounded by the steep banks of the ravine to the east and west, Hamm's brewery at the north end (or top) of the hollow, and the Seventh Street Improvement Arches at the south end. Hamm's Mansion on the east side overlooked the hollow "like a baronial castle" in a "medieval scene."<sup>112</sup> The

surrounding neighborhood to the north was known as Dayton's Bluff, while to the west as the Railroad Island neighborhood—so-called because it was surrounded by railroad tracks on all sides. Children from Swede Hollow attended Lincoln School there, and Payne Avenue, a commercial street, ran in a linear diagonal to the street grid, corresponding to the orientation of the Hollow.

### Case #6: From Hamburgh to Foggy Bottom, Washington D.C.

Located between Georgetown, a thriving tobacco port, to the west and the new federal capitol to the east, the marshy area south of the confluence of Rock Creek and the Potomac River was initially known as Hamburgh. Incorporated into the City of Washington in 1791, Hamburgh had earlier been divided into 234 lots by a German immigrant named Jacob Funk.<sup>113</sup> It was a sparsely developed area with only twenty-seven habitable dwellings in 1800.<sup>114</sup> L'Enfant designed two key public sites for the neighborhood: "Washington Circle and Reservation Number Four, a small hill located on the riverfront between 23<sup>rd</sup> and 25<sup>th</sup> Streets."<sup>115</sup>

The earliest printed references to Foggy Bottom appear in a newspaper report on a murder and a riot in the neighborhood in 1883 and 1884, respectively.<sup>116</sup> A few years later, another story appeared with the explanation that Foggy Bottom was "that section of the city lying below E street west of Nineteenth street northwest, peopled principally by colored people and notorious in police annals for fights and drunken brawls..."<sup>117</sup> The article continued on to describe how a murdered had recently evaded the police, escaping into the "flats... concealed by grass and weeds."<sup>118</sup> At the time of Foggy Bottom's beginnings, city blended into swamplands, a refuge for the marginal and criminal in nineteenth century thinking.



Figure 16: Birds eye view of Washington D.C., 1871. Collection of Library of Congress, notation added.

A local history of the neighborhood sponsored by George Washington University and printed in 1974,

described the name's origins this way:

Several unusual names came to be associated with the area at this time. The most well-known and perhaps most unusual is 'Foggy Bottom' itself. No one seems to known exactly when or how this name came to be applied to this part of the First Ward. (Note: The First Ward extended from Rock Creek to 15<sup>th</sup> Street.) It undoubtedly came into use during this period when so much of the southern portion of Foggy Bottom was just that—a swampy, boggy land prone to fog.<sup>119</sup>

A recent publication describing the Foggy Bottom Historic District provided a similar explanation.

The area popularly known as Foggy Bottom is generally considered to be between 17th Street, N.W. on the east; Rock Creek Park on the west; the Potomac River on the south; and Pennsylvania Avenue, N.W., on the north. Although the origin of the name is not documented, it was probably used by locals as a term to describe the swampy "bottom land" along the Potomac, with its atmosphere of natural river fogs combined with the smoke and soot from nearby industries.<sup>120</sup>

Foggy Bottom was originally bounded by Pennsylvania Avenue on the north, Washington Circle at its northeast corner, 23<sup>rd</sup> Street on the east, the Washington Canal on the south and west, and 28<sup>th</sup> Street and Rock Creek on the west. Extensive landfill and remaking, especially highway construction, radically altered the landscape of the Bottom from 1950 to 1970. The western border became the Rock Creek Parkway, and the area south of Virginia Avenue was replaced by the Watergate complex, the Kennedy Center, the West Leg of the Inner Loop, Columbia Plaza, and a huge, twisted, spaghetti-like junction of connecting roads with on and off ramps.

## Lowland Themes and Commonalities

The development and redevelopment of these six lowland sites followed similar patterns. In the first stage, property owners, speculators, and city officials made the lowlands into urban places by subdividing them for speculative purposes, deliberately under-developing them, and establishing them as stigmatized areas for poor people's residence. Part I explores the making of bottoms, hollows, and flats. In the chapters that follow, organized thematically to highlight the commonalities between sites, examples from the six sites are used to illustrate how land subdivision and development practices, stigma, and floods made urban lowlands into slums.

## PART I: MAKING LOWLANDS INTO SLUMS

~~~~~ Chapter 2 ~~~~~~~~

Subdividing Property and Transforming Tracts

City founders, elected officials, and property owners often platted city development, laid out grids and the location of future streets, and established property boundaries over low-lying, poorly drained lands. By the mid-nineteenth century, the railroads joined in the process. In lowland areas, railroads constructed embankments and culverts to facilitate passage over intermittently flooded areas, built levees, and established a new series of physical barriers and legal divisions on top of these initial urban boundaries. Over time, owners subdivided larger properties into smaller areas, and eventually urban lots. This process could transpire rapidly or take decades, depending on local circumstances. In the lowlands, subdivision was the beginning of the four-step process of "bottom"-making: that is, the explicit use of low-lying areas for the containment of the poor in American cities in the late nineteenth and early twentieth centuries. Part I explores how land subdivision practices, the deliberately partial implementation of urban infrastructural systems such as sewerage, speculation in urban real estate, and housing containment strategies reinforced by municipal authorities (such as in the de facto management of vice districts), combined with social stigma, to produce the phenomenon of bottoms, hollows, and flats. Remarkably similar patterns of "making" may be observed in the historic development of urban lowland neighborhoods, regardless of region or other local characteristics, across the United States. This chapter examines the cases of St. Paul's Swede Hollow, Nashville's Black Bottom, and Los Angeles's Flats.
Opportunities and Constraints of Lowland Real Estate Development

Interestingly, lowlands often did not begin as slums. Indeed, lowlands were frequently the place where cities were founded: along riverbanks or coastlines, places where land and water came together. They provided land for settlement and water for river transportation, drinking water, and disposal.

Most major cities are where they are because of environmental factors: snug harbors, breaking points along rivers, junctures of ecological zones, and so forth. It is no coincidence, for example, that in so many cities, the wealthiest districts are found on high ground where the air circulates rapidly, vistas are the most pleasing, and the ground is best protected from unforeseen floods. Likewise, factory districts often occupy land adjacent to rivers and harbors where manufacturers have enjoyed easy access to water for transportation, waste disposal, and power. To exclude this dynamic from the history of our cities is to miss much of the story.¹²¹

Lowlands within villages and towns that grew into cities also provided agricultural lands. Indeed, as planning historian John Reps and others have documented, many American towns were laid out in this manner.¹²² Interval lands, alluvial fans, washes, or river bottoms frequently had rich soils, productive for growing grains, vegetables, or fruits. Indeed, fertile valleys and river lands subject to flooding were the places where many ancient civilizations flourished as well. Thus, lowlands have been regarded as good locations for settlement, rather than just places where urban problems developed. For instance, in the place we now call the "American Bottoms," a region of nearly 175 square miles around the Mississippi River in southern Illinois, was once the extensive pre-Columbian city of Cahokia.¹²³

Defined by its constructed earthen mounds standing as tall as ten story buildings, Cahokia reached a population of more than 30,000 at its peak. Archeologists have uncovered evidence of significant shaping and grading of the land. Cahokia's builders developed sophisticated engineering approaches to make an urban settlement in a lowland setting that is thought to have thrived over several centuries. By the time French explorers reached the area, Cahokia's original inhabitants had long abandoned the site.

Archeologists and historians have debated multiple possible explanations for the city's decline after the year 1300. Archeologist William Iseminger, for example, contends that "[r]esource overexploitation, crowded living conditions, political and economic disruptions, and climatic change all contributed to Cahokia's decline, all threads of the same tattered fabric that cloaks today's world."¹²⁴ In this way, he suggests, "we can see parallels with modern society, although on a different scale."¹²⁵ At the same time Cahokia Mounds stand as a monument to human ingenuity and resourcefulness in adapting the natural world, they also remind us of the long history of human habitation and challenges of settlement in low-lying areas.

Nineteenth-century American city builders found lowland areas well suited to some uses and adaptable enough to be remade. Before railroads spread across the country, especially in the period before 1840 when river-based transportation and, briefly, canals, were primary modes of moving people and goods, inland cities relied on lowland locations. Cities like Cincinnati were built on the low terraces, known as the first and second "bottoms," at the edge of Ohio River. As they grew in population and wealth, these cities altered their physical settings to accommodate greater building density and intensity of land use. At the edges of the wharfs and waterfronts, and particularly around and upland along either side of creeks and streams emptying into larger rivers, small-scale capitalists constructed tanneries, mills, breweries, and other manufacturing sites. Squatters, small homebuilders, and real estate speculators often chose similar areas of available land to put up inexpensive housing for themselves or to rent to others. Often, the two trends overlapped with small factories and industries joining shantytowns and small houses to fill up valleys, dales, ravines, and hollows.

As urban historians have documented, cities founded along rivers or at the confluence of two waterways often grew extremely fast. In the process of city growth and expansion, they rapidly transformed their natural settings, taking advantage of all available land as "usable territory."

Americans founded their cities in locations where nature offered various attractions—on coastlines where the land's contours created harbors, on rivers and lakes that served for transportation, water supplies, and waste disposal, and in fertile river valleys with plentiful food and animal resources. Cities have always placed demands on their sites and their hinterlands... All cities... were interested in extending their usable territory. Municipal governments, urban developers, industries, and railroads often reshaped natural landscapes, leveling hills, filling valleys and wetlands, and creating large areas of reclaimed land along the edges of rivers, lakes, and bays. On this new land they constructed a built environment of paved streets, squares, parks, parking lots, railroad tracks, and viaducts, as well as erecting structures such as houses, warehouses, factories, office buildings, and churches.¹²⁶

By cutting and filling, topographical features were built up, reshaped, or erased to suit new purposes and serve specific agendas and particular, not necessarily universally shared urban needs. Adapting terrain for profit, for convenience, and for social purposes like reclaiming or taking away land, has been an integral aspect of city building.

In a study of Seattle, historian Matthew Klingle described how these land making activities frequently also

had unequal impacts.

Those with more power had pushed those with less power to the margins, often unwittingly, sometimes willfully, in the name of civic improvement... leveling hills and filling tide flats had been a way to provide 'a fair foundation for municipal solidarity.' But municipal solidarity was not the result. Changing Seattle's physical terrain had reinforced inequality, concentrated it, and made it more visible. Re-engineering topography had channeled the city's castoffs, quite literally, to the bottom.¹²⁷

In hills cities and flats cities alike, the powerful, including real estate developers, elected leaders, and city

engineers made bottoms, hollows, and flats. They were produced as new social and physical

environments, as Klingle puts it, for the "city's castoffs."128

The names bottoms, hollows, and flats were derived from the observation that the poorest people ended up

in the low-lying places, but they were also imprecise and flexible, as colloquial speech is. Thus, "the

Bottoms" was not necessarily "the bed or basin of a river," but could be a "a valley, a dell; [or] an alluvial hollow" with a different physiographic character. Perhaps still flood-prone and unwanted or unprofitable, but nevertheless specific in its soil composition, fluvial processes, geological form, vegetation, and other biotic and structural characteristics. The names came into use in urban and rural settings, eventually assuming the specific meanings and associations attached to urban life, including slums, shanty towns, "foreign colonies," or poor districts where blacks and whites lived together. Nineteenth century city planning and building practices, particularly selective patterns of infrastructure development in the construction of bridges, levees, drains, culverts, embankments, land filling projects, and sewers, played a major role in making lowland environments.

The Improvement Arches

In the early 1880s, the City of St. Paul organized a major municipal effort to connect the downtown to Dayton's Bluff and the city's East Side. Between the two highlands, a vast expanse of railroad track occupied the Y-shaped lowlands of Trout Brook and Phalen Creek. Extending northeast in a straight line from downtown, Seventh Street crossed the two valleys at the point near the confluence of the two streams (see Figure 17). City officials had deemed an existing wooden bridge over the Phalen Creek ravine, and the Swede Hollow settlement, inadequate and unsafe. Its disrepair became a cause of serious concern, and real estate interests and civic elites pushed for a new, improved structure to link the highlands, bridging the gap. The City condemned the existing bridge in 1883, and shortly thereafter allotted funds for a massive landfill and bridge construction project known as the "Seventh Street Fill."

By the 1880s, Swede Hollow was a well-known settlement within the city, traversed by the tracks of the Duluth and St. Paul Railroad, and site for small-scale manufacturing activity. Breweries and mills located in and around Phalen Creek and the Hollow, adjacent to the railroad lines, including North Star Brewery (1855), Brainard Mills (1856), City Mills (1860), Excelsior Brewery (1863), Union Mills (1864), St. Paul Mills (1867), and North Star Mills (1872); Swede Hollow's residents worked in these businesses as well as for the railroads and other businesses in the downtown area.¹²⁹



Figure 17: Detail, city engineer's map, City of St. Paul, 1885, showing streets graded in 1885 (marked in red), graded previous to 1885 (purple), paved streets (light blue), macadamized street (green), gravel surfaced streets (yellow), and unimproved streets (black). Collection of St. Paul Public Library, notation added.

The City hired William Albert Truesdell, a thirty-eight year-old engineer working for the St. Paul,

Minneapolis, and Manitoba Railway, to design and implement the project. He responded to the complex

challenges presented by the "Seventh Street fill" site with an innovative helicoidal or spiral design. On the upper level, the new structure improved transportation access between downtown and Dayton's Bluff by allowing streetcars, carriages, and pedestrians to pass over the ravine. On the lower level, it created arched openings for the Duluth and St. Paul railroad, and redirected Phalen Creek into a 320-foot long culvert under the embankment.¹³⁰ Construction of the Seventh Street Arches, which had begun in September 1883, was completed in a little over a year. On December 18, 1884, the roadway over the arches opened to traffic.¹³¹ A steep staircase descended from Seventh Street down into the Hollow. On the level of the creek, the arched passageways created a portal that became a symbol of the entrance to and exit from Swede Hollow. The Hollow's denizens walked through it, followed the tracks a brief distance, then crossed over to reach the Lowertown warehouse district or downtown St. Paul.

The Seventh Street fill and new "improvement arches" reshaped the Hollow and redefined its spatial character, enclosing the lower end of the ravine. It separated the Hollow from the lower stretch of Phalen Creek, creating and marking an entrance to the immigrant village with a monumental architectural feature. In effect, the City enclosed the Hollow. Bounded on the east and west by the sides of the steep ravine, and on the north by the brewery, the project closed off its lower end.

It also altered the flow of water through the ravine by directing Phalen Creek through a culvert. It would be the beginning of numerous efforts over the next ten decades to engineer these flows. It also gave its name to Swede Hollow's first "street": Culvert Street, which was platted shortly thereafter at the base of the massive embankment on the east side of the bridge. Jacob Wagener, who owned Swede Hollow, including land on either side of the Improvement Arches, subdivided his newly improved property into small lots. As seen in Figure 20, he named the street on the opposite side after himself.



Figures 18 and 19: Looking up, looking down. Illustrations from "The Squatter's Home," *St. Paul Daily Globe*, March 21, 1886, show the new Seventh Street Improvement Arches in relation to Swede Hollow. Collection of Library of Congress.



Figure 20: Detail, Donnelley Atlas of St. Paul, Minnesota, 1892, showing the area of the Seventh Street Improvement Arches completed in 1894, Culvert Street, and Wagener's addition. Collection of Minnesota Historical Society.

On the west side, Payne Avenue ran alongside the Hollow until turning north, where it became the main commercial street of the Swedish East Side. To the south, one could walk out of Swede Hollow along Phalen Creek and the railroad tracks until it joined Trout Brook before flowing into the Mississippi. Both valleys became important rail corridors in the mid-nineteenth century, and Trout Brook like Phalen Creek was also buried in a sewer. Swede Hollow, as rustic as the name may have sounded, did not develop naturally or on its own, it was a deliberate construction, a production of a hybrid natural-industrial environment where selected urban investment literally bypassed the homes of the immigrant poor.

Making Black Bottom

Nashville's Black Bottom neighborhood emerged immediately adjacent to the downtown, in the low land basin formed by Wilson's Spring Branch on its way to the Cumberland River. In the late eighteenth century, Thomas Molloy platted Nashville as a town of 165 squares on the highland bluffs west of the Cumberland. Arranged in a grid pattern with eight north-south streets parallel to the river and five perpendicular eastwest streets, the original grid terminated at the lowlands. South of Broad Street, the southernmost street on the original plat, Molloy marked "Upper Spring Branch" (later Wlison's Spring Branch) on the map just beyond the edge of town.¹³²

As the town grew into a city, Nashville's real estate interests extended Molloy's original grid "below" Broad, south across the creek and up into the hills to the south. The area that would become known as Black Bottom following the Civil War, stretched eight blocks across from Spruce Street (8th) to Front Street (1st), and from Broad Street (Broadway) to Highland (Lea). The new streets aligned with the neither the river,

which curves in a dramatic bend south of downtown, nor the creek. In the hills south of Highland Street, the streets turned to realign with the river.

In the 1890s, the Tennessee Central Railroad constructed a station and freight house on the site of the Planing Mill at the bend in the Cumberland, the neighborhood's eastern edge. Small homes, stables, beer joints, churches, other railroad buildings, and warehouses grew up there, too, as real estate developers, speculators, and landlords converted the low-lying land into an urban neighborhood. In 1904, Black Bottom's street names were changed to align with downtown: Front Street became First Avenue South, Market Street became Second, College became Third, Cherry became Fourth, Summer became Fifth, High became Sixth, Vine became Seventh, and Spruce became Eighth.

The pre-1904 street names denote the topography of the basin, with 6th Street on the west side of the basin called High Street, and uphill to the south was Highland Street. On the backside of downtown, another low-lying area that became known as "the Gulch" developed into a major railroad corridor. In this manner, the downtown area was effectively built up with lower land surrounding it on four sides. The Tennessee State Capitol was constructed on the highest point (see Figure 22).

By the turn of the century, the neighborhood was built out with "Negro tenements" and dwelling houses called "courts" or "flats" built on top of the low-lying land. Wilson's Spring Branch disappeared, covered over by streets and houses. A local historian, looking back the area's history in 1918, told a brief history of the small creek.

In the early days of Nashville the small village on the bluff was bounded on the north and west by the Sulphur Spring Branch, and on the south by George Wilson's Spring Branch. The latter now enters the Cumberland River through a large sewer near the Tennessee Central Station. Its source is a large spring now concealed under a house at the northeast corner of Seventh Avenue and Peabody Streets, on the fifth block south of Broadway. George Wilson's place contained about five

acres... Originally, the valley of George Wilson's Spring Branch was heavily wooded and thick with cane... In George Wilson's time the large spring supplied water for Wilson's tannery, the tannery of Peter Bass lower down on the Branch, and other factories. Then, and for many years afterwards, it furnished cool, wholesome drinking water for the residents of that vicinity. At the present time even the course of the Branch is concealed beneath the streets, the buildings, and the accumulated rubbish of Black Bottom...¹³³

The City of Nashville buried, or to use McGill's term "concealed," the creek in or around 1894, incorporating

it into the sewer system and "opening" new land above it for development.¹³⁴ As seen in Figure 24, the

sewer's path can clearly be observed on the 1908 Hopkins real estate atlas.



Figure 21: Original plat of Nashville showing location of Upper Spring Branch (Wilson's Spring Branch), Broad Street, and Cumberland River. Source: Nashville Civic Design Center, "Nashville Past and Present," accessed from the website <u>http://www.civicdesigncenter.org</u> May 2009. Original source: Map, 1815: The Tennessee Historical Society, Tennessee State Library and Archives.



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Figure 22: This 1905 Nashville photograph shows the view from the railroad "gulch" northeast toward the State Capitol (center left). The Black Bottom neighborhood developed in the lowlands to the south (far right). Collection of Library of Congress.



Figure 23: Detail, Nashville street map, 1877, showing Wilson's Spring Branch cutting across urban lots in the Black Bottom neighborhood. Collection of Metro Archives, Nashville, Tennessee.



Figure 24: Detail, 1908 Hopkins Atlas, showing location of underground sewer along the former path of Wilson's Spring Creek which defined the low-lying basin that became known as Black Bottom. Collection of Metro Archives, Nashville, Tennessee.

The sewer was not completed at that same time as the rest of the sanitary system, however. The City constructed the downtown Nashville sewer first. Between 1872 and 1894, it dumped its contents out from under Broad Street into the open creek running through Black Bottom.¹³⁵ Then, after 1894, when city leaders and engineers enclosed the polluted stream once known as Wilson's Spring Branch and put it underground, real estate interests proceeded to build over top of it. First polluted, then concealed, the creek continued ran underground as part of the city's sewer system, and Black Bottom became a "buried floodplain."¹³⁶

Foggy Bottom's Alley Dwellings, Shacks, and Shanties

Like Nashville's Black Bottom, Foggy Bottom developed into a mixed residential-industrial urban district after the Civil War. Its development was sporadic and uneven, however, characterized by discontinuities and gaps, vacant lots and partially developed blocks. Housing conditions varied widely, with small brick row houses, alley dwellings, shacks, and shanties providing housing. A gas works, lime kilns, breweries, and other industrial uses also located there. Moreover, the edges of the neighborhood on three sides were swampy, bounded by Rock Creek and the Potomac River, raising fears of malaria and other diseases.

As Washington grew rapidly, houses without sewers, water, or natural light became prevalent in Foggy Bottom. Shacks and shanties on the neighborhood's edges and poorly constructed alley dwellings at the interior of blocks shared this condition. Few public services and poor access to downtown also characterized the area. Its population was a mix of African Americans, who had inhabited the area since the city's founding and during the period that the area was known as a German enclave, and new immigrants. After the Civil War, Irish immigrants replaced the Germans and Foggy Bottom became known as a "tough section of town" dominated by Irish.¹³⁷ "A small Italian population" also lived in the area.¹³⁸

Landowners constructed the alley dwellings for profit, creating the unsanitary conditions that gave the area its slum reputation. Local historian Suzanne Berry Sherwood explains:

By 1860, Foggy Bottom had at least one inhabited alley, Snow's Court, which was in Square 28, bounded by I, K, 24th and 25th Streets... some early alley dwellings were built by individuals who owned the front part of the lot. Later on, however, these back lots were developed by absentee owners. A few individuals might own many buildings in one alley or each house might be owned by a different person. The buildings turned a good profit. One reformer in the early twentieth century claimed that they brought about twice what was considered a good return for a property located on the street. At first, the inhabited alleys were relatively limited in scale and density. By the 1870s, the alleys became more crowded, and Foggy Bottom became a focal point for alley housing as it spread north and west.¹³⁹

By the 1890s, Foggy Bottom had nine inhabited alleys: more than 300 people lived in Snow's Alley alone, with several hundred more in Green's Alley and Hugh's Alley (see Figure 25). In 1891, the *Washington Post* noted that the "labyrinthical locality" known as Snow's Alley had "sixty nine houses with at least two families" each yet not "a single lamp," provoking police officers' complaints.¹⁴⁰ The alley, the article explained, was an "infamous" part of one of the city's most dangerous neighborhoods.¹⁴¹

The alley dwellings attracted the attention of social workers, charities officials, and public health advocates.

In Neglected Neighbors, a 1909 investigation into life in the slums, Weller and Weller described the

neighborhood's slum housing conditions, taking special note of the smell.

Following the water line through Eleventh and Twelfth streets,--with other appropriate areas on either side of these,--to F, D, and C streets, southwest, one passes to the southwestern fringe of northwest Washington which has been known as 'Foggy Bottom.' Such new structures as the Conventional Hall erected by the Daughters of the American Revolution are now redeeming 'Foggy Bottom' from its *characteristic dump heaps and indescribable old shacks*. Some of the latter were built up merely with rusty scrap iron and old boards gathered from the waste heaps, from which human denizens also pick up decaying fruit and vegetables for food. Paralleling the Potomac's borders farther one notes a large area of stagnation stretching, with some exceptions, from Twenty-fourth, or even Twenty-third street, westward, between E and K street, northwest. Odors from the gas works and influences from large breweries are especially evident here. Next come 'Snow Alley' and 'Hughes Alley' at Twenty-fifth and I streets; then "Douglas Flats", "Phillip's Alley" and the neighboring areas near Twenty-fifth and M, northwest. Opposite this settlement and just across 'Rock Creek' there is a *large, sunken community with scores of houses which are 'below grade' in every sense* (emphasis added).¹⁴²

In combination, the alley dwellings, shacks, industrial smells, poor sanitation, location next to the swampy

edges of the Potomac River, immigrant and black population, and reputation for crime and violence made

Foggy Bottom.

As an examination of Square 28 and the other alleys make evident, those environmental conditions were party natural, but the built features and the housing conditions were produced. Factory owners, property

owners, speculators, and the city, through its failure to address or enforce basic sanitary standards, made the Bottom into an urban slum.



Figure 25: Square 28, bounded by 24th Street, K Street, 25th Street, I Street, and, at the southeast corner, New Hampshire Avenue, Foggy Bottom, Washington D.C. Baist's Atlas, 1903. Collection of the Library of Congress.

Utah Street and the Flats of Los Angeles

Across the continent, on the Pacific Coast, similar developments were underway in Los Angeles. On Saturday, November 9, 1901, a crowd of Angelenos gathered near the Los Angeles River to celebrate with "free beer, claret, and sandwiches."¹⁴³ They were celebrating the completion of the "Arroyo de los Posos storm drain" with a speech by William Henry Workman, businessman, land developer, and former mayor.¹⁴⁴ He read a resolution aloud to the crowd and thanked the City Council, announcing the engineering work's significance for the future of East Los Angeles: "the storm waters of the Arroyo de los Posos have been diverted into the Los Angeles River, thereby reclaiming hundreds of acres of valuable land, and making land accessible for thousands of homes and for manufacturing purposes, and thus increasing its valuation so that the city will receive largely increased taxes."¹⁴⁵ The *Los Angeles Times* reported, "The new concrete drain, which will carry a stream fifty feet wide by five feet deep, will relieve the flats east of the river from the floods which inundate those low lands during the rainy season, and will reclaim a large tract hitherto worthless."¹⁴⁶ The soggy, flood-prone flats had been made into urban land; they would later be transformed or "remade" many times over.

The event's speaker, William H. Workman, was one of the most influential figures in the nineteenth century development of Los Angeles. One historian claimed that "[h]e was directly instrumental in securing or aiding the construction of every steam railroad which entered Los Angeles," including the Southern Pacific (1872), the Los Angeles and Santa Monica (1875), the Santa Fe (1888), and the Salt Lake and Los Angeles (1888).¹⁴⁷ He was on the first Board of Directors of the Salt Lake railroad. He subdivided the land, procured the water supply, and gave Boyle Heights, one of Los Angeles's oldest neighborhoods, its name in 1876. He was elected to eight terms on the City Council (1872-1887), one term as Mayor (1887-88), and three

terms as City Treasurer (1901-1907), as well as serving at various times as a park commissioner and a member of the Board of Education.¹⁴⁸

Workman had a long history in the flats, and in Boyle Heights. Looking back in 1906, the Los Angeles *Herald* wrote "Hon. W. H. Workman, present city treasurer, and familiarly known as 'Uncle Billy,' … [resident] of the Ninth ward… by his personal enterprise and influence… succeeded in bringing Boyle Heights to the front as a residence district."¹⁴⁹ Workman had named the new suburb after Andrew Boyle, his father-in-law, who had bought low land on the other side of the river for a vineyard and "built himself a spacious residence on the bluff in 1858."¹⁵⁰ At that time, Los Angeles was the wine growing center of California and the lowlands, which were prized for their agricultural value, reportedly sold for between "\$100 and \$200 per acre, while the highland… sold for as low as \$5 per acre."¹⁵¹



Figure 26: Detail, Official Map No. 2 of Los Angeles 1868, showing bluff at Boyle Heights. The Los Angeles River is at far left next to the number 64. "House of A. A. Boyle" is indicated at center right. Collection of Los Angeles City Archives.

In the 1850s, 1860s, and 1870s, in addition to grapes, farmers grew corn, wheat, fruits and nuts, and vegetables in the lowlands around the meandering and sporadic flow of the Los Angeles River. Water was a scarce resource in the arid Southern California climate, and it would be decades before the city began importing water via aqueduct from Owens Valley. Supply was delivered through an extensive system of ditches and trenches known as zanjas. On the east side, Zanja Number Seven diverted water from the Los Angeles River, splitting into two branches, and running through the flats between the main bed of the river and the bluffs approximately a mile to the east (see Figures 27 and 28).

The Arroyo de los Posas flowed into the flats from the northeast, between the mesas that would become known as Brooklyn Heights and Boyle Heights, emptying out near Aliso Street and Summit Avenue. By the 1890s East Los Angeles residents were expressing alarm at the contents of its flow. Upstream, the County Hospital was discharging large amounts sewage into the arroyo after passing it through "a straining box charged with quicklime."¹⁵² The treatment was not adequate, however, with the intended purification device allowing large amounts of "filth" into the small stream. With a low, sporadic flow, the arroyo became polluted with stagnant water and medical refuse. Neighborhood residents demanded action from the County and the City when several typhoid cases were linked to the arroyo's polluted waters. It would be another six years before Workman and friends celebrated the construction of the storm drain at the lower end of the arroyo where it emptied into the flats and joined the Los Angeles River.

The river played an influential role in the physical development of the city, shaping its neighborhoods and Angelenos spatial understanding of the city. In turn, engineers, aided by elected officials, developers, and railroad company men, people like Workman, shaped the river. They constructed levees on either side of it and laid down vast expanses of railroad tracks. They narrowed its flow and channeled its path. They

diverted and lessened its flow for irrigation and drinking water in the nineteenth century, then supplemented and enhanced its flow after 1912 when imported water, once used, was disposed as waste.¹⁵³ And they constructed depots, freight houses, warehouses, and worker housing on the former flood plain.



Figure 27: Detail, Stevenson Map, 1884, showing location of tracts owned by William Henry Workman (bottom center and right). The Los Angeles River is at left, with "West Branch Zanja No. 7" and "Zanja No. 7" (center) noted in the area of the Flats. Note that Workman owned property both in the Flats (near the number 3) and above the bluff, east of Boyle Avenue, in the Heights: "Workman Park" and "Workman Vineyard." Collection of Los Angeles Public Library.



Figure 28: Bounded on the north by Macy Street, the Flats were located between the Los Angeles River (far left, with direction of flow indicated by diagonally shaded arrow) and the bluffs at Boyle Heights. This map shows the north end of the Flats where the Arroyo de los Posas emptied into the river. The three white arrows shaded with a dotted pattern show the direction of Zanja No. 7 and its two branches. Note that in the area of "Myers Tract" (center left) the first two north-south streets in the flats have been platted: Myers Street and Anderson Street. First Street extends horizontally across the bottom of this image. The arrow with the wavy pattern indicates the direction of the flow of the Arroyo de los Posas (top center). Sub-dividers gave the name "Mount Pleasant Tract" to the elevated ground at the edge of the bluff (center) and Summit Avenue to the steep road connecting the Flats and the Heights. Source: 1877 Surveyors' Map of the City of Los Angeles, Collection of Los Angeles City Archives. Notation (arrows) added.

Settlers from Mexico had established Los Angeles as a *pueblo* (town) under the Spanish Crown on the west bank of the river along an elevated terrace in order to take drinking water from the river, distance

themselves from potential floods, and use the lowlands for agricultural purposes. Those agricultural lands,

known variously as the flats or the river bottom, were rapidly transformed beginning in the 1880s into railroad territory. City officials and railroad builders eliminated the meandering course of the river, which ran dry for most of the year, replacing it with a regularized and legally defined channel. The mixed industrial-railroad-residential-river area began to take on a new identity as an urban neighborhood within only a mile walking distance from the traditional center: the plaza.



Figure 29: View east across the Los Angeles River. The flats are located at the center top of this image. Source: Blake Gumprecht, *The Los Angeles River*, 155. His caption reads, "This photograph, taken from a balloon in June 1887 and looking east across the Los Angeles River, shows that urban development had encroached on the west side of the river from Macy Street south to First Street. The plaza is the circular feature in the left center. Alameda Street roughly parallels the course of the river a mile west of its banks, running just east of (above) the plaza. The northernmost crossing on the river in the photo is Mission Street (far left). Moving south, the other crossings are at Macy Street, Aliso Street, and First Street. Used with permission, Seaver Center for Western History Research, Natural History Museum of Los Angeles County."



Figure 30: This detail from a 1888 Sanborn map continues to show bends and twists in the Los Angeles river. That same year levees would be constructed on either side of the river through the downtown area, straightening and narrowing its flow.

During the wet season, typically November through March, the flats were wet, and occasionally subject to major floods. Before the construction of the levees by the railroads in the late 1880s, the river could spread out into a muddy expanse or barrel across the lowlands like a raging mountain stream. Older maps depict meandering river channels forming a small oxbow (see Figures 26 and 30).

The curving, meandering, indeterminate nature of the river landscape seen in early photos and maps was eliminated after 1888. In exchange for permission to enter the city and lay tracks along the river's edge, the railroad companies were required by the city to build levees along the river. They straightened its course, put the river between two parallel lines of constructed river bank, narrowed its path, and remade the muddy river bottom into a new neighborhood. A collection of small houses grew up next to the tracks, freight

houses, and depots constructed by the different lines. On the east side, the city gave the land to the Salt Lake railroad. They built a depot at First Street and the river.

The city abandoned the zanja system in the 1880s and 1890s, filling and building over it. Demand for water increased, hundreds of new wells tapped the area's groundwater, and underground pipes and conduits replaced open ditches. The city "lined the Zanja Madre with concrete for eight thousand feet and replaced its open channel through the business district with underground pipe."¹⁵⁴ Dramatic increases in population meant river water was desperately needed for domestic residential use. The owners of orchards, cornfields, vegetable gardens, and vineyards that occupied the river area realized that their land would be much more valuable as homes and businesses.¹⁵⁵

The East Side, however, still faced hurdles to real estate development. While rows of large single-family homes now graced several avenues in the heights, the lowlands remained only partially developed—this incomplete development was deliberate, as the lowlands were intended primarily as industrial land, not a high status residential suburb like Boyle Heights. Open land and vacant lots characterized the lowlands, although small houses could be found along Anderson Street near the Depot. The highlands and lowlands were linked, or, at least, boosters hoped that the potential for industrial development and jobs in the flats might induce businessmen to buy a lot in the heights. The *Los Angeles Herald* reported: "Events of the past few months have greatly enhanced the value of industrial tracts in the lowlands, and the improvements inaugurated along First street, east of Main, have tended to bring the Heights districts in greater favor."¹⁵⁶

Floods were another problem. A trickle during the dry summer months, the river could become a destructive torrent after heavy winter rains. The Flats and surrounding low-lying areas were subject to major floods with the power to overtop levees, destroy bridges, and whisk away houses.

The three greatest floods here in the memory of most living persons were those of February 17, 1884; January 19, 1886, and December 25, 1889.... In one small section between First and Aliso streets in the 1884 flood, at least thirty-five homes were carried away and so severe was the damage that Los Angeles was without communication with the north or east for two weeks. In the flood two years later, although that same section had been presumably protected by a levee, again a number of houses were swept away, only one bridge across the river remained standing and this could be negotiated only by brave foot travelers. Again the city was marooned, even wire communications being cut off for almost two days. It was on this occasion that four lives were lost and some 200 mules used in grading for the Santa Fe depot were all swept into the river.¹⁵⁷

Floods represented an independent and unpredictable force in both the making and remaking of lowland neighborhoods. Indeed, as William Workman himself proclaimed at the opening of the Arroyo de los Posos storm drain, putting creeks and streams underground accomplished several interrelated land development goals: it removed sewage (such as the County Hospital's waste) from sight, it provided a conduit for directing storm waters during floods, and it facilitated "making land accessible for thousands of homes and for manufacturing purposes."¹⁵⁸

Private real estate benefits resulted from the public investment in the storm drain as well as public ones. The railroads had constructed the river levees, the city abandoned the zanjas and allowed them to be covered over, and the city engineers had intercepted the arroyo's flow with a drain. The bottomlands got built out, somewhat improbably becoming a mixed Russian Molokan and Mexican neighborhood after 1904, and they got a new name: the Flats.

For Workman and other real estate investors atop the bluff, the last major hurdle to the success of Boyle Heights would be transportation connections. By 1905, they had arranged for it as well. New streetcar lines were planned and the district began to grow rapidly as a result.

Boyle Heights has always been regarded as one of the most attractive subdivisions of Los Angeles, and for years conservative dealers in realty, those who do not talk for commissions or personal profit, have held that the mesas east of the river embraced a large portion of the best residence district in the city; but the chief reason for the tardy development of Boyle Heights has been due to lack of satisfactory transportation facilities, a most important consideration for the active business men and the breadwinners who by using the electric cars annihilate time and distance... Now the street car service for the eastern portion of Los Angeles is excellent, the green cars on the traction line and the cars of the Los Angeles company on First street reaching the eastern limits of Boyle Heights within twenty minutes.¹⁵⁹

The Flats developed in conjunction with the Heights, and its prospective development as an industrial district was considered an asset to the residential area. Jobs could be in the flats, homes in the heights, promoters suggested.

But for those workers who couldn't afford the new homes or needed a cheap place to stay, the Flats became its own neighborhood. The real estate values of the lowland and highland had reversed from the earlier era, when well-watered agricultural land was in high demand and the mesas were unwanted without water supply. By 1905, promoters could tout the Heights as an exclusive suburb connected to downtown. Streetcar lines ran through the Flats first on First street, then later along other routes (including through the Arroyo de los Posos), and up over the bluff to higher ground. Homebuilders, community groups, and the city constructed bungalows, stores, schools, churches, and synagogues to complement the large Victorian residences and parks established in the decades prior. The Heights would become one of the most well known neighborhoods in the city, and a symbol of the East Side.

In the Flats, development took a different turn. An ad hoc mixture of sturdy small houses, railroad related buildings, small factories, and stores defined the area. In a few places, informal laborers, job seekers, and newcomers put up their own shacks and shanties. Elsewhere, railroad cars became shelter, and discarded lumber or materials found around the river were assembled into living spaces. Among these places, one street would receive more attention than any of the others. It was known as Utah Street.



Figure 31 and 32: Two Sanborn maps show the early development of the area that would become Utah Street. On the left, a detail from the 1888 map of the area, showing lot lines and houses along Anderson Street. The curving line (middle) is the old west branch of zanja number 7, labeled here as "ditch" and "mostly dry," while the area to the east (right) is labeled vacant. Six years later, in 1894, the zanja has been relabeled as "creek" (perhaps because it has been receiving the flow of the Arroyo de los Posos before it reaches the Los Angeles River) and the property immediately to the east has been subdivided into urban lots.



Figure 33: The same area of Anderson Street in the Flats. Detail, 1906 Sanborn map. Note that the rear property line of the lots on the east side of Anderson Street shows the former path of zanja no. 7, but the "ditch" marked on the 1888 map and "creek" shown on the 1894 map are now missing. Immediately to the east, the new lots have been filled with a collection of small structures that the mapmaker has labeled as "shanties." Note the difference in scale between the houses along Anderson Street and those crowded on to the new lots along the west side of Utah Street.

In 1907, preacher, settlement house worker, urban reformer, and Los Angeles booster Dana Bartlett

declared that Los Angeles had no slums, except for Utah Street. In a reform tract titled The Better City, he

wrote:

The worst congestion that existed in the city was found on Utah Street, just east of the river, where those Mexicans lived who were brought in from Mexico to work on the trolley lines. The land in that locality was divided into tiny lots which were rented for one or two dollars a month. On each of these lots was built a shack of hammered-out cans, old boxes, or burlap, with no yard space nor sanitary appliances of any sort. The toilets were of earth, and were used in common. In order to study this condition, a Housing Commission was appointed by the Mayor...¹⁶⁰

Architect Dana Cuff has attributed housing types and conditions around the river downtown to "low

population density."

House courts, defined as three or more habitations on a lot with the unoccupied portion shared (Los Angeles, Housing Commission, Report 1906-08), were a rational outcome of circumstance at the turn of the century. The eastern banks of the never-navigable Los Angeles River were flanked by railroad tracks, small industrial enterprises, livestock-related businesses, and housing for low-wage workers and recent immigrants (Spalding, 1992). The generally low population density left plenty of open land near downtown and the railyards, that is, near jobs. Since most of the rest of the city was segregated, people of color lived primarily in concentrated communities along the river and Alameda corridor... The vacant land there became house sites for workers who paid about a day's wages for ground rent and the right to erect tents, shacks, and other thin, simple buildings, habitable because of the region's mild climate. After a year's study, the commission concluded that LA had a unique problem for which no parallel could be found in other cities. The crowding of 'foreigners' into these small, poorly built houses in the center of the city was 'deadly to health and morals.'¹⁶¹

Many of these housing became known as "cholo courts," a derogatory term at the time for Mexican

laborers.

City health officials and social workers with the Housing Commission surveyed Utah Street and the Flats in

1908, identifying poor housing conditions and taking special note of the "house court" as Los Angeles's

equivalent to the tenement.

Utah street court in the days of its most flourishing condition comprised a tract of land equal to onethird of a city square. On this ground were sixty-eight houses of various styles of architecture and material, depending upon the choice and ingenuity of the builder. Between four and five hundred people, including children, lived in this area, and for their convenience and accommodation they were supplied with seven water faucets, and eight toilets...¹⁶² The Board of Health expressed concern that the house courts were places where "disease spawned in overcrowded rooms, including tuberculosis, cholera, typhus, and pneumonia.¹⁶³ They recommending that "house courts," shacks, and converted railroad cars be replaced by better-designed housing.

They were also explicit about the area's cultural and ethnic character, voicing racist displeasure at the mongrel nature of the settlement.

Already difficult problems of overcrowding and unsanitary conditions have existed in Los Angeles, a city of homes and open spaces, too long to make their solution easy. With the coming of every carload of colonists, our task increases. The foreign population has grown incredibly in the last two or three years. Do uptown people know that we have about four thousand Russian peasants, two thousand Slavs, and a large number of Italians, Japanese, Chinese, Syrians, not to mention the original Mexicans, the rapidly increasing colored population and other elements of a cosmopolitan whole.¹⁶⁴

Following the housing surveys, the neighborhood was transformed by municipal interventions in many

forms, including an extensive bridge building campaign to connect the "East Side" to downtown and an

expansion of industrial activities.





en speciel e en loren par la marcele approxime



Figure 35: Photograph from the 1910 City of Los Angeles Housing Report.





The City, in turn, adopted a housing ordinance regulating "house courts." The response from some landlords was immediate, Bartlett noted. "In several instances," he wrote in 1907, "the landlords, rather than submit to the expense of renovating the houses and repairing the courts, have evicted their tenants. This is especially true on Utah Street, where nearly all the courts were cleaned out.¹⁶⁵

The Flats had become a slum, partially developed, sharing space with industry, stigmatized a place for recent immigrants. The neighborhood may have appeared to be drained, built up, separated and protected from the river, but the risk increased as an increased density of new railroad-related buildings, warehouses, shanties, small houses, tenements, house courts, and stores transformed the urban environment. During major storms, water continued to surge down from the mountains through the foothills and mesas in ravines and gullies like the Arroyo Seco, the Arroyo de los Posas, and countless other small creeks and streams across the Los Angeles Basin to the Pacific Ocean. In the 1930s, Los Angeles would experience two major floods of a severity not seen since the 1880s.

Bridges, Embankments, Sewers, Drains, and Tracks

The scale of a lowland area may be hundreds of square feet or hundreds of square miles. In an urban context, these varieties of scale mean that "lowland" could refer to an area of one small parcel of land, a block, a neighborhood, a city, or a region. Indeed cities such as East St. Louis, Illinois have been constructed almost entirely on bottomlands and regions like the American Bottoms occupy areas or more than a hundred square miles. Similarly, one may regard larger regions, such as southern Louisiana, as an entire low-lying region where the Mississippi River empties out its contents towards the Gulf of Mexico.

Town site planners, speculators, boosters, and civic leaders often organized new urban settlements adjacent to lowlands but not in them. Whether envisioned as agricultural lands to support the expected new population, working landscapes for the establishment of mills, tanneries, or other small industrial developments, or hunting grounds and open space at the edge of the settled area, the lowlands were considered in selecting an urban site. The utilitarian features of the landscape were proclaimed as loudly as the scenic beauty of the site or commodiousness of the climate and setting. "Mill Creek," for example, was a name often given to brooks and streams in the West for promotional purposes: as in, this creek would be a good place to put a mill.¹⁶⁶

In cities like St. Paul, Nashville, and Los Angeles, new towns were platted on terraces and bluffs overlooking large rivers. Adjacent to the higher ground, creeks and streams ran across the landscape, down from the hills, into the river. In St. Paul, Trout Brook and Phalen Creek formed the eastern edge of downtown St. Paul, flowing together before joining the Mississippi. In Nashville, Wilson's Spring Branch once ran through the low area north of town. In Los Angeles, it was Arroyo de los Posas.

Lowland sites are many and varied, the terms imprecise, and the meanings changing. Lowland features may be surrounded on four sides like a bowl or flat like an open plain with barely discernable edges or boundaries. They can differ remarkably in scale, shape, and physical character. Furthermore, they are subject to human intervention, to filling in ravines and ditches, cutting down hills, constructing bridges and roads, burying and concealing waterways, and draining land for real estate development.

Neighborhood-scale lowlands developed as gaps, holes, marks, divides, and fissures in the urban context. They were often interstitial spaces, neglected, abused, and exploited. City builders, developers, and engineers reworked natural processes in the cities; they simultaneously reconfigured urban space. By

exercising the power to reshape the physical landscape, they produced zones of marginality and poverty, pushing immigrants and African Americans down into the lowlands.

Stigmatizing Residents: The Goat in the Parlor and Other Stories

In the study of housing conditions much is frequently attributed to the methods of living in vogue among the occupants of the dwellings examined. The 'foreigner' is generally made the excuse for existence of housing evils, and the trite stories about potatoes in the bath tub or the goat in the parlor are related with much satisfaction and with no little success in postponing legislation and avoiding or delaying law enforcement. The same kind of reasoning was used in New York City at the time when slum conditions were created by a large increase in German and Irish population thirty or forty years ago, as is used throughout the whole country against the Italian, the Pole, the Armenian, or any other nationality that prevails in a given community... ¹⁶⁷

--Carol Aronovici, 1917

The social environment of the lowland slum, and outside perceptions of it, gave the constructed environments of bottoms, hollow, and flats their negative reputation. These neighborhood nicknames linked together people and landscape effectively *naturalizing* inequities. That is, journalists, crusaders, neighbors, and city leaders made unjust conditions seem normal by equating dirty, filthy places with dirty, filthy people. In the process, the landlords, property owners, and city officials who helped create these unequal and stigmatized urban landscapes obscured the ways in which the lowlands were *produced*. People who ended up in the bottoms, it was believed by many city dwellers, did so because they were inferior. By taking a closer look at St. Paul's Swede Hollow, Nashville's Black Bottom, and Los Angeles's Flats, we can see how the lowlands became known as dirty and unhealthy, and how the people who lived there tended to be lumped together in their association with bounded, stigmatized spaces. The low-lying places that speculators, developers, boosters, and builders transformed into urbanized land, subdivided into lots and offered for sale, became residential environments, urban neighborhoods, and ethnic enclaves. Sometimes seen as temporary, or described by historians as steppingstones to a better life, as places they became rather permanent. Frequently, immigrants were blamed for their own poor housing conditions, and the lowlands became known as areas where foreign people with foreign customs, unfamiliar with American ways of life, lived. As housing reformer and city planning advocate Carol Aronovici wrote in 1917, newspaper stories and other reports often focused on peculiar anecdotes like the family with "potatoes in the bathtub" or "the goat in the parlor"—activities that were seen as an affront to civilized behavior, suggesting ignorance, ambivalence, or total disregard for the "proper" function of spaces within the home.¹⁶⁸

Aronovici, who went on to become a national figure in housing policy and urban planning circles, critiqued this attitude in the study of St. Paul housing conditions he authored while head of research for Wilder Charity in 1917. He argued for housing reform, new city ordinances, and better city planning. His characterization of newspaper accounts was quite accurate in describing the lowland slum.

Living in the Lowlands

Nels Hokanson, Frances Camareno, and William Daniel lived in the lowlands. Reflecting on his experiences growing up in Swede Hollow, Hokanson wrote:

My family lived in the Hollow in 1889 and the early 1890s... My father and mother... moved the family to St. Paul from Sweden in 1887. Our first home was a cottage on Cook Avenue, which Father rented or purchased on the advice of his brother, Nils Monson, who had preceded us to this country. I do not know why we left the cottage, but my uncle intimated that Father lost money in a land deal and could not continue payments on the house. In any event we moved to one of a row of smoke-encrusted houses along the railroad tracks. I remember the place because of a kindly lady who lived a few doors from us. She shared her cookies with my sister and me and gave us our

first English lessons... The Hollow was about one hundred and fifty feet wide. On one side a rugged bluff devoid of greenery reached some seventy feet to a series of tenements at the city street level. Back porches of these tenements faced the Hollow. Housewives hung their washing on the porches, and it was not unusual for them to shake brooms and sweep refuse in our direction... There must have been thirty or forty families in the Hollow when we lived there.¹⁶⁹

Frances Camareno, who grew up in the Flats of Los Angeles in the 1930s, described the neighborhood this

way:

We moved to the area in the thirties, and I went to grammar school at the Utah Street School. We moved there in the first place because most of the people my father knew from Zacatecas moved there, and from Durango, so they all knew each other. We all spoke Spanish, but there was a night school to learn English. We kids did the clean-up after dinner while our parents went to that school... I lived on Utah for about ten years; my youngest sister was born there in 1933. That was the year they had the big flood. Luckily, the homes were high up off the ground, or they would have been taken. We were scared. We heard policemen coming through the neighborhood—they woke us up—saying the river was overflowing and that families in lower homes had to get out. The water came right up to the floorboards; it flooded our streets. It was very scary, but I was 13, and we older kids thought the whole thing was fun. The Red Cross brought our food, and everybody was stuck there for a couple days. It ruined everyone's garden. Everyone there had gardens, and everyone tried to outdo each other.¹⁷⁰

William Daniel grew up in Nashville's Black Bottom, living there from 1930 to 1948. He described his

experiences in as follows:

Black Bottom was a wonderful place to grow up. It was a poor neighborhood, but I was used to it. It was where I learned all the skills I needed to make it in life... In those days, everyone had absolute authority over children. And if you were walking around looking hungry, people would invite you in and give you something to eat... We didn't have snow days back then... The only time we didn't have to go to school was when the backwater was so high that it was flooded. And even then they sometimes came and got us in a boat.¹⁷¹

Their stories and thousands others like them express how the lowlands became both city neighborhoods,

with street names, houses, neighbors, and policemen, but also places apart. The lowland neighborhoods

were places where housewives in the tenements above swept dirt on you, or the river flooded up to the

floorboards and everybody's gardens were destroyed. They tended to be places where immigrants and

their children learned English, or where African Americans sought out a good education in a segregated

school. Families tried to accumulate some savings and move up and out to a better life in a better

neighborhood.

But the lowlands, intended to be a temporary home for many families, were permanent for many others. Often lowland residents couldn't move, lost money rather than accumulated it, or faced ethnic, racial, religious, or other prejudices when seeking housing on higher ground. For many African Americans, the attempt to move into white neighborhoods was met with violence. So, while lowland residents often sought an exit, they were at the same time being pushed back down. Newcomers joined them, forced into the bottoms by a lack of housing choice, municipal neglect, and prejudice. The segregation of neighborhoods based on topography became a well-known aspect of the industrial city, a phenomenon that began in most American cities following the Civil War. Indeed, by the 1920s, the low-lying slum had become such a familiar feature of the city that sociologist Nels Anderson remarked about "the slum": "Every city has its worst area; its unkempt houses along the tracks, its shanties on the river bottom, its row of houseboats, or... its East Side, its West Side or some other area of mediocrity."¹⁷² Anderson went on to urge sociologists to make the slum a part of their research agenda, although he did not term it "slumming."

Barred from the middle and upper class districts of the city, poor people, immigrants, and African Americans were often relegated to the lowest, most flood-prone areas of the industrial city. While "other side of the tracks" or "wrong side of the tracks" remains in common parlance today, in an earlier era these places were known for their low topography and propensity to flood, as much as they were identified by their location across a boundary line or a dividing feature like railroad tracks. In fact, as one looks closely at these low-lying neighborhoods, it becomes clear that the low ground often was on the other side of the tracks, down in the river flats, along a polluted creek or stream, or in the broad expanse of a wide floodplain called "the bottoms."
The Little Hamlet of Shanties and Huts

St. Paul's Swede Hollow is perhaps the oldest named lowland settlement of this type that I examined in this dissertation. By the 1880s, newspaper journalists were already referring to the history of the area and its link to Swedish squatters who set up camp there in the 1850s. Over time, the Hollow developed a reputation as one of the worst districts in the city. In a report in a Christian evangelical newspaper, one writer explained that in 1898 outreach efforts and "mission work" was being undertaken with great effort reaching "a large number of the most needy and also degraded of the population being near 'Swede Hollow' and "Konemara Patch' [sic], *the simple names of which will sufficiently designate its inhabitants* (emphasis added)."¹⁷³

In *Lost Twin Cities*, architectural historian Larry Millet argues that a lack of affordable housing drove recent immigrants to the hollow, and the river's edges, citing newspaper articles from the period.

For the cities' poor... finding a decent place to live was almost impossible. Housing of all sorts, but especially low-cost housing was in chronically short supply. A St. Paul newspaper advised its readers in 1882 that it was 'absolutely impossible' to obtain a house for rent in the city. By the end of the decade, the situation was not much better. 'The scarcity of small houses has driven a larger element into boarding houses, hotels and flats,' the St. Paul Daily News reported in March 1889, noting that there was a glut of expensive houses on the market. Those with the least money usually lived in ghettos of one sort or another. In Minneapolis, for example, there was 'Hell's Half Acre,'... Other squatters lived in hidden-away places like Swede Hollow or along the river flats in shacks built from drift lumber. For poor immigrants these makeshift communities offered an inexpensive start on life in a new and alien world, and many families moved up to better neighborhoods once their fortunes improved.¹⁷⁴

Along with Swede Hollow, one could find Bohemian Flats in Minneapolis and the Levee district in St. Paul,

both along the Mississippi River.175

The Swedes who lived there arrived poor, and rather desperate for a new life in an unfamiliar country. They

were part of a mass exodus from their home country caused by agricultural failures, political and religious

repression by the state church, and economic disaster. Hokanson writes that "[m]ost were members of the Swedish peasant class, illiterate and unskilled, forced to take menial jobs like pick, shovel, saw, and ax work on early railroads or in the woods."¹⁷⁶ They brought their customs, and their food ways with them, he notes: "They lived much as they had in Sweden, with a penchant for snuff, potato sausage, pickled herring, *flat bröd*, and especially coffee which they drank at all hours."¹⁷⁷

In Swedish, the Hollow was known as *Svenska Dalen*. Swedes were the dominant group from about 1850-1900, sharing space with Irish immigrants. A smaller, adjacent settlement known as Conamara Patch is frequently mentioned in newspaper accounts as the Irish section of Phalen Creek Valley. Located south of the Seventh Street bridge, the "Patch" appears to have lasted from about 1881 into the mid- to late-1890s.



Figure 37: Map detail, Swede Hollow, St. Paul, Minnesota, Donnelley Atlas, 1892. The tracks of the St. Paul & Duluth Railroad line, Phalen Creek, and the location of approximately one hundred fifteen small houses are shown. The label "Swede Hollow" indicated the location of the ravine settlement between the highland neighborhoods of Dayton's Bluff and Railroad Island. Courtesy of the Minnesota Historical Society.¹⁷⁸

In 1884, a letter from the Office of the Department of Health noted that "built down in the valley of Phalen creek, are shanties for one hundred families."¹⁷⁹ By the 1890s, as many six hundred people were living in about 115 small houses and cottages in the Hollow.¹⁸⁰ According to one source, a state census in 1905 recorded more than 1,000 people living in the Hollow.¹⁸¹

Newspaper articles from the time presented two contrasting, albeit equally slanted, viewpoints on the settlement: romanticized descriptions focused on the exotic nature of the foreign colony or screeds denigrating the low class behaviors and un-American ways of the immigrants. Whether presenting the "little hamlet" or "plague spot" version, the journalists' common approach was to emphasize the foreignness of the people.¹⁸² An article in the *St. Paul Daily Globe* on March 21, 1886 carried the headlines:

THE SQUATTER'S HOME. Foreign Settlement in the Midst of the City of St. Paul—The Foreign Residents Thereof.

'Swede Hollow.' It's Quaint Appearance, and Still More Quaint and Picturesque Surroundings.

How the Little Hamlet of Shanties and Huts Appears on a Winter's Day - - A Quiet Scene.

Something of the Legal Status of the Holdings and the Extent of the Flaxen-Haired Population.¹⁸³

The reporter's romantic depiction contrasts jarringly with the image presented in an 1888 story focusing on the poverty and dependency of "Swede Hollow and the People Who Dwell Within It," offering the reader "Sights and Scenes as Observed Among the Lowly of Life."¹⁸⁴ "The dwellings are uniform in but one

particular," the author writes, "their general air of ruin and desolation. They are placed at all angles... [and] the whole resembles an irregular mass of toy houses which a child has indiscriminately set down in accordance with the particular whim of the moment."¹⁸⁵ The writer continues, characterizing "[t]he inhabitants of Swede Hollow... [are] of the lowest order of mental and moral intelligence," adding that "[a] stroll about the quarter shows an enormous amount of hidden and concentrated vice."¹⁸⁶



The Hamm mansion (at right) and the brewery overlooked the Hollow.

Figure 38: Like a Baronial Castle. Source: Nels Hokanson, "I Remember Swede Hollow," Minnesota History, vol. 41, no. 8 (Winter 1969). The author identifies the original source as follows: "Hamm's provided the photograph on page 367."



Figure 39: Swede Hollow, as it appeared around 1910. The railroad right-of-way is visible at the left side of the image, and the brewery can be seen in the distance (top, center). Collection of the Minnesota Historical Society.

In the 1890s, journalists describe Swede Hollow as "a Paradise in Its Way" and a "Swedish Hamlet" of

"Contentment and Thrift."¹⁸⁷ One reporter took a completely different attitude towards the arrangement of

the houses, a symbol of disorder in earlier accounts.

One house may turn its back on the water and face the bluff, thereby having its back door not six feet away from the next house, that looks toward the stream. Then there are others whose directions would puzzle the skilled eye of a surveyor, and yet there is an economy of space and originality of design which irresistibly fastens one's attention upon the necessity of this ingenuity. Herein lies the legend of Swede Hollow. These people years ago left the old country and came to this land, where they had heard of broad plains and fertile valleys, and where they had hoped there would be more room for them than there was in their native land. Those that came out here found room, but many of them were not welcome, for the highlands were pre-empted, and they found no resting place till they found this deserted, but cozy little hollow made by the kindly hand of nature,

refreshed by the airy stream that loiters through the ravine on its ways to the Mississippi, and sheltered by the bluffs from the inclement winds.¹⁸⁸

Based on these romantic accounts, it is perhaps no wonder that Swede Hollow achieved a mythic status in

a city where Swedes continued to immigrate, assuming a larger percentage of the population over time,

and eventually assuming positions of power and acting as one of the dominant ethnic groups in the region.

As Swedes moved out, new immigrant groups moved into the hollow's houses. In the early 1900s, Italian immigrants began to replace Swedes in the *Dalen*. The newcomers took over the small houses, and established a new community, known to some as "Little Italy" while others still referred to it as Swede Hollow. The experiences of Italian immigrants appear to have been quite similar to the Swedes. One former resident, Gentille Yarusso, recalled his family's long history in the Hollow.

...thousands of Italian immigrants got off the train at the depot in St. Paul, Minnesota. They all had tags on their lapels, and on each tag was written Joseph Yarusso, No. 2 Swede Hollow, St. Paul, Minnesota. Joseph Yarusso was my grandfather. He was there at the depot on many occasions to greet these friends and relatives, who had just come from the Old Country. He had been one of the first immigrants to settle in Swede Hollow. It was therefore his obligation to see to it that these people should have a place to stay and a place to settle for awhile. By pinching and scrimping, in a year or two, when they had saved enough money, they, too, would move to better living quarters—Up on the Street.¹⁸⁹

Immigrant heritage stories have often defined places like Swede Hollow as temporary. In the narrative arc of the American Dream story, where upward mobility and opportunity is available to all, immigrants arrived under harsh conditions, encountered many difficulties, suffered at times, but ultimately built a new life for themselves in their new country, achieving success and, perhaps, a small amount of material comfort or wealth. This narrative of "up and out" is one that is frequently told about Swede Hollow. As Lanegran puts it, the Hollow was a slum, but it was also a "funnel" and a "stepping stone."¹⁹⁰

During the last years of the nineteenth century, Swede Hollow served as a funnel through which many Swedes entered the East Side. Swede Hollow was a 'stepping stone' neighborhood, a temporary home where immigrants stayed only until they could afford to move up the hill. It was a place where impoverished newcomers could find cheap housing while they got started. It also served as a refuge for people who had fallen on hard times and needed a place to stay while they pulled themselves together again. It was a slum.¹⁹¹

But, as historian Rudolph Vecoli argues, in the same edited volume *Swedes in the Twin Cities*, the harsh living conditions in lowland areas like Swede Hollow sometimes made it difficult to leave. He warns that a narrative that focuses only on assimilation and upward social mobility (and, in this case, upward topographical mobility) misrepresents the facts. Many immigrants, he writes, were "defeated and crushed by the harsh conditions they encountered in America."¹⁹²

A name like Swede Hollow could be understood two ways: as the place where Swedes lived or belonged (perhaps an attitude prevalent among the city's existing middle and upper classes at the time of immigration), or as the place where the poorest Swedes lived (an attitude more likely to be adopted by Swedish immigrants themselves, emphasizing the class differences among their group and the potential for assimilation and upward mobility in their adopted country). But from the outside, Swede Hollow was a symbol of how all Swedes lived.

Nashville's Black Bottom: Sights, Sounds, and Scents

Nashville historian James Summerville writes that the "very mention of the name 'Black Bottom' conjured up visions of rambling tenement houses that overlooked dark and sinuous alleys, the sound of music blaring from the doorways of dimly lit dance halls, the scent of unbathed bodies huddled over a crap game in a basement den."¹⁹³ The neighborhood was notorious. Located in a low-lying depression south of Broad Street, its early development was influenced by the wharves of the Cumberland River. The "ramshackle housing, saloons, brothels, and gambling dens" that defined the neighborhood in the early twentieth century traced their roots back to an earlier era when "Nashville's riverboat crews," who "had always demanded a

certain amount of commercial vice, and the soldiers quartered in the city during the Civil War produced a booming business in prostitution, which lingered long after 1865."¹⁹⁴

After the Civil War, real estate speculators, merchants, migrants, lumber mill owners, and railroads transformed the "low ground" south of Broad Street and its "beautiful creek" into a densely developed urban district.¹⁹⁵ Thousands of people moved to Black Bottom in the late 1860s and early 1870s, including Irish immigrants and African Americans seeking jobs in the downtown, along the waterfront, with the railroads, or as domestic laborers working in people's homes. It is likely that some of the new African American residents in the area were veterans of the so-called "contraband camps" of freedmen established by the Union army around Fort Negley. The Irish and blacks lived together with poor native whites, later to be joined by Jewish immigrants. In 1870, the population of the Sixth Ward included 1,844 whites and 1,649 blacks.¹⁹⁶ In 1874, African American residents constructed a large, new brick church in the neighborhood: St. Paul's African Methodist Episcopal. By 1880, the city was nearly forty percent black and Black Bottom was one of several low-lying areas of black settlement.¹⁹⁷

New industries and railroad connections transformed Nashville, and the city grew rapidly. Between 1870 and 1890, the city population nearly tripled, going from 25,865 to 76,168. By the end of the 1880s, real estate developers, speculators, landlords, and industrial interests had built out the Black Bottom in a patchwork pattern with a concentration of cheap housing "courts," shacks, tenements, and "flats" available to blacks; unwanted nuisance businesses; and drinking and gambling establishments. Behind the stores on Broad Street, which separated Black Bottom from downtown, and along the Cumberland River, they built wagon shops, a distillery, livery and feed companies, stables, a lime and cement warehouse, tobacco and cotton warehouses, junk yards, lumber yards, and machine shops.¹⁹⁸ At the base of Demonbreun Street, where Wilson's Spring Branch once flowed down to the river, the Cumberland Planing Mill, Box Factory,

and Saw Mill established a huge complex of buildings.¹⁹⁹ In the lowest lying areas near the path of Wilson's Spring Branch landlords built "Negro tenements" as rental properties. The creek became an open sewer.

Beginning in the 1880s, the area became less Irish. Doyle explains:

As the Irish American population grew, and as the Irish began to generate their own modestly prosperous middle class, they began moving away from the grimy slums of the Jungle and Lower Broad (which became 'Black Bottom' as the Negro took the place of the Irish), many of them came to an area west of the railroad gulch that by the 1880s came to be known as 'Little Ireland.'²⁰⁰

In 1883, the city constructed a segregated public high school south of Demonbreun on Summer (5th Avenue South). It was the only high school that African Americans were allowed to attend in the entire city.²⁰¹ "By the turn of the century, some 1,800 black people lived in the quarter mile area of Black Bottom."²⁰²

As the city's African American population increased in the decades following the Civil War, Nashville's real estate interests, elected officials, and civic elites built Black Bottom into a zone of segregated topography that could simultaneously function as a quasi-sanctioned vice district and operating location for noxious industries and nuisance uses. Whites used restrictive covenants, deed restrictions that prevented the sale of rental of property to non-whites, and violence to keep blacks out of white neighborhoods.²⁰³ Post-bellum migration patterns met with Jim Crow segregation. Instead of "forty acres and a mule," African Americans ended up with something much less pastoral, equitable, or potentially wealth-generating after Emancipation. For many, the new era meant shared accommodations in a shack or small, crowded rental house in a flood-prone district on the near-edge of downtown.

In the first decade of the twentieth century, Black Bottom's housing and the visual appearance of the neighborhood began to attract the attention of local journalists. Between 1905 and 1910, the *Nashville*

Banner and the Nashville Daily American ran multiple stories on the neighborhood as part of a campaign to either clean it up or eliminate it altogether. One journalist described the visual scene, emphasizing the accumulation of garbage.

Over in an alley two small houses bring \$10 each a month: the gutters are falling, the steps rotting, but they are better than most of the rental property of the Bottom. The rag man's house is just a bit beyond these, and the heaps of rubbish, old scrap iron, and porcelain milk bottles and other rubbish are not so very much worse than in many of the yards where no rag business is carried on. The rag man we were told pays \$7.50 for the hole in which he dwells. Not far away is one of the filthiest holes in all the Bottom. An old skeleton stable ready to fall down occupies one corner of the lot, and just within a tumbling fence is a heap of old rubbish under a sort of shed that the wildest imagination would hesitate to call a shop.²⁰⁴

The goat makes an appearance in these accounts, just as Aronovici remarked, although not in a parlor.

One newspaper report noted, "Few animals are to be seen in Black Bottom, but the billy goat seems to be

something of a favorite."²⁰⁵ The photographer made sure to capture that goat on film, too.



Figures 40 and 41: Newspaper photographs from the article "A Journey Through Black Bottom," Nashville Banner, July 29, 1905.

The sounds of the neighborhood attracted great interest as well, especially at night when "fun rules, and

innocence goes to wreck, and pathos stares at you out of pallid faces, and crime slips in and out, dodging

here and hiding yonder."206 But most of all it was the odors. In 1905, the Nashville American editorialized:

No city in America or Europe can present a more disgraceful or sickening aspect of modern civilization than that part of Fourth Avenue that runs through the hideous heart of Black Bottom. If a conglomeration of dives, brothels, pawnshops, second-hand clothing stores, filthy habitations and the like—accompanied by the daily display of lewdness and drunkenness on the sidewalks and redolent with the stench of every vile odor—can make a 'hell-hole' then Black Bottom is that place.²⁰⁷

A Banner journalist described problems with garbage and waste, inspecting the contents of residents' trash

barrels, describing the contents in detail for the newspaper's readers.

At one place I stopped, there was a little wooden railing, on Third Avenue, I believe, it was guarding against a false step that would drop the unwary down some fifteen or more feet into a sort of court below, where life moved on strangely unusual as above. Along the walk by this rail stood the inevitable row of garbage barrels, 'waiting for the wagon.' Old papers, old rags, decaying vegetables, melon rinds and big green flies made a lively picture and a 'speaking odor' to be sure. Down a flight of rickety little steps I climbed, for the time bent on pictures. There was a long row of doors, a slim little shelter of a porch, and in the center of the court the women (who took in the laundry) had rigged themselves up a sort of coop, made of old sheet iron and four small posts. One side was open and in it was small stove, the fire burning where the flatirons were heated. The rood was literally packed with the household vessels, bowls, washing boards, pans, and what not! The house was two-storied and a big foul smelling outhouse stood nearby. But the court was scrupulously clean so far as the dwellers there could make it. The ground was hard, and swept clean as a floor. The filth was all in the barrels above, 'waiting for the wagon.²⁰⁸

Five years later the same reporter returned to the neighborhood on a "slumming tour in Black Bottom."209

The journalists encouraged readers to associate what they read about the sights, sounds, and scents of Black Bottom with race. For African Americans living in lowland neighborhoods, stigma and blame were applied in racist terms relating to the supposed development of the Negro race. Progressives and reformers often tried to refute the view that African Americans belonged in the bottoms by describing their "progress" or the activity of successful individuals or attentive school children, despite the perceived social disintegration and disorderly conditions of the slum.²¹⁰



Figure 42: Newspaper photo published in 1910 showing housing conditions in Black Bottom.

City health inspectors and newspaper journalists stigmatized all lowland dwellers as an immoral or less

socially developed type of "foreigner" or "negro." They blamed African Americans for the poor housing and

unhealthy living conditions created by segregation and maintained by discrimination and violence.

"Progressive" journalists pointed to class differences among Negroes. In the Nashville Banner, for example,

one journalist expressed how blacks in Black Bottom were different from other members of the race.

...it is only fair to state that the best element of the colored people of the city does not dwell in Black Bottom; furthermore, that they shun it, frown down upon it, and despise it with as much disgust and terror as the people of the white race. They do not associate with Black Bottom negroes, nor endorse their mode of life. Black Bottom seems to hinge upon just two things, to have two reasons for existence: the matter of finance, and the desire of the rougher element for a congregating place—the people who own and receive revenue from the shacks of the Bottom, and the people who find life in these hovels more to their taste than cleaner and more healthful surroundings.²¹¹

These types of descriptions were commonplace, and they presented an image of lowland residents as primitive, countrified, dirty, and undeserving. Interestingly, though, in the reform view, the "people who own and receive revenue" are considered complicit in allowing the degraded conditions and lifestyle of the

bottom dwellers (or one might equally as well say the people from the flats or down in the hollow), to persist.²¹²

Color, Clamor, and Noise in the Flats

East of downtown Los Angeles, across the Los Angeles River, Mexicans, Japanese, African Americans, and Russians moved into the area around First and Utah Streets after the turn of the century. With William Workman's backing, the City drained the land and opened it to new housing. The neighborhood quickly became known as "the Flats" or "Russian Town." Molokan Russians established a tight knit ethnic and religious enclave in the Flats. Newspaper reporters expressed both amazement at the exoticness of the newcomers calling it "one of America's strangest foreign colonies" and disapproval at the apparent unwillingness of the strangers to assimilate to American ways of living.²¹³ Protestant reformer Dana Bartlett described how the "coming of Russians in large numbers to this city caused for a time much unhealthy crowding, with several families in houses intended for only one family."²¹⁴ But, he added, Angelenos should not worry too much as "these people are industrious and thrifty, and are now buying houses of their own."²¹⁵

For the most part, however, Angelenos regarded the newcomers with suspicion and the newspaper writers expressed hostility and derision. *One Los Angeles Times* writer commented that the Molokans were in the middle of "a slum sandwich": "On one side of them are the Mexicans; on another are Armenians."²¹⁶ The author continues, "It is a picturesque place—a place which is not of America. But is it picturesque only so far as people go. In itself it is a squalid region, a huddle of flat houses and tenements, of squat cottages and dilapidated huts."²¹⁷



Typical Melokane household inte which health afficers must go to enforce souldary regulations.

Figure 43: Illustration from a 1907 Los Angeles Times article on the Molokan settlement in the Flats of Los Angeles. The original caption reads, "Typical Molokane household into which health officers must go to enforce sanitary regulation."



Figure 44: A photograph from the City of Los Angeles Housing report, 1910.

The foreigners were declared to be too separate, not American enough, and potentially a threat to the city. They were suspicious of doctors, they performed marriages without getting city licenses, and they gave birth to babies without registering them with birth certificates. Again, from the *Los Angeles Times*: "They had come here to avoid laws. They had come here to form colonies on a socialistic basis where statutes would not bother them."²¹⁸ In the end, though, the authors declares that they are a "simple, harmless people, hardworking and thrifty, and a "never-ceasing source of wonder" to the visiting "health officials."²¹⁹

The Molokans moved into an area with lots of new housing, in a variety of styles and conditions. Houses built decades before on Anderson Street were joined by new "courts," shacks, small houses, and tenements as home builders and real estate interests converted the lowland into a neighborhood. Business owners established First Street as the commercial center of the district. It was an affordable place to live, within walking distance of downtown, close to jobs. By 1924, the Molokans had become an established presence. A *Times* noted approvingly that "nesting secure in their colony in Boyle Heights, situated in the area bounded by East First and Fourth streets, Anderson street and Boyle avenue, [they] have gone about their business."²²⁰ Interestingly, while the geographic area described in the article was part of the Flats, the same area inhabited by the Molokans since 1904, the writer avoids the term and labels the Flats part of Boyle Heights.

White Angelenos' attitudes towards the Molokans reflected fears about the ethnic composition of the growing city. Between 1880 and 1910 the population of Los Angeles increased from 11,183 to 310,198, Massive in-migration, mostly from other places within the United States, produced an enormous new city within the span of three decades. Native-born whites, variously referred to as Yankees and Anglos, became the dominant culture, establishing a rigidly segregated city. Anti-Chinese prejudice was widespread, and a history of brutal violence had marked previous decades. Many Anglos held racist views, believing that "foreigners" belonged in the industrial areas around the Los Angeles River. In an 1889 editorial in the *Los Angeles Times*, one writer's hateful screed suggested that "steps were being taken" to drive the Chinese to the east side of Alameda, down toward the river flats.²²¹



Figure 45: An image from the Los Angeles Times article "They Build Nests in the River Bed," January 6, 1901.

The river areas, as Los Angeles historians such as William Deverell have documented, became associated with tramps, hobos, scofflaws, and outsiders.²²² For example, a 1901 *Los Angeles Times* article with the headline "They Build Nests in the River Bed" describes in a bemused and mocking tone the story of

"unrequited love" and an old pioneer, a white man who once had riches, who has landed in the river area, built himself a shack, and become known as "King of the Bottom."²²³

Among the quaint residents of Los Angeles are the ever shifting class that inhabits the river bed," the article begins. "While preferring a solitary existence, they nevertheless establish themselves within sight and hearing of the busy world. Tucked away here and there amid the shrubbery of the over-hanging river banks, are to be seen many rudely constructed shacks, their sides and tops clumsily patched with sheets of tin rescued from the dump. The inhabitants are as unconventional as their dwellings.²²⁴

From the confluence with the Arroyo Seco south to Seventh Street and beyond, the former agricultural lands were transformed into a railroad-industrial zone, one that had increasingly become associated with social, ethnic, religious, and behavioral difference. Newspaper reports like this one gave the lands around the Los Angeles River the reputation of urban swamplands, a refuge for the marginal and criminal, a description also used to characterize Washington D.C.'s Foggy Bottom.

Likewise, a similar mixture of romanticization and distain, such as that used to describe Swede Hollow in St. Paul, was present in attitudes towards immigrant communities in the lowlands around the Los Angeles River, especially the Flats. In particular, Anglos mythologized and falsified the Spanish and Mexican past. The areas around the Plaza, including the area known as Sonoratown were exoticized and portrayed romantically by writers, such as settlement house worker Amanda Matthews Chase, author of *The Hierogylphics of Love: Stories of Sonoratown and Old Mexico.*²²⁵ At the same time, journalists, reporters, health officers, and visitors "slumming" in the river districts portrayed the river as "a place of bad smells and bad people, a place where, Anglos expected and insisted, crooks, Mexicans, Indians, and Chinese congregated.²²⁶

Alameda Street, which ran in a long straight line along the eastern edge of the Plaza and downtown, became known as a dividing line. East of Alameda became the industrial zone, and one of the few places

where non-whites could find housing. The river and the "railroad areas" developed a reputation for marginality, ethnicity and "foreign colonies" like "Russian Town" in the Flats.



Figure 46: A photo of an outdoor Molokan community gathering as it appeared in the Los Angeles Times, January 12, 1932.



Figure 47: A photograph from Pauline V. Young's 1932 study of the Molokan community.

In 1932, sociologist Pauline V. Young authored a major study of the Molokan community in the Flats of Los Angeles. The University of Chicago Press *The Pilgrims of Russian Town: The Community of Spiritual Christian Jumpers in America* published the book with an introduction by Robert Park, one of the sociologists of the Chicago School. Young focused on the religious and social practices of the community, particularly the questions of interest to sociologists: customs and practices in immigrant communities, social integration and disintegration, conflict, and assimilation. Young portrayed the community in positive terms, and the study is filled with detailed descriptions of the character of the Flats in the early 1930s. For example, in this passage, she described its smells. The atmosphere of The Flats is heavy. Factories, warehouses, small industrial plants of all kinds and description, contribute their share of pungent smells. Feed, fuel, and livery stables, a wholesale drug company, a co-operative bakery, a firecracker factory, a granite-works establishment, a creamery, a garment-manufacturing concern, are some of the varied types of industrial establishments which hem in the district to the north, south, and east, while the railroads define the west boundaries. Noisy engines, clanking over a maze of tracks, puffing steam in spirals, and emitting volumes of black smoke, spread a pall over the region.²²⁷

The influence of the Chicago School is evident in her writing: the Flats, she implies, is located in Park and

Burgess's zone of "transition" and the Molokans are just one of many groups that have "invaded the

district."

The Flats... is... an area of transition and for some years has been in a condition of flux. The most prosperous and active of the early American residents have moved away, leaving some stragglers behind. Wave upon wave of immigrants have invaded the district: Japanese, Italians, Negroes, Russians, and Mexicans have settled here, some temporarily, others more or less permanently, the human tide leaving behind it, as it moved on, a certain number of marooned families to keep alive the tradition of their sojourn. As new people arrived, the color, clamor, and noise of the streets increased...²²⁸

In just thirty years, the Flats had become a major district in the fast growing city of Los Angeles, occupied

primarily by immigrants, many from the "Old World" in their colorful costumes. The Flats was "heavy" with

the smells of smoke and industry, and loud from railroad noise. It was an urbanized lowland.

Frog Hollow's Factories

Immigrants would play a major role in shaping the character of Hartford's Frog Hollow, too. Real estate developers constructed multiple family dwellings known as "perfect sixes" in close proximity to the factories that lined the Park River and Capitol Avenue. The Weed Sewing Machine company, Pope Manufacturing, Billings and Spencer, Pratt and Whitney, and the Hartford Machine Screw company were just a few of the employers located nearby. French-speaking Canadians, Lithuanians, Poles, Swedes, Danes, and many other ethnic groups moved to Frog Hollow, setting up businesses, churches, baseball teams, and a variety of other small-scale commercial enterprises and institutions.



Figure 48: Frog Hollow, 1900. Collection of Connecticut Historical Society.



Figures 49 and 50: Advertisement in the 1903 Hartford City Directory for a factory on Capitol Avenue, 1921 Sanborn fire insurance map showing large factories (pink) along Park River and Capitol Avenue, homes on Laurel and Woodbine Streets.

Unlike the other areas in this study, however, Frog Hollow developed into a solidly working class area with well-constructed buildings and no shanties. It was densely developed with mostly three- and four-story buildings (see Figures 48 and 50). On the far southwest side of the neighborhood was Pope Park, donated by the founder of the bicycle-manufacturing firm. The Connecticut State Capitol stood just north of the neighborhood, and Trinity College to the south. Although the neighborhood was not the poorest in the city, neither was it a middle class area. It was crowded, and smoke from the nearby factories polluted the air.

Frog Hollow was different from Swede Hollow, Black Bottom, or the Flats. Its name may have reflected the marshy conditions of a small depression or dip in the land, but it did not develop in the same manner as the other neighborhoods. While those places were intentionally partially developed, with a wide mix of housing conditions including numerous shanties and shacks, Hartford's Frog Hollow had more uniform, and better quality, housing conditions overall. Industrialists built a large manufacturing district, with multiple factories employing hundreds of people, interspersed with high-quality worker housing. The neighborhood came to be defined by its production processes and its economic success, with major companies locating together along the Park River and Capitol Avenue. Laborers worked in the factories to make machine parts, bicycles, typewriters, and many other goods.

The exception of Frog Hollow serves as a reminder of the limits to the urban lowland phenomenon: some places, despite their name, simply weren't as poor, neglected, or stigmatized as others. The Frog Hollow name appears to have originated in the early days of land development, when the area was on the periphery of Hartford's densely developed residential and business center. If Hartford's land owners, elected officials, and speculators had developed the land differently, in the mode of the stigmatized,

interstitial, and incomplete development of other urban lowlands, it would be a "hollow" in the same sense as St. Paul's Swede Hollow or Pittsburgh's Skunk Hollow. Instead, Hartford capitalists and industrial developers invested significantly in the area, building up a dense built environment in a rather brief period of time. At least eight factors account for the difference between Frog Hollow and the other sites: the extent of industrial development and proximity of jobs, the infrequency of flooding in the residential area (the South Branch of the Park River being located at the western edge of the neighborhood), the relative wealth of Hartford in the nineteenth century, the small land area of the city, the presence of other "bad" neighborhoods in the city, the absence of racial stigma associated with black neighborhoods in other sites, the location of the vice district elsewhere in the city, and the complete (not deliberately partial) development of the area.²²⁹ Frog Hollow had some of the characteristics of "bottoms, hollows, and flats," but not all. As a case, it serves to reinforce how urban actors made these places and how marshy areas with stigmatizing names and immigrant inhabitants could have developed differently.

Immigrant and Black Spaces in the Industrial City

Bottoms, hollows, and flats exhibited mixed conditions, and an ad hoc, often dilapidated appearance. Sometimes romanticized or remembered fondly, they were also communities of people's homes and places where tight-knit communities formed, often out of necessity. They were not uniformly unhealthy, dirty, or illkept, but were on some blocks or in selected areas. Shacks and shanties would be mixed in with wellconstructed small houses. People built, repaired, and maintained their own humble dwellings in the same areas that slumlords packed tenants into poorly constructed buildings with no toilets and no readily available water supply. But these districts were easily defined spatially, clearly marked and bounded by topography, and they acquired reputations as units. People and place were lumped together: aspects of constructed space (the built environment) were associated with a bounded area of "natural" space that became stigmatized according to notions of class and American-ness (or whiteness) expressed and condemned as behavioral space. The names, the reputations, and the practice of lumping together was way of making simple sense of the complex, fast growing, and heterogeneous industrial city.

Low-lying urban districts became known as places of cheap housing, cultural or behavioral separateness, industry, racial mixing and ethnic difference, flood danger, poor access, and crime. The lower section of the city could threaten property values or excite concerns about racial mixing and sexual practices. Spatial separation came to be considered as "natural," supporting Social Darwinist notions that the people who lived there belonged there due to their race, ethnicity, and religion, as manifested in deviant, low-class, or anti-social behavior.

City health officials, housing inspectors, and newspaper journalists were a few of the outsiders to venture into the lowland neighborhoods to describe them as city districts. They reported on places that looked bad and smelled bad, with dirty people and dirty houses. They observed and commented on, and beginning in the 1900s and 1910s, photographed these conditions. They expressed concern about dirt yards and "courts" as a housing type. They noted housekeeping practices and the tidiness of the area. They remarked on the presence of animals, the sources of water, and the disposal of waste. Many neighborhoods lacked adequate plumbing and facilities for sewerage and sanitation. Fresh clean water was frequently difficult to access, or shared by a great number of families through an outdoor spigot or by taking water directly from a creek, stream, or small well. They expressed concern about washing and bathing practices.

Most of all, low-lying places were understood as a place apart, separate from the rest of the city, segregated by topography. It is perhaps this "separateness" that terms like bottom, hollow, and flat convey

most powerfully. Places like Swede Hollow were truly isolated or partially hidden from the rest of the city, while places like Black Bottom, while adjacent to the downtown, were visibly lower as one looked at them from downtown or the heights. For example, Rutledge Hill was a wealthy area next to Nashville's Black Bottom. It was within walking distance, or a short carriage ride, of downtown. In an oral history recorded in 1951, a longtime white resident of the area, a woman identified as Mrs. Price, described the relationship between the two areas.

It never occurred to me that I would really live out my life in this old community, but it was such a convenient place to live that we could never bring ourselves to move away from it. It is so very near town—the only obstacle being the fact that a negro settlement lies between our home and Broad Street. This was commonly known as Black Bottom, although I have always tried to get my friends to call it Ebony Flats. But even that settlement did not distract too much from the great convenience of our location...²³⁰

Of course, the "negro settlement" in the Bottom that Price refers to was one of the few places African Americans were allowed to live in the city. In Nashville, as elsewhere it was not unusual for low-lying neighborhoods to lie adjacent to, and even sometimes directly below, wealthy neighborhoods. William Hamm, the St. Paul brewery owner, could look down on Swede Hollow's small shacks and cottages from his mansion next to the brewery. Wealthy Boyle Heights residents with houses overlooking downtown, looked out over the Flats, too. Just the same, lowland residents looked up at those houses from their own position in the landscape.

The physical conditions and living environments that came to be labeled bottoms, hollows, and flats were produced by the supply of inexpensive housing (often rented by speculators waiting for an increase in land values or the promise of redevelopment), the neglect of city officials, the delineation of tolerated vice districts, and the prejudice of segregationists and real estate interests. They were reinforced by a general distain held by the middle and upper classes for the people who lived in the lowlands. Even reformers, with few exceptions, tended to focus more on the behavior and morality of African Americans or immigrants

living there than the real environmental hazards present. A city planning regime defined by the interests of capital, and justified by faith in privatism and laissez faire, produced an inequitable urban landscape. Bluffs served as walls, terraces and ridges as dividing lines, and dirt and disease as markers of stigmatized spaces.

Dirtying Place and People: The Residue of Floods

Floods defined the lowlands in both material and cultural terms. The stigma attached to low-lying places as expressed through place names like 'the bottoms," was reinforced by flood events. Charity and relief efforts usually dominated the immediate response to disasters, patterns of municipal neglect and prejudice prevailed over the longer term. The most vulnerable in society were often blamed for filth, disease, and social isolation. Poor and working class people living in low-lying urban areas were not floods' exclusive victims, but they were the most common ones. Repeated inundations of urban lowlands disproportionately affected the poor, inflicting suffering, displacement, homelessness and death. This chapter examines floods in Nashville's Black Bottom, with reference to floods in the Flats of Los Angeles, but is primarily devoted to an in-depth discussion of the case of the Great Flood of 1913 in Columbus, an urban catastrophe that killed ninety-three people.

Floods, Lowlands, Poverty

Gilbert White observed the connection between poverty, low-lying residential areas, and floods in his classic treatise *Human Adjustment to Floods* in 1945.

Rarely does a flood inundate a high-grade residential district in an American town or city. The lower-income groups in urban areas suffer proportionately more from floods than do those in higher brackets.... It seems to be a reasonable hypothesis that wherever a flood plain is narrow or of medium width, the better grade residential occupance seeks the upland. Flood plains lack the scenic views and the interrupted landscape that commonly go with hillside or upland location, and they are more likely to be occupied by objectional commercial and manufacturing forms.²³¹

White echoed observations made earlier by Burgess and Hoyt in this regard, but he added a powerful new form of analysis to the understanding of low-lying places within cities: the relationship between city building practices and flood hazards. He astutely identified connections between the built environment, natural hydrological processes, and socio-economic conditions.

Floodplains vary in total size with some floodplains consisting of dozens of square miles or more. A floodplain can be larger than a city, such as East Saint Louis, located within the large region of the American Bottoms. A floodplain can be parts of multiple cities and towns, or located completely within one city. White pointed to another key difference in the character and scale of floodplain: width. He argued that wide floodplains exhibited a greater resistance to structural and land use changes as a flood protection measure. By developing new terminology and means of comparing low-lying areas, White added greater sophistication to professionals' discussion of urban sites and flood hazards. The "flood plain" could be its own unit of analysis.

Floods are in part a result of human constructions. Water overflowing its stream banks or river channel in an unpopulated area is rarely considered as flood. Freshet was the word once given to seasonal (usually springtime) flows, a term that has largely disappeared from common parlance. "Spring runoff" is another term for this phenomenon. Rather than seasonal events, though, floods are often considered exceptional events, where "land not usually covered with water" is suddenly submerged.²³² Indeed, major floods can be exceptionally destructive. But the spatial arrangement of urban districts and decisions about what to

build where, and patterns of who lives where and why, are human decisions and societal choices. As such, the disproportionate impact of floods on the poor must be recognized as a product of human decisions.

Following the rapid industrialization of lowlands, a new type of vulnerability became attached to poverty. Urban floods in built up areas, especially as the result of the failure of levees or other constructions designed to protect people, were unpredictable and swiftly destructive. While high waters and seasonal flows may have been a regular occurrence along streams and rivers for centuries, the presence of constructed protections, the covering over of drainage channels and other "natural" outlets, and the proximity of the residential population could be, and sometimes was, a deadly mix. The making of the lowlands often involved the burying and concealment of creeks and streams, the cutting and filling of land, and the construction of earthen embankments and other features.

Floods inflicted suffering and death on poor people because these families had few other choices about where to live. In the late nineteenth century, the cultural association between floods, lowlands, and poverty became more common as the number of terrible incidents grew. City after city experienced the effects of building out the bottoms as mixed industrial-residential districts. Typical is this report from the *New York Times* describing a Spring flood on the Cumberland River in 1884 in Nashville's Black Bottom district.

The river is now several inches higher than it has been at any time during the Winter. Much suffering is being endured by *the poor people whose homes are in low places*. Many families have been driven from their homes by the water... Many dwellings along the river-front, north and south, are under water to the depth of several feet. The water is washing the lower end of Broad-street, while in black bottom it is nearly up to Summer-street (emphasis added).^{"233}

Summer Street was later renamed Fifth Avenue, five blocks inland from the Cumberland River—this report suggests that nearly the entire basin was filled in this backwater flood. Early accounts of Black Bottom's history mention Fifth Avenue as the western edge of black settlement in the area. Sixth Street, a block further west from the river, was known as High Street during this period.

It is also evident from newspaper reports and other sources that many low-lying districts of this type were occupied by African Americans. Following the deadly 1938 Ohio River floods, an editorialist in the African American newspaper the *Pittsburgh Courier* expressed this hope for a better rebuilding:

The present flood, now happily subsiding, will go down in history as the worst yet experienced by the American people, both in lives lost and property destroyed. With typical resourcefulness and unusual spirit of cooperation, the people of the Ohio Valley have confronted and surmounted the danger, aided by funds and equipment and food from all parts of the country.... Inevitably the waters will subside and the flood will be ended. Then will come the period of reconstruction. And right here there is a good possibility that the flood may not have been an unmitigated evil. Many sections of the flooded cities have for long needed rebuilding. Slum areas, broken down factories and other blighted sections have customarily occupied the lowlands along the river, and in these areas many colored people of the poorer class have been crowded. These sections have now either been destroyed or rendered uninhabitable. They will have to be rebuilt or the former inhabitants moved elsewhere. *To get the Negroes 'out of the bottoms'* will bring an appreciable lowering of their sickness and death rates, and a decrease in delinquency and crime (emphasis added).²³⁴

Just as floods elicited concern and alarm, they could also spur hope that the poor might find better accommodations and the low places might be remade. Along the Ohio River, the historic border between the "free" and "slave states," and throughout the South, African Americans had lived in lowland areas since before the Civil War. In the late nineteenth and early twentieth century, they found that the segregated areas available to them in the North and West often had these characteristics as well.

Floods contributed to the negative image and stigma attached to the lowlands in at least three ways: by marking territory, by isolating residents, and by depositing residue. First, the physical extent of the area of damage, with its destroyed buildings and ruined landscapes covered with debris, marked the inundated territory as the low part of the city, the area that would be filled up—like water poured into a bowl, when the floods came.

Floods marked boundaries. The damaged part of the city became known as "the flooded district" after many floods. Flood damage had an unmistakable spatial quality—the area of damage and debris, the area of standing water, the area left with watermarks after the flood receded. In fact, the maximum extent of floodwaters is one definition of a flood plain. When these incidents were repeated, and the same area would flood a second, third, fourth, or other time, "the flooded district" became a regular part of the city.

Second, the destruction of bridges across these waterways reinforced the notion of the separateness or isolation of the area. Floodwaters could also remake the physical landscape of a river, and shift the relationship between land and water. A nineteenth century historian of Columbus, Ohio, for instance, noted how small islands and other land features disappeared in a Scioto River flood.²³⁵ Marginal places like river islands, unstable and constantly changing landforms, were used as social spaces by African Americans in nineteenth century Columbus. Lee writes:

Intermittently washed, as it has... been, by huge volumes of water, the local topography of the river has exhibited, within the historic period, some interesting changes. Early in the settlement of the borough, a strip of land called an island extended from Broad Street south to the dam, and was a favorite dancing place, it is said, for the manumitted slave population which settled in Nigger Hollow.²³⁶

Floods severed connections, remade landscapes, and upset social patterns.

In cities located on both sides of a major river, floods could separate one side from the other. Bridges were often swept away and connections severed. For example, in the 1886 Los Angeles River flood, the east side of the city was completely separated from the main area of settlement around the Plaza.

In one small section between First and Aliso streets in the 1884 flood, at least thirty-five homes were carried away and so severe was the railroad damage that Los Angeles was without communication with the north or east for two weeks. In the flood two years later, although that same section had been presumably protected by a levee, again a number of houses were swept away, only one bridge across the river remained standing and this could be negotiated only by

brave foot travelers. Again the city was marooned, even wire communication being cut off almost two days.²³⁷

Floods reinforced the potential isolation and vulnerability of low-lying places. Populated urban districts that flooded were often isolated for days, and sometimes weeks, with few people able to get in or out except by boat.

Third, floods left behind a physical residue: flood waters, filth, debris, and mud. City officials and city residents expressed concern that stagnant waters and stained landscapes were contaminated, posing the threat of disease.

Floods served as a reminder, often ignored, of the position of the city in relation to the rivers, and specifically of the position of the lowlands in relation to the river. People who could afford to move elsewhere did so, and the lowlands became associated with the people who lived there, either too strong willed to move, too attached to the place, or too poor to relocate.

Cumberland River Floods

Nashville's Black Bottom has flooded repeatedly since the nineteenth century, most recently in May 2010. Newspaper articles and local histories attest to the vulnerability of the area where Wilson's Spring Branch once flowed through a bowl-shaped depression down towards the foot of Demonbreun Street and into the Cumberland River.²³⁸ In 1887, the *Atlanta Constitution* reported on the rising waters in Nashville, adding that "[h]undreds of the wretched poor, who will be driven from their cheap homes in the lowlands, will suffer, if not helped by the citizens."²³⁹ The terms for urban lowlands, like "the bottoms" or "frog town" conjured up images of watery expanses of silt and mud. Indeed, floods did bring the dirt, as this newspaper article about the 1929 Cumberland River flood in Nashville demonstrates.

Today [the river] had passed the third crest forecast and still was rising slowly to a point 11 feet above flood stage. The police and real estate firms had made available their facilities to the hundreds whose homes were temporarily uninhabitable, but factories and other commercial institutions had no relief from the water, which had covered valuable machinery and stocks of goods, and has deposited heavy layers of mud throughout the city's river section.²⁴⁰

The reporter added, "Sections of railway and trolley trackage were flooded, but no serious inconvenience to

traffic had resulted."241



No. 6. Flooded Area Around Hay Market and Tennessee Central Depot. (Photographed and Copyrighted by Nashville Aeronautic Corp. December 30, 1926. River Gauge 56 Feet.)

Figure 51: Aerial photograph from the December 1926 Cumberland River flood in Nashville showing Black Bottom. Source: Charles J. Burnell, The Nashville Flood of December and January 1926-27 (Nashville: C.J. Burnell, 1927).

The debate over the origins of Black Bottom's name also has connections to the area's frequent flooding.

Summerville writes:

Black Bottom's name conveyed two literal truths of physical geography: it was low alluvial land, and its soil was much darker than the clay and mineral-laden earth surrounding middle Tennessee. The great number of Irish immigrants who arrived in Nashville between 1850 and 1860 were forced to cut streets and measure off narrow lots through this area in order to erect homes for themselves. Following a rain, their boots would sink deep into the mud that was *the result of countless centuries of flooding on the Cumberland River* (emphasis added).²⁴²

In this sense, the "bottom" could be the bottom of a bowl, sink, tub, or jar. When the floodwaters spilled over into the low-lying land, they filled it up, not only with water but sediment. The bottoms were the place where the dirt and debris settled or landed. It didn't take much imagination for city dwellers to connect this "dirt" with the city's lower classes—settling into the low spots.

Columbus and the Great Flood of 1913

The relationship of Franklinton, the neighborhood known as "the Bottoms," to the rest of Columbus, has been defined by repeated floods. Located on a wide flood plain, wrapped by the Scioto River on three sides, the Bottoms sits directly across the river from downtown Columbus. It comprises "the other side," separated, bounded, and well defined. The district is centrally located, close to the downtown and the State Capitol in a location that is prominent and the same time, inferior and troublesome. The dramatic S-shaped curve in the Scioto River known as The Bend has historically defined the development of the Columbus landscape, forming the edge of the downtown area and separating east from west. Broad Street extends in a straight line across the plain, a distance of more than two miles from the bluffs at the west side to the Scioto River on the east. It forms the major east-west axis of the city.

On March 25, 1913, a major flood struck Columbus, Ohio. Heavy rains swelled the Olentangy and Scioto rivers.²⁴³ Within hours, the rivers were overflowing and The Bottoms was submerged. In some areas, more than twenty feet of water surged across the urban landscape, ripping up railroad tracks, pushing buildings off their foundations, and drowning people in their homes. The bridges connecting The Bottoms to downtown were swept away, and the district was cut off from the east side of the city. Hundreds of buildings were destroyed, more than twenty thousand people were made homeless, and ninety-three citizens lost their lives.²⁴⁴ President Woodrow Wilson activated emergency military assistance and ordered federal relief supplies sent.²⁴⁵ Rescuers searched for survivors stranded on rooftops and retrieved the dead. The event became known as The Great Flood of 1913.



Figure 52: This view from the top of the Wynadotte Building, facing west down Broad Street, shows the extent of the ruined landscape of "the Bottoms." Source: A Report to the Mayor and City Council on Flood Protection for the City of Columbus, Ohio, September 15, 1913 (Chicago: Alvord & Burdick, Engineers, 1913).


Figure 53: The intersection of Broad and May Streets, 1913 Columbus flood. Source: A Report to the Mayor and City Council on Flood Protection for the City of Columbus, Ohio, September 15, 1913 (Chicago: Alvord & Burdick, Engineers, 1913).



Figure 54: Only accessible by boat, "the Bottoms," Columbus flood, 1913. Source: National Weather Service Collection, National Oceanic and Atmospheric Administration.



Figure 55: Track damage, Columbus flood, 1913. Source: National Weather Service Collection, National Oceanic and Atmospheric Administration.



Figure 56: Flood victim. Source: National Weather Service Collection, National Oceanic and Atmospheric Administration.





Figure 57: Corner of Rich and Dakota Avenue, 1913. Source: National Weather Service Collection, National Oceanic and Atmospheric Administration.

The flood shut down the entire city of Columbus for six days, and the Bottoms was inaccessible for six weeks. After the floodwaters subsided, Columbus Mayor George Karb and the City Council brought in Chicago engineering firm Alvord and Burdick to assess the damage and recommend possible flood control remedies.²⁴⁶ The experts got to work quickly. They began compiling reports of the current property damage, weather data, historical records, and previous flood studies. When completed, the report offered no less than fourteen alternatives to address the flooding problem in Columbus. The response to the 1913 flood, Alvord and Burdick argued, offered an opportunity to protect the city, improve traffic flow, decrease money spent on bridge maintenance, and improve city appearance.²⁴⁷ Proposed engineering solutions were roughly divided into two groups in a cover letter from the Army Engineers, which stated a preferred option in each category: proposals with reservoirs and proposals without.

At the time of the 1913 flood, several thousand people lived in The Bottoms. Real estate investors and factory owners, with the aid of civic and infrastructural investments from the city, had built up the neighborhood since the 1870s when it was annexed to Columbus. Especially in two decades prior to the flood, new apartment houses, businesses, and factories had been built.²⁴⁸ Builders put up new cottages, rooming houses, and tenement apartment buildings to shelter the city's rapidly growing population, which more than doubled between 1880 and 1900, from 51,647 to 125,560.

Paradoxically, it was an earlier flood that stimulated this investment. Real estate investors had responded to the 1898 flood, only fifteen years prior, not with caution but optimism. The earlier flood had catalyzed an assertive response from the city and the railroads who set about constructing additional protective measures to prevent future floods and improved infrastructure to support the district's continuing economic development. Engineers designed and workmen constructed new levees and railroad tracks along the Scioto River that were raised an additional six feet above the 1898 high water mark.²⁴⁹

Floods shaped and reshaped the physical landscape, as well as the cultural one. Of particular note is the way in which Columbus residents interpreted these flood events over time. Floods could be considered exceptional or spectacular moments, separate from everyday life, but which at the same time, left behind traces, physical evidence, memories, and a lasting impact of the city. Columbus residents greeted these floods with curiosity and enthusiasm, as well as terror and dread. During the September 1866 flood, one observer remarked that "the scene was peculiar, grand and novel."²⁵⁰

Up stream and down stream was traceable the widened current of the swollen river, hardly detached from the broad lake of still water clustering about farmhouses and flooding the city suburbs. Old landmarks were gone, the National Road seemed blotted, in part, from the map of these suburban districts, as revised, railroads were less than dotted lines, and fences designated by mere hairstrokes. The low districts to the west and to the south were extremely well watered,

and were principally inhabited by a floating population. Cattle and horses, caught napping on high points, were navigating the inundated country in a very careless manner, going no way in particular, if we except certain spasmodic plunges downward. There were pretty scenes in the dim distance of women and children being handed from windows to boats below, of men wading shoulder deep in the water carrying little children above their heads across the flood, and of anxious faces framed in windows toward which the water surged rapidly. The scene was peculiar, grand and novel, and the event is to be remembered as a landmark in our history.²⁵¹

Spectators might find the floods fascinating, but the damage was real. Repeatedly the raging Scioto

wrecked houses, farms, and town buildings, and displaced the people of Franklinton.

Floods were not uncommon in the Bottoms. In fact, they defined it. In 1897, on the occasion of the town's

Centennial, a local historian noted the frequency with which the area flooded.

The Scioto, whose overflowing made the fertility of the soil and aided in the production of the fine crops of maize which in 1795 attracted the attention of Lucas Sullivant, has also caused much damage. The first flood of which there is record inundated the land on which Lucas Sullivant had decided to build his town. That was in 1798. There were other great freshets in 1834, 1847, 1852, 1859, 1860, 1866, 1868, 1869, 1879, 1881 and 1883. The lowness of the ground offered to the waters a ready sacrifice of the property of various kinds that was being accumulated in the growing town, and even now there is not entire immunity from flood.²⁵²

Likewise, in his voluminous 1892 *History of the City of Columbus, Capital of Ohio*, Alfred Lee described freshets, high water marks, and Scioto river floods in 1798, 1832, 1852, 1859, 1860, 1862, 1866, 1868, 1869, 1870, 1875, 1881, 1883, and 1887.²⁵³ Although nineteenth century Columbus historians occasionally mentioned creek flooding along on the east side or river flooding south of Franklinton, they focus the historical discussion on "the river bottoms opposite Columbus" or "the West Side bottoms." Indeed, in numerous accounts, the neighborhood is completely submerged (again) and inaccessible.

In this manner, Franklinton and "the flooded district" became synonymous, particularly after two major floods followed (and spurred) intensive urban development between 1898 and 1913. While other areas of Columbus were subject to flooding and did flood, Franklinton became known as the Bottoms, and not just "the West Side bottoms," over time because of its historic association with the founding of the city, its rapid

development into an urban district following annexation, and its prominent location across The Bend from downtown combined with its vulnerability to flood.

But whether one called the area Franklinton, West Columbus, the Bottoms, or something else, the material reality of the district was that it had become urbanized by the 1890s as a result of substantial investments of capital. Land and business owners now had a stake in seeing the continuing function of the area as an urban district, as part of the city. The Bottoms was a set of property relations, as well as it was a landscape or a residential district.

In the years following annexation, the Bottoms grew from a village into a large, densely populated city district with a range of warehousing, industrial, and railroad-related land uses. But concerns about the neighborhood's site, and its vulnerability to floods grew more prominent. When Columbus notables celebrated "Franklinton's Centennial" in 1897, one of memorial speakers dedicated his time at the podium to pondering the logic of Franklinton's lowland setting and its suitability as a settlement:

...experience has taught us many things, and one of these is, that to properly lay out a city is a science, locations for a village may be totally unfit for a city. Hundreds of cities in the United States are paying dearly for the error of their founders... Lucas Sullivant made a mistake in locating the village of Franklinton on account of lowlands; his associates made a mistake in selecting the high banks east of the Scioto... The smoke, steam and dirt from factories are wafted over the city by western winds; the fogs and miasmas from the lowlands west follow.²⁵⁴

In this remarkable statement, we see an early indication of what would become a major theme in subsequent debates: the lowlands were simply the wrong place to put a city. Indeed, the author argues that the entire city should have been located west of the bottoms, rather than on the east bank of the Scioto. The question became what to do about it, particularly in light of the property interests of landlords, factory owners, and railroads and the "logic" of their choice of location.

Floodwaters also brought disease fears, a constant factor in the public debate and discussion over living conditions in the lowlands. Following the 1913 flood, the Ohio State Board of Health reported on its statewide response to the flood. Six steps are described in report regarding sanitary conditions following floods: "1) reestablishment of water supply, 2) disinfection, 3) removal of putrescible matters, 4) cleaning of streets and walks, 5) reestablishment of sanitary conveniences, and 6) cleaning yards, houses and buildings."255 Regarding the response in Columbus, E. F. McCampbell, Secretary and Executive Officer of the Ohio State Board of Health, wrote, "In practically portions of the [flooded] district the streets were clogged with large masses of wreckage and debris which prevented any continuous traffic through them. The clearing of this mass of wreckage was therefore the first object to be obtained. Great fear was felt that the extremely unsanitary conditions brought about by the flood would result in widespread epidemics in the flooded district and in the city as a whole."²⁵⁶ McCampbell continues by describing the length of time the district was without a clean water supply, the issuance of a boil water order, the use of "large quantities of lime and a small amount of bleaching powder" to disinfect "putrescible matters and flood deposits," the guarantine of flood survivors with communicable diseases, the establishment of a temporary morgue and removal of those dead bodies that could be recovered from the subsiding flood waters, the construction of temporary privies, and the removal of "flood deposits, dead animals, putrescible wastes, rubbish and debris of all description."257

Disease

The association between lowlands and disease was a longstanding one, partly due to polluted water (as from floods) and partly due to nineteenth century theories of disease etiology. Before the means of transmission of malaria, yellow fever, typhoid, cholera, and other diseases were scientifically established,

predominant theory was rooted in environmental explanations. In particular, doctors and scientists attributed miasmas and emanations from low places as disease causes. "Malarial" swamps were a special concern, as they were thought to be an environment that produced dangerous vapors or "miasmas." Likewise, sewer gases regarded as disease-causing emanations within the urban environment.

Doctors, medical professionals, and health experts connected malaria, yellow fever, typhoid, cholera, and other diseases to low-lying, especially marshy or swampy, environments. In certain respects, these associations make sense, although the disease etiology has been proven wrong. Mosquitoes, which transmit malaria and yellow fever, breed in those environments, and contaminated water, the transmission method for typhoid and cholera, is sometimes found in low-lying places, especially when those areas are downstream from a source of contamination.

Many nineteenth century Americans subscribed to older theories, rooted in religious beliefs, that disease afflicted the immoral and intemperate, especially the lower classes. Sometimes referred to as the "filth" theory, proponents blamed a lack of cleanliness, poor household practices, dirt, and filth for the spread of disease. Eventually, following a series of key scientific discoveries, public health improvements, a decline in the death rate from these diseases, and publication and reporting on the topic, the disease etiologies of malaria, yellow fever, cholera, and typhoid came to be popularly understood in the twentieth century. Nevertheless, cultural associations with lowlands and the people who lived there as unhealthy persisted through the nineteenth century and into the twentieth. Waterborne diseases like typhoid and cholera were prevalent in areas of poor sanitation in the nineteenth century, where outhouses or privies contaminated creeks, streams, and groundwater used for drinking, washing, and bathing.

Cholera, in particular, struck fear into the hearts of city dwellers. It could kill with frighteningly quick speed, and it inflicted great pain and suffering on its victims while they remained mentally alert and cognizant of their fate.

The symptoms of cholera are spectacular; they could not be ignored or romanticized as were the physical manifestation of malaria or tuberculosis. One could as easily ignore a case of acute arsenical poisoning, the symptoms of which are strikingly similar to those of cholera. The onset of cholera is marked by diarrhea, acute spasmodic vomiting, and painful cramps. Consequent dehydration, often accompanied by cyanosis, gives to the sufferer a characteristic and disquieting appearance: his face blue and pinched, his extremities cold and darkened, the skin of his hands and feet drawn and puckered... Death may intervene within a day, sometimes within a few hours of the appearance of the first symptoms. And these first symptoms appears with little or no warning. He felt no premonition of cholera, at all, reported a New Yorker in 1832, until he pitched forward in the street, 'as it knocked down with an axe.²⁵⁸

It killed tens of thousands of Americans in the nineteenth century before sanitary improvements and waste

disposal systems became standard components of urban infrastructure. More than a thousand died in

Nashville alone.

In the 1840s and 1850s, doctors and scientists vehemently disagreed over the origins of the disease before

two Londoners, Dr. John Snow and a clergyman named Henry Whitehead, first established that the disease

was spread by contaminated water. It would be many decades before the significance of their discovery

was widely appreciated and belief in it eclipsed the miasma theory. William Farr, who "went on to

revolutionize the use of statistics in public health," working for England's Registrar-General's Office,

investigated the relationship between elevation and cholera.259

Farr thought that the single most reliable predictor of environmental contamination was elevation: the population living in the putrid fog that hung along the riverbanks were more likely to be seized by the cholera than those living in the rarefied air of, say, Hampstead. And so, after the 1849 outbreak, Farr began tabulating cholera deaths by elevation, and indeed the numbers seemed to show that higher ground was safer ground. This would prove to be a classic case of correlation being mistaken for causation: the communities at the higher elevations tended to be less densely settled than the crowded streets around the Thames, and their distance from the river made them less likely to drink its contaminated water. Higher elevations were safer, but no because they were free of miasma. They were safer because they tended to have cleaner water.²⁶⁰

In fact, cholera is transmitted via human feces and spread by water, so lowland dwellers who took their drinking, cooking, or washing supply from urban creeks and streams were at great risk.

But it was not until 1883 that another key discovery would be made. A German researcher "isolated the organism that causes cholera."²⁶¹ Rosenberg explains in greater detail how the cholera "vibrios" spread from one person to another, noting that major outbreaks occurred in the United States in 1832-34, 1848-49,

1849-54, and 1866.²⁶²

Once they find their way into the human intestine, these vibrios are capable of producing an acute disease which, if untreated, kills roughly a half of those unfortunate enough to contract it. Cholera, like typhoid, can be spread along any pathway leading to the human digestive tract. Unwashed hands or uncooked fruits and vegetables, for example, are frequently responsible for the transmission of the disease, though sewage-contaminated water supplies have been the cause of the most severe, widespread, and explosive cholera epidemics.²⁶³

Rosenberg concluded that cholera's deadly attacks were closely related to the rapid expansion of global trade and transportation advances in the nineteenth century, allowing the disease to spread during the period of rapid urbanization while "public health and medical science were catching up."²⁶⁴ The epidemics led to government responses which would eliminate the disease from United States and many parts of the industrialized world in the twentieth century.

As the connections between waste removal, water supply, and human health became clearer, sanitation measures took on greater urgency. However, sanitary sewers and water supply systems were rarely implemented before the 1860s. City planning historian Jon Peterson writes, "Only Jersey City, Brooklyn, and Chicago, in fact, attempted major [waste removal] works before the Civil War. Not until after the war and the return of cholera in 1866 did many cities introduce systematic sewerage—elaborate, engineer-designed removal systems, using underground conduits powered by wastewater—to rid their surroundings of offensive wastes."²⁶⁵

In many cities, cholera remained a major concern in the 1870s and 1880s. A report from the U.S. Surgeon General following the cholera epidemic of 1873 made this evaluation about cholera in Nashville, noting that "[t]he banks of Wilson's Spring Branch are also subjected to annual overflows, which extend backward about half a mile with a width of about one-fourth of a mile" and that "Hackberry and Wilson's springs [are] favorite watering-places for the lower classes."²⁶⁶

Comparatively few deaths occurred in the highest and best-drained and cleanest portions of the city. The disease was almost exclusively confined to the outer limits and low portions of the city, along the foul streams known as Wilson's Spring Run and Lick Branch, which almost encircle the city. On the low ground in the vicinity of these streams are settlements made up of small shanties, occupied by negroes, one shanty being considered large enough for from five to fifteen [persons].²⁶⁷

Living in the lowlands could be deadly for those residing next to an urban stream in an area where human

waste entered the water supply.

Nineteenth century cities considered a wide variety of preventative measures from the use of chemical

applicants to the removal residents from low, wet places. The Third Report of the Board of Health to the

Honorable City Council of the City of Nashville detailed some of the steps taken in 1879:

Wilson Spring Branch and Lick Branch were disencumbered of all obstructions and the water allowed the free flow natural to these streams. This was a very necessary yet ticklish work. There could be no possibility of pure air with these streams in a befouled condition. Yet to stir up any mud, or expose fresh malarial surfaces was, in the opinion of all authorities upon yellow fever, from Merrill and Barton to the newspaper writer of the day, certain destruction. The streams were cleansed and malaria avoided by the simple expedient of coating before nightfall every square inch of newly exposed surface with quicklime. The wet rocks were painted with coal tar. The water of the foul streams were purified by barrels of quicklime.²⁶⁸

Creeks and streams were the focus of municipal efforts related to both sanitary improvements and flood

control.

Creeks and streams were used for the disposal of industrial as well as human wastes as American cities

developed new water supply and sanitary systems in the nineteenth century. Indeed, as creeks and

streams were already actively used for disposal, many sanitarians advocated simply burying these polluted waterways in pipes and conduits, and incorporating them into the sewage disposal system, using gravity and water flow to send waste through pipes underground before depositing it in a large river. Engineers, architects, and planners developed an urban infrastructure of roads, sewers, levees, water supply, and waste disposal systems in relation to topography. Indeed, an entire science of "sanitary geology"— combining knowledge about geological structure, hydrology, and waste disposal through gravitational flows—briefly developed in the mid- to late-nineteenth century. Bottoms, hollow, and flats were often the last places to have complete urban systems implemented, lagging behind in the paving of roads, supply of water, and removal of waste. Indeed, as the Nashville case evidences, in some cases waste from one part of the city traveled through sewers then re-emerged into open streams in these neighborhoods. Furthermore, urban lowland slums were deliberately underdeveloped with incomplete infrastructure as they were considered marginal places, dumping grounds, containment areas for the poor, and/or temporary places awaiting development.

Urban systems required millions of dollars in investment, and once spent those sunk costs made it remarkably difficult to rearrange or re-engineer them. The locations where railroad tracks, sewers, and water supply pipes were laid became a fixed part of civic infrastructure, forcing urban development in particular directions with specific kinds of consequences for lowland areas. They forced newer buildings and construction projects to conform or adapt to what came before in a path dependent process.

Urban environmental historians, geographers, and hydrologists have mapped urban streams before and after industrialization. Using historical data, historian Joel Tarr and his colleagues marked the original tributaries and small watercourses of Pittsburgh in red on one map: tiny squiggly red lines filled the page, like so many capillaries and veins. The second map, at the same scale, showed open streams today. Only

a few red lines remained. Nearly every single stream had been put in a pipe and buried underground. In many cities around the United States, even above ground streams are only visible in areas, hidden below elsewhere. Frequently, creeks and streams that were not entirely forgotten were made inaccessible: lined with warehouses, factories, and other industrial uses, bounded by rail corridors and security fencing.

Cities are subject to natural processes such as flows of water and air, factors of climate, and cycles of life and death. However separate "city" and "nature" may be perceived, the two are intertwined. The hybrid environment created is the realm of urban nature, a place of seemingly endless mutability that remains subject, at the same time, to the underlying and fundamental conditions of natural processes. It is in this sense that the famous geographer and flood researcher Gilbert White wrote that while floods are "natural," flood losses are the result of human constructions.

The story of municipal responses to, neglect of, and intervention in urban lowlands provides a lens for viewing early city planning debates, and the emergence of the field. Before city planning or zoning regulation became standard functions of municipal governance, the sanitation movement brought together a wide variety of professionals to consider the impact of the physical environment on health, the engineering and construction of urban systems, and the socio-spatial organization of the city. Part II examines how various attempts at remaking the lowlands fared over time.

PART II

TAKING BACK THE LOWLANDS, REMAKING URBAN SPACE

~~~~~ Chapter 5 ~~~~~~~~

## Encountering Reluctance to Change: Three Failed Remaking Attempts

The sections generally known as 'Swede Hollow' and the 'Flats,' which constitute the lowest types of residential districts not only in St. Paul but of many cities that it has been the writer's privilege to examine, offer remarkable opportunities for replanning. The complete wiping out of the former district would afford a most unusual opportunity for the development of a park area which would serve as a breathing space for a district growing in congestion and in need of open space. Phalen Creek and the banks of this stream are ideal for park purposes, while in their present state they constitute a menace to the health of the residents and to the community at large. The 'Flats' if properly treated would afford a splendid opportunity for the development of an industrial zone accessible to rail and river transportation instead of being what they are today, a slum of the worst character. The entire city needs a constructive plan, but the elimination of the slums and the redistricting of the city to meet the housing and industrial needs of the wage earners and poorer elements of the population should take precedence...<sup>269</sup>

Carol Aronovici 1917

Housing expert and planning advocate Carol Aronovici was not alone in his viewpoint that lowlands could become "the lowest types of residential districts": unsanitary, unsuitable for residence, and unbecoming of a well-planned city. In the decades prior to his 1918 report for the Wilder Charity in St. Paul, Minnesota, medical inspectors and public health officers had warned about the dangers of disease in lowlands, recommending their elimination. It was best, they argued, that housing in these areas be destroyed and the residents removed from their homes. Similarly, several prominent nineteenth century landscape architects, including Frederick Law Olmsted, Sr. and Charles Eliot, argued that low-lying and "poorly drained" city areas were ill suited for housing development, making better parks than neighborhoods. Indeed, calls for

remaking the lowlands into parks or industrial-only areas date back to the 1880s, around the same time that these urban neighborhoods were first called bottoms, hollows, and flats.

Public health officials, housing reformers, planning consultants, and civic groups began agitating for municipal action to remake urban lowlands almost as soon as they appeared as new "low grade" or "low quality" residential districts in the mid-nineteenth century. Initially, it was public health officials who led the charge. They identified lowlands as potential sources of contagion or "hot beds" of disease, particularly cholera, typhoid, malaria, and yellow fever. For many reformers an interrelated concern was poor housing conditions, or immoral behavior and vice—attributes of lowland neighborhoods that defined them as unworthy, unsavory, or unsanitary places.

Urban lowlands rapidly drew the attention of health inspectors, urban reformers, and newspaper reporters because they were places of the poor. Landscape architects shared an interest in urban lowlands, but for different reasons, including the benefits of open space and the possibilities of incorporating lowlands into city design. The sanitary movement of the late nineteenth century brought them together with engineers to develop the new field of urban planning. This chapter examines reluctance and opposition to reform in three episodes: the City of St. Paul's tepid response to cholera fears related to Swede Hollow, the failed campaign for a Central Park to replace Black Bottom in Nashville, and the reluctant response by Columbus's voters and elected officials to proposals for flood protection following the 1913 flood.

#### Motivations and Tools

Motivations for physical transformation of urban lowlands reflected varied social objectives, from uplift to elimination, containment to freedom and property rights. Often proposed improvement measures encountered resistance from property owners who fought against public intervention, especially when it involved taking property. Most local histories of poor lowland districts describe the frustration of progressive reformers and others seeking to "do something" about the social and physical problems of the poor low-lying neighborhood, whether it be demolition and clearance or attempts at improving living conditions. Frequently these accounts mention that the problems of these urban districts festered on for a half-century or more.

Reformers' calls for action in the lowlands were often preceded by years of municipal neglect. Urban lowland neighborhoods, just as other parts of the city, were shaped almost entirely by private decision-making, primarily the real estate market. Real estate speculation, combined with poor quality construction to temporarily occupy "poorly drained" building sites, was a common phenomenon in the lowlands. Cities exercised little control in the way of building codes or other tools for overseeing the overall development of the city. Shantytowns, clusters of houseboats, groups of houses made from railroad cars or lumber scraps, and collections of shacks were common features of the urban landscape of the nineteenth century. Often, though, these housing types were mixed together in a hodge-podge arrangement in lowland areas, where more substantial dwellings and other structures also sat. Lowland areas typically had poor quality roads and few public services. They displayed a lack of investment, serving as de facto housing overflow areas. In rapidly growing and expanding cities, with not enough housing, lowlands offered limited opportunity in the broader context of municipal neglect and inattention to physical planning as well as social problems.

Thus, when they were "discovered" by health inspectors (not uncommonly accompanied by journalists and others) seeking out the city's unsanitary zones, they could cause alarm. Medical experts and city officials, as well as charitable and citizen groups, expressed shock and dismay, and often recommended elimination. But, the lowlands were generally left alone, disregarded.

It was during the very period in which municipal governance expanded and urban planning developed that local officials weighed contesting claims about the value of the lowlands, their suitability or safety as urban settlements, and the property rights of landowners in these areas. In several cases, the main inhibiting factor preventing floodplain protection or slum clearance or neighborhood improvements of any kind was property rights.

Proposals to remove lowland residents from their homes and redevelop the land were motivated by many different purposes, some well-intentioned ones, some not. In areas close to downtowns, business and civic elites often viewed the lowlands as potential sites for the expansion of commercial activity if only the people who lived there could be removed. Thus one set of property owners with an interest in remaking the area in their own design might seek to influence existing property owners who were profiting as landlords. In other settings, such as Nashville, property owners encountered segregationists, including "radical whites [who] used violence and murder to keep blacks in their subordinate places."<sup>270</sup>

Likewise opposition to the "elimination" of the lowland neighborhoods could also be motivated by exploitative or negative aims. Segregationists disapproved of removing people from lowland areas because they wanted them contained there. Sometimes slumlords carried more weight with local officials, despite inattention to tenants' legitimate grievances and concerns about property maintenance.

Before zoning and slum clearance became standard components of urban governance, the barriers to lowland redevelopment were great. The Supreme Court ruled zoning constitutional in 1926, but it was not until 1937 that slum clearance became federal policy. Previously, the costs of demolition, the problem of relocating residents or dispersing them, opposition from existing residents, the question of rebuilding or what would replace the cleared land, the cost of reimbursing private property owners, the financial interests of landlords, and, at least in a few cases, concern for residents and the social impact of such disruptions made removing residents and remaking the lowlands more challenging.

One exception was when essential infrastructure improvements were required. Indeed, in cities like St. Paul and Los Angeles, greater attention was devoted to constructing bridges, viaducts, and culverts that allowed for connections between areas of higher ground *over* the lowlands. They were not infrequently, and quite literally, passed over. Streetcar passengers could look down on the people living in the bottoms, hollows, and flats as they went about their business in the city above.

Infrastructure and investment for selected projects could be opportunistically seen as a way to push some people out while trumpeting "new uses" for the future. In the mid-twentieth century highway projects were used this way, but the instinct and the device is an older one, perhaps ancient. Roads, bridges, and other public improvements such as public markets, recreation facilities, and parks, could be used to dual effect: displacement of a "problem" and replacement with a new public structure or site. The site selection for Nashville's Hay Market in the early 1890s, used to eliminate tenements as well as create a new facility, is but one example.<sup>271</sup>

"Remaking" the lowlands was a process that cannot be isolated or categorized in one period of time, or one set of actions. Instead, the lowlands were subject to multiple initiatives, studies, and repeated calls for their

destruction, but they rarely stuck. Urban lowland slums presented decision-makers with complex problems, and for decades the common response was to ignore the problem. A pattern of neglect developed wherein causes might come and go, fears of disease or other urban problems might arise, but city officials continued to ignore the problems, the people, and the lowland neighborhoods.

For urban lowland dwellers, this neglect was double-sided. On the one hand, it meant that were left alone and not evicted from their homes or removed from their neighborhoods. On the other hand, it meant that they were constantly in a marginal position, with poor city services and a lack of attention to their concerns, as well as the concerns of experts, reformers, or others who had ideas about the neighborhood based on their "study" or "investigation" of it.

Urban lowland neighborhoods tended to be hidden away, but notorious. They were unseen places frequently invoked and discussed and, to a large extent, mythologized. City officials, engineers, and planners found it advantageous to allow relative isolation and segregation to persist because of a great fear that the people who lived there would move into the more regular or typical neighborhoods of the city. City residents continued to pejoratively label these neighborhoods, and often blamed the people who lived there for the physical deterioration of the area or the lack of municipal investment of support. These explanations had the advantage that they did not require or suggest any remedial action or city investment or planning. Unless, that is, they presented a threat to the health of the society as a whole. Even then, however, there was a reluctance to use government power for any activity other than assisting economic development by granting public lands and rights of way to private companies or public investments in urban systems that were deemed absolutely necessary for the future economic growth of the city as a whole.

The lowlands played an important role in shaping the development of city planning, as they were the locus for three interrelated trends and developments: sanitation and public health efforts, parks and landscape design, and civic beauty in architecture. Peterson describes the influences that shaped the "birth" of American city planning in the early twentieth century:

City planning is best understood as the a child of Progressive Era urban reform, born out of its response to the urban environment that had emerged in the United States during the latter two-thirds of the nineteenth century, especially after the Civil War. The birth itself spanned almost precisely a ten-year interval, from 1900 to 1910.<sup>272</sup>

Planners, he wrote, "aspired to something both visionary and difficult to achieve: the shaping of the city as a whole."<sup>273</sup> They brought together ideas from the three different influences as well as approaches and concepts from other countries, especially Germany. As Peterson explains, Frederick Law Olmsted, Jr., offered his own explanation for city planning's emergence: in his view, "public street platting, sewerage, water supply, parks, and civic architecture" were like five separate independent streams with different origins aligned next to one another.<sup>274</sup> Peterson modifies this account slightly, suggesting that there were three true three "antecedents": "sanitary reform, landscape values, and civic art."<sup>275</sup>

Similarly, Schultz and McShane suggest that three types of professionals, "sanitarians, landscape architects, and engineers formed a troika that tried to pull citizens and officials alike from the mire of governmental inaction to the higher ground of municipal planning and administration."<sup>276</sup> In his own history of planning's origins and early history, Schultz writes that "[s]ince many of the sanitarians' proposals involved the construction and administration of new public works, they early discovered as their most natural allies two other rising groups of nineteenth-century professionals—landscape architects and municipal engineers."<sup>277</sup>

In each version of the early history of urban planning, landscape architects play an essential role. Parks and landscape design became key aspects of proto-city planning efforts in the nineteenth century, along with the civic design and improvement ideas of the City Beautiful movement. But as an urban intervention, park planning was also fairly limited in most cities. While New York developed Central Park, Brooklyn established Prospect Park, and Boston created the Emerald Necklace and the Metropolitan Park system, most cities developed smaller, less extensive parks, and very few developed the kind of interconnected system developed in Boston or Minneapolis. In many places, proposals for lowland parks failed due to their potential cost. In areas that were already developed, land purchase and demolition expenses, in addition to design and construction costs, frequently made projects prohibitively expensive without issuing municipal bonds or devising other funding measures.

Uncertainty about where displaced residents would go was another reason why some voters opposed parks to replace slums. Some critics feared displaced lowland residents might move into their neighborhood. Civic design, meanwhile, became focused on ceremonial centers and City Beautiful ideas often never left the downtown or "civic center" area.

Nineteenth century landscape architects like Frederick Law Olmsted Sr. and Charles Eliot, his protégé who died unexpectedly at age 38 in 1897, were well aware of lowland areas, and, when developed, the pattern of urban land uses found there. They argued that undeveloped lowlands were likely to turn out to be slums and should be purchased to prevent such development from occurring. Public housing historian Lawrence Vale describes how Olmsted Sr. warned in the early 1890s against building on Franklin Field, an area that the Boston Housing Authority sixty years later selected for public housing construction, characterizing the episode as an example of "the geography of marginality."<sup>278</sup>

But creeks and streams were scenic resources at the same time they were marginal sites for high quality urban development due to their poor drainage and miasmatic associations. They could oftentimes also be available for purchase, as they were often only sparsely developed. As open spaces they could be considered in a systemic way, links in a chain of open space connections and greensward corridors that allowed for the above-ground flow of water within the city. And, if designed properly, such as at Olmsted's Riverway, they could be used to improve urban sanitation and protect public health in the city, rather than

threaten it.<sup>279</sup> Spirn explains,

Landscape architects and urban historians regard Boston's Emerald Necklace park system as a landmark in American park planning, but few appreciate that a third of the system was designed as a flood control and water quality project and not primarily for recreation. The designer, Frederick Law Olmsted, created the Fens and the Riverway to combat the flooding and pollution problems of Boston's Back Bay tidal flats; public recreation was an incidental benefit and Olmsted himself objected to the use of the word 'park' for the Fens, since he did not consider it an appropriate spot for any recreation beyond a stroll or a drive along the border of the marsh. The statement printed on Olmsted's 1881 map, 'General Plan for the Sanitary Improvement of the Muddy River,' declares this intent: 'The primary purpose of the scheme shown here is to abate existing nuisances, avoid threatened dangers and provide for the permanent, wholesome and seemly disposition of the drainage of the Muddy River Valley...<sup>280</sup>

Olmsted and other top landscape architects of his era were versed in medical literature of the day, as well as experienced in reading the topographical characteristics of urban ground and aware of ideas in the field of sanitary engineering. However, few "sanitary" projects like the Fens were ever constructed.

Eliot argued that development pressures strained the limits of topography, pushing inexpensive housing into low-lying places. In the midst of a campaign to raise awareness of the need to preserve historic sites and places of scenic beauty in the region, he wrote his childhood friend Governor Russell in December 1890:

Within five miles of Beacon Hill is seated much the largest body of population in Massachusetts. This population is rapidly growing, and as it grows it becomes more and more crowded. The best building-ground is already occupied, and much wet and unhealthy land is being built upon. Within a comparatively few years there will be a continuous dense city between the State House and the Neponset River, the Chestnut Hill Reservoir, the Fresh Pond Reservoir, Medford, and Malden: and if nothing is done to prevent, much of this great city will consist of low-lying and badly drained *slums*. What provision is being made within this metropolitan district for securing those public open spaces which the experience of all great cities has proved to be essential to the welfare of crowded populations? (emphasis added)<sup>281</sup>

A few years later, together with journalist and metropolitan governance advocate Sylvester Baxter, Eliot successfully convinced Governor Russell and Massachusetts legislature to fund the nation's first metropolitan park system in 1893. The sites they selected reflect Eliot's concern about low-lying places, the importance of urban waterways, and the potential to use parks to shape urban development. Ultimately, the Boston metropolitan example, while widely cited, was rarely implemented elsewhere.<sup>282</sup>

Fifteen years after Eliot and Baxter's report, Henry Barker, secretary of the Metropolitan Parks Commission

in Providence, Rhode Island, expanded upon Eliot and Olmsted Sr.'s ideas, observing:

...in all town planning, good and bad, after all of the land best adapted for residence purposes or for business uses has been platted in the ways most convenient and feasible for its purposes, there will remain, in most of the places upon which cities are built, and all around them, the features that by nature were especially picturesque and striking. The population will live and work and extend itself out over the valleys and level lands along the lines of least resistance. The steeper hillsides and the edges of waterways are better adapted for breathing places and recreation grounds than for any other purpose that can be conceived... unless reserved [these places] will become the shabbiest by the city's growth. The little rivers will become pestilence bearers and open sewers. The fragments of ponds remaining unfilled will be nuisances to all their surrounding neighborhoods. The steep and rocky hillsides will present ever lasting problems of street construction. The drainage of the lowlands will be ever troublesome. A local instead of whimsical or accidental development would make a city most attractive in those parts where otherwise it would be most shockingly ugly, ragged and ill arranged.<sup>283</sup>

Landscape architects and some planners continued to emphasize these themes into the 1930s and

beyond.

Planning consultant Harland Bartholomew and Frederick Law Olmsted Jr., who trained in landscape architecture under his father's guidance but became a prominent figure in early city planning history in his own right, wrote about the lowlands in their plan for a comprehensive system of parks, boulevards, and recreation spaces for Los Angeles County in 1930. Under the heading "Parks and the Drainage Problem,"

they argued that "remedial" action might be needed there, considering the prevalence of speculators and the possibility of the "wrong development" for these areas.

To the experienced eye, the slopes of the land show approximately where water must concentrate in times of heavy rainfall. No matter how innocent it may look in dry weather, low land must always be far less valuable for building purposes than other land. But the lowlands may be just as good as any other for providing spaciousness of open scenery for parks and parkways; and it ought to be relatively cheap to acquire. Because of the innocent look it has in dry weather, it is not as cheap as it ought to be. Between floods it looks pretty good for building purposes to those who never saw what storm water can do in this country [of Southern California]. Unsuspecting purchasers, victims of their own ignorance, will fall into the traps laid for them by the sharp practice of ruthless promoters, and such lands will be cut up, sold, and occupied. Unfortunately, the burden of such wrong development does not fall on the purchaser alone, and scarcely ever on the vendor, but most heavily on the community at large. There is, of course, a remedy, but it requires vision and vigor to apply it. Remedial legislation might prevent further mistakes and correct those of the past.<sup>284</sup>

Los Angeles did not adopt the plan. As the influence of landscape architects waned, zoning became the primary tool for the organization and regulation of city development, and the power of real estate speculators and developers prevailed. The lowlands were more likely to be seen as another potential development (or redevelopment) area than as a potential park.

# The Plague Spot

Not long after St. Paul's Swede Hollow became established as a fairly permanent community, the City began to seriously explore the possibility of demolishing it. In 1884, as fears of a cholera outbreak increased, the St. Paul Board of Health undertook a special survey effort to inspect sanitary conditions around the city. Henry F. Hoyt, M.D., President of the Board of Health, who was also the City's chief health inspector, a high level position within city government, completed his report on sanitary conditions in November 1884, identifying Swede Hollow as one of the sections of utmost concern within the city.

After careful investigation and thorough study of the matter from all its bearings, the only solution of this difficulty—in the opinion of the Health Department—is the removal of these people to some

other portion of the city where the natural drainage and the water supply will not be so prejudicial to their own and the public health as their present site...<sup>285</sup>

St. Paulites read Hoyt's report with great interest, organizing subsequent tours of the Hollow and reports by

newspaper journalists. The residents must be removed, many citizens agreed.

Removal, however, presented its own problems. Members of the Council objected to "compulsory removal,"

as well as the potential cost if the City were to take responsibility for relocating residents.

...but removal at this or any other season of the year means to these people expense and hardship, neither of which they will undertake voluntarily. A compulsory removal is out of the question, as the Council decided at their last meeting their removal if accomplished, must be at the expense of the city. If this is favorably considered, a committee should be appointed to secure another location, estimate cost, etc., and report as soon as possible when action can be taken.<sup>286</sup>

The Ramsey County Medical Society weighed in with its own opinion on the matter, bringing forward

another potentially costly aspect of the removal plan: the need to reimburse property owners for the taking

of their land.

There was unanimity amongst the committee that the most efficient and radical remedy would be the destruction or removal to sections of the city widely separated, of all the shanties and dwelling houses in the valley through which the Phalen creek runs and known as "Swede hollow"... but as special legislation would be necessary and the question of damage to property owners arise, the committee would recommend, which they do, that the Board of Health be vested with the power and means to abate the nuisances referred to, and their efforts in this connection will receive the cordial co-operation and support of the members of this [sanitary] committee [of the Ramsey County Medical Society].<sup>287</sup>

Nevertheless, the call to clear Swede Hollow was repeated two months later, led this time by the Chamber

of Commerce. They expanded upon the doctors' diagnosis of cholera risk, adding that the ravine emitted

bad air causing typhoid and malaria as well.

The fact is that something should be done toward cleaning out this hot-bed of disease. Should the cholera make its appearance here this summer it would find a splendid base of operations in Swede Hollow. Whether the dread epidemic appears or not, the region sends forth the germs of typho-malaria by the millions to permeate the surrounding air, and it is inimical to public safety from a hygienic point of view.<sup>288</sup>

A few weeks later, the Chamber of Commerce discussed the need to enforce municipal ordinances

regarding privies and sanitation, but also the impracticality of the proposed solutions. Members also stated

their concern that dispersal of the residents would only result in them reassembling in another location.

The enforcement of these ordinances would abate many of the nuisances mentioned by Mr. Drake and others at previous meeting of the board, but in many respects are impractical to carry out in Swede hollow. Privies, as required by ordinance, could only be built at great expense in that locality. The theory of removal en masse, advanced by some member of the board at the last meeting, does not appear altogether practicable in execution, but every effort should be made to induce single families to move to more healthful locations, preventing so far as possible their massing some other locality. Communities like these have existed for the last twelve years in the city, first at the corner of Sibley and Third streets, later at Fourth and Rosabel; later at Fifth and Kittson, and now in Swede hollow, and as long as the owner of the land will permit this it appears as good a place as any. Drive them away and they will cluster in unoccupied streets and vacant lots.<sup>289</sup>

The report in the Daily Globe goes on to note that the enforcement of ordinance 76 would help. Chamber of

Commerce members suggested another "method": city officials should go to Swede Hollow, together with

an interpreter, to inform that the residents in no uncertain terms they are required to clean their houses.290

Those residents that did not comply with the order should be arrested, one Chamber member argued.

Inspections would take place once a week during the cholera "season."291 The Chamber then debated a

proposed resolution on the subject.

Resolved, That on account of the threatened visitation of the cholera, and the fact that our death rate is largely made up from preventable diseases, it is the opinion of this chamber that our board of health should use most vigorous measures to effect the thorough spring cleaning of our city, and to maintain the same in healthy condition; that their attention is particularly called to the condition of the locality known as "Swede hollow," also to the slovenly appearances of the alleys and back yards throughout the thickly settled portions of our city, and we further believe that the health of the community demands that sections 86, 92 and 93 of article 3 of the ordinances of the city should be strictly enforced.<sup>292</sup>

The Globe reported that "there was considerable opposition" to adopting the report.<sup>293</sup>

Gen Bishop argued that the enforcement of the ordinance... would render it necessary for a good portion of the people to move somewhere else to live... Dr. Day argued generally against the report, and declared that in his opinion Swede hollow was to-day a more healthy locality than St. Anthony hill... Mr. Murray asserted that Swede hollow was more healthy than any other part of the city, only two deaths having occurred there during the year and three not from sickness. No action was taken on the matter and the report goes over as unfinished business.<sup>294</sup>

In the end, the City did not take action on Dr. Hoyt's recommendation. Even the Chamber of Commerce refrained from passing a resolution on the subject.

The opposition raised various concerns about either the forced removal of residents or the enforcement of city ordinances: first, relocation and reimbursement to property owners might be costly; second, residents might end up somewhere else potentially more problematic, third, that other measures such as mandatory inspections and house cleanings might be effective; and, finally, that the Hollow was actually a healthy place to live, not a source of disease as Dr. Hoyt and others had claimed. By the early 1890s, more than one hundred small homes would be located within the ravine, with a likely population of around 600 men, women, and children.

Hoyt filed his cholera report in the same month that the City officially opened the Seventh Street Arches over the lower end of Swede Hollow. The two efforts are worth mentioning together because they point to the dramatic, costly, and occasionally highly innovative civil engineering and municipal public works funded by late nineteenth century cities. Voters and elected officials supported these infrastructure projects while at the same time expressing reluctance, and at times political opposition, to urban redevelopment initiatives that may have altered the city's spatial arrangement, specifically the location of the city's poor and immigrant classes. This initial failed attempt at removing residents to remake the Hollow into a healthier environment points to the fact that remaking efforts (unsuccessful though they were) can be traced back decades before the federal slum clearance projects of the 1930s. In fact, as this case demonstrates, newspaper stories and medical reports discussed reasons for removing residents and demolishing housing in these areas as early as the 1880s.

St. Paul's head medical officer had been concerned that, should cholera "visit" the city, a widespread epidemic might kill hundreds, or even thousands, of St. Paulites. He recommended to the Common Council that Swede Hollow's residents be removed in order to remediate the unsanitary conditions at Phalen Creek. But the bridge project went forward, while Swede Hollow's residents stayed. St. Paul avoided a major cholera outbreak in 1885, and Swede Hollow avoided destruction. However serious concerns over disease may have been, many city residents objected to the potential cost of remedying the problem, the potential problems incurred by interfering with private property rights, and the possibility that lowland residents might just relocate elsewhere in the city. A few even thought Swede Hollow wasn't such a bad place to live after all. It would be another thirty years before Carol Aronovici conducted his housing survey, recommending again that Swede Hollow's residents be removed and suggesting that the ravine be transformed into a park.

## A Park to Eliminate Vice

Journalists, crusaders, evangelists, and reformers often associated the lowlands with immoral behavior. Such a connection was not unusual in the late nineteenth and twentieth century, when poor areas, foreign colonies, and Negro settlements were more often characterized as behavioral zones of the city than segregated spaces. It was a widely held view that vice and moral decay festered in the unkempt homes and dirty streets of the undesirable districts. It was also the case that drinking, gambling, prostitution, and other potentially profitable activities that were not strictly prohibited elsewhere were allowed to flourish in these districts, their presence rationalized and explained by social attitudes that equated slums and bad behavior. However, when moral crusaders organized enough constituents and the calls for reform got loud enough, elected officials might prod the police to step in and make some arrests, temporarily constraining the extent the illicit activity. On rare occasions, someone might propose getting rid of such a district

altogether, dispersing the residents, and demolishing the buildings. This remaking episode involves the case of the campaign for a Central Park for Nashville.

Beginning in the late nineteenth century, Nashville reformers initiated an intensive campaign with promises of public action to "eliminate" Black Bottom. The campaign reached its height in the years between 1905 and 1910. A series of articles in the *Nashville Banner* urged citizens to vote for a plan to replace the area with a park, and placed the blame for the district's deteriorated housing and low morals on speculators and landlords.

There is no reason under the sun why Hell's Half Acre and Black Bottom should exist, except that someone is getting rich off the big black blots upon the city's civilization. Rents—three dollars, two dollars, or one dollar for a few feet of shelter and a door to shut out the dangers of the streets. People will hold these hovels so long as they will rent; they will rent so long as there is nothing better at such prices as they can pay. And so long as it is nobody's business to interfere or lift a lament, just so long Black Bottom will exist, and thrive and grow, and spread her poisonous roots out, farther and farther, with a menace to the beautiful city which sits serenely among her hills...<sup>295</sup>

Black Bottom, which had developed as a containment zone for unwanted strangers, immoral activity,

offensive odors, and noxious nuisances, was now being characterized as "a menace"-rather than a

"natural" development or a convenience to the rest of the city.

In December of the following year, Nashville Mayor Morris announced a campaign to root out vice, round

up prostitutes and loiterers, and "redeem" Black Bottom.

Mayor Morris' orders to clean out Black Bottom were delivered to Chief of Police Curran on Thursday... The patrolmen on duty in Black Bottom were instructed to make out a list of all houses conducted for immoral purposes, and notify the inmates to vacate at once... The two officers in the beat have no small task as a large number of the houses within the territory bounded by First avenue, Broadway, Fifth avenue and Peabody street have the reputation which brings them within the moving orders, and for years hundreds of negroes have made Black Bottom their rendezvous.<sup>296</sup>

The interest in breaking up immoral activity in Black Bottom presented a problem for reformers, however,

and it invited opposition in perhaps unexpected quarters.



Figure 58: Front page editorial cartoon from the Nashville Banner, August 4, 1905.

White homeowners in neighboring districts began to worry that the "class" of people who frequented the areas dance halls and whiskey joints, and the "downfallen population" who lived in the Bottom, might take up residence elsewhere.<sup>297</sup> They expressed fear and concern that they would need to be segregated from

the rest of the population. One proponent responded by assuring readers that means of segregation would

surely be found.

What will become of this degraded part of the population, and what district they will be permitted to inhabit is a question that has frequently been discussed by those interested in the problem. There is probably no city in the world which had not its downfallen population. There will doubtless be efforts made in Nashville to segregate this class, and the next question will be as to what section it shall be permitted to take.<sup>298</sup>

The Nashville Banner editorialized in support of the Mayor, and in favor of a proposed park.

Mayor Morris has taken a commendable step towards the reclamation of Black Bottom in his instructions to the Chief of Police to close the house of ill-fame, the gambling and the dance dens in that section and arrest the loiterers, white and black, around those places of vice. When the places in that unsavory portion of the city that are sustained by the idle and the vicious who congregate in them are made unprofitable and impossible by a vigorous enforcement of law, the owners of the properties which have so long been used for grossly immoral purposes will be forced to put those properties to better use, and this will necessitate improvements or encourage a co-operation among those most directly interested in a movement to change the entire aspect of the Bottom and make it either an entirely respectable residence or business section or a public park or market place, with respectable and inviting surroundings. For the thorough rehabilitation of Black Bottom, with all that it would mean in the development of the great portion of the city south of Broad Street; the Banner's suggestion of a public park secured by condemnation proceedings appears the most feasible.<sup>299</sup>

The Banner editorial indicates that proponents were well aware that the property rights of land owners in

the area could be a reason for political opposition, as well as legal challenge.

In fact, the park seems to have been deliberately chosen as the end use simply because it was one of the

only legally allowable uses of eminent domain. The Nashville Banner editorial continues:

Private property rights, however much they may obtain in instances against any proposed policy of general improvement, must be respected, and it is only by the power of eminent domain that there can be such a reclamation of Black Bottom as is desired and contemplated.<sup>300</sup>

Eminent domain was the only way to activate the requisite power needed to clear the neighborhood. To get

the "means" proponents wanted, they appear to have tailored their "ends." Newspaper articles from the

time fail to mention topography, landscape analysis, open space needs, playground space, recreation

possibilities, benefits to scenery, conservation objectives, or other possible undertakings that might suggest

their motives, other than a brief mention of "the character of the ground and the property conditions" in Black Bottom.

A few months after the police department's raid, in February 1907, "[t]he House Committee on Municipal Affairs [of the Tennessee state legislature] met at the Tulane Hotel... and unanimously recommended authorizing Nashville to issue \$500,000 in bonds for the purpose of eliminating Black Bottom."<sup>301</sup> It would be another three years before the bill passed the Legislature and was taken up by the City Council. Approved by the Council 16-5 in September 1910, it was placed on the ballot for a vote on a \$300,000 bond issue to be held November 8, 1910.<sup>302</sup>

Proponents argued that among the many reasons for voting yes were Black Bottom's "...disgrace to the city; menace to public health; obstruction to route from city cemeteries, fair grounds and Hermitage; [and that] travelers in route transferring from depots leave Nashville with such a bad impression..."<sup>303</sup> They characterized their opposition as being more concerned about money than morals.

...the biggest deal made in the commercial situation of the Bottom is by the property owners, the landlords, and land-ladies, for there are both. The landlord is the king of the Bottom... the city's pest hole. Some of the property owners fight the project of elimination of the district for the reason that they make money out of it. The negroes and low whites hug their hovels for the reason that they have fallen to that depth, most of them, that they prefer Black Bottom to a saner and cleaner existence.<sup>304</sup>

Furthermore, supporters insisted that means were an end in and of themselves, stating "the wiping out of the Bottom would alone be sufficient to commend this proposition to the entire city."<sup>305</sup> They suggested that their proposal would eliminate ugliness: "Like a beautiful lily growing from the ooze of a stagnant pool the new Central Park will spring up out of the slime of Black Bottom."<sup>306</sup> And, invoking a medical analogy, they suggested that it was a cancer that had to be removed: "The spot is like a malignant tumor poisoning the

municipal blood current, which the civic body cannot overcome except by the prompt and radical surgery of

complete elimination."307

Proponents also suggested that property values surrounding the neighborhood would increase to such an

extent that the increased tax revenue from that part of the city would offset the expense of the bonds, and

that there was no need for Nashvillians to fear that Black Bottom's current residents might move into their

neighborhood.

There are infinitely better and cheaper homes out in the exclusive colored quarters of the city where the hard-working population of Black Bottom would be welcome and happy, and the sixty-five or seventy families could be accommodated with sanitary dwelling places at lesser rentals than they have had to pay heretofore for the tumble-down fire traps they have called home. Their moving need cause no alarm to the citizens of north, east, south or west.<sup>308</sup>

One Nashville paper published an "appeal from colored people," presumably not those living in the

neighborhood, urging support for the measure. It read, in part:

The negro citizens are especially solicitous that the white people of this county continue to give them their support in the moral uplift of the race. They believe that the removal of Black Bottom will remove great evils, crimes, temptations, and a spot from the city that breeds crime and criminals. Hence we appeal to the whites to solidly support the proposition that is to be decided next Tuesday for the elimination of Black Bottom.<sup>309</sup>

The next day, the ballot measure failed. Black Bottom was not "eliminated" and Central Park was never

constructed.

Summerville describes how different interests came together to support city action related to Black Bottom.

He suggests it is a key moment. He writes:

As the new century opened, events brought to positions of power and influence the several groups whose interests were threatened by the mere existence of Black Bottom. The business community, the Progressives, the segregationists, the prohibitionists, and the property owners on Rutledge Hill, for all their apparent diversity, shared a vision of the city. In the minds of such Nashvillians, the habitations of the poor stood in the way of business growth, and their diversions jeopardized real estate values. Thus professor and banker, civic leader and evangelist were of the same view concerning the plague spot of lower Broad. It was time to 'do something about Black Bottom.'<sup>310</sup>

Doyle summarizes the fight this way:

By 1905 Black Bottom had become a permanent sore on the edge of downtown... The ongoing struggle to 'reclaim' or eradicate Black Bottom continued through the 1900s and 1910s. In 1907 the South Nashville Women's Federation, a group initiated by the Centennial Club, lobbied for a city bond issue to underwrite a large park and a new bridge across the Cumberland, both intended to 'eliminate Black Bottom.' The Sparkman Street Bridge was built, terminating near the Haymarket and displacing many of Black Bottom's tenements as new warehouses and industrial activities cropped up around the bridge. A bond issue to develop a park in Black Bottom was defeated in 1910, however, in part because of fears that slum dwellers would only migrate to middle-class neighborhoods.<sup>311</sup>

Concerns about cost as well as segregation seem to have been the primary causes for the measure's defeat. Nashville's Central Park campaign, organized primarily by the desire to eliminate the neighborhood and the fact that park development constituted an allowable use of eminent domain, points to the barriers to change in lowland neighborhoods, and their persistence, but also to the multiple conflicting agendas related to any action there. Perhaps the only force more powerful than citizens' reluctance to approve tax or spending measures, in St. Paul or Nashville, was their concern about where displaced residents might end

up.

But, just as in St. Paul's Swede Hollow, the same factors that led some to advocate clearance made others wary of clearance and dispersion. They maintained a policy of containment. Ultimately, the park proposal was defeated, but efforts to "clean up," "eliminate," or redevelop Black Bottom would continue for many more years. Racist attitudes perpetuated the bottoms as a neglected and despised urban district, designated for unwanted land uses and the poor, and those same attitudes reinforced the stigma of Black Bottom.

### Flood Protection for the West Side

In Columbus, Ohio, a major debate about municipal investment to remake the lowlands unfolded following the Great Flood of 1913. The City contracted with the engineering firm Alvord and Burdick from Chicago immediately after the disaster to evaluate options for protecting the city from future floods. The engineering firm produced an extensive report offering more than a dozen design alternatives. The report focused on engineering solutions, but offered some recommendations related to the suitability of development in the lowlands generally. In several places in the report, the authors suggest that the City purchase lands in the path of possible future floods and dedicate them to parks, roadways, or other uses instead of buildings.

City officials, engineers, railroad companies, real estate investors, and architects had responded to previous floods by continuing to build on the flood plain. With deadly results, they expanded and intensified the physical development of the area following the 1898 flood because they had found cheap, available land there that was accessible to downtown by streetcar lines and connected to major transportation routes by railroad lines. One of the first streetcar lines constructed in Columbus was on the west side, along Broad Street, a major east-west axis for the city and the neighborhood's major commercial thoroughfare.

After the 1913 flood, as McKenzie mentions in his neighborhood study, The Hilltop became a desirable new residential district. The difference in elevation between the Bluffs at the west side of the district and the Bottoms is dramatic. The top of the Hilltop is nearly sixty feet higher in elevation than the west end of the Bottoms below. Within the Bottoms, relatively minor variations in natural elevation may be found; however, raised railroad embankments and highways stand significantly above grade. East of the Bend, downtown Columbus is located on higher ground than the Bottoms with a noticeable, albeit gradual, slope between the intersection of Broad and High Street and the Scioto River.

The more development, the harder it would be to address the problem through open space solutions, relocation, or anything other than increased levee construction. The preeminent flood researcher Gilbert White noted as early as 1936:

Where a city such as Columbus, Ohio has so encroached upon the flood plain that densely built-up portions of its central business district are subject to occasional damaging floods, potential benefits ...may be relatively unimportant by comparison with existing ones. Little change in intensity and type of land occupancy in areas of that type may be expected to result from consummation of a flood-control program unless the program requires alteration of street or drainage location. On the other hand, where a large portion of the flood plain in an urban area is not occupied or is settled very sparsely, existing benefits may be slight by comparison with potential benefits. Thus, contraction of the flood plain of the Trinity River in its course through the City of Dallas had the objective of reclaiming wide, unoccupied flat lands for future manufactural [sic] and commercial use.<sup>312</sup>

White's distinction regarding flood plain width is worth noting here. In Columbus's Bottoms, as in other wide flood plains like Kansas City's West Bottoms or East St. Louis, these districts were not uniformly poor or disenfranchised in the first decades of the twentieth century. Rather, they became both more built up and more distressed over time, and the same factors which led to the abandonment of these areas by some residents, resulted in the attraction of newcomers, drawn by inexpensive land for development or affordable rental housing in close proximity to job sites.

The debate that followed the publication of the Alvord and Burdick report reflects the ways in which the potential cost of removing people and buildings from lowland areas, and constructing municipal improvements there, led citizens to reject extensive redevelopment in the lowlands. Furthermore, opponents of the proposed flood control works successfully labeled it as a "West Side" project or one that would only benefit a part of the city, rather than the entire population. As such, Franklinton residents were rhetorically transformed from victims of the disaster into special interests asking that their neighborhood be treated be differently than other areas of the city.
By the time of the 1913 flood, the Bottoms had developed into an extensive district with hundreds of homes, businesses, factories, and churches, a major hospital, a railroad station, and several thousand residents. The flood destroyed large sections of the neighborhood, and killed dozens of people. Franklinton never really recovered, and one might say it got its reputation as "the Bottoms," a neighborhood in decline, following the 1913 flood.



Figure 59: A newspaper illustration showing one of several alternatives discussed that would have straightened of the course of the Scioto River, 1913. Source: "Map Showing Much Discussed Plan to Change Course of Scioto River," *Columbus Evening Dispatch*, April 3, 1913, p.3



Figure 60: Map showing Alvord and Burdick's preferred alternative, the construction of a channel through the Bottoms, as it appeared on the front page of the *Columbus Evening Dispatch*, September 13, 1913.





Figure 61: Flood depths, an illustration from the Alvord and Burdick report. Source: A Report to the Mayor and City Council on Flood Protection for the City of Columbus, Ohio, September 15, 1913 (Chicago: Alvord & Burdick, Engineers, 1913).

The flood also destroyed a large amount of railroad property. Significant investments in private infrastructure would be needed to return the system to functioning order again. Rushing water ripped tracks, destroyed bridges, and undermined embankments. In fact, as documented by Alvord and Burdick, railroad embankments supporting raised tracks across the low ground had contributed to the velocity and force of the floodwaters, increasingly the destruction and the deadliness of the flood. The railroad

companies set about repairing the damage and rebuilding their systems. The problem of the embankments' channelization and acceleration of the floodwaters through street level openings was left unaddressed.

An outpouring of charity and relief measures aided the victims, but as months passed citizens expressed reluctance towards the recommendations proposed by Alvord and Burdick. While the city of Dayton, which had been hit even harder by the floods, pursued an aggressive building campaign of massive new civil engineering works and flood control structures, funded in part through nearly two million in pledges funds from the National Cash Register company, Columbus dithered.

On September 14, 1913, the *Columbus Dispatch* front page headline following the release of the report, read "Cost of Alvord and Burdick Plan Staggers City Officials."<sup>313</sup> It called the cost of the proposed flood control measures "appalling."<sup>314</sup> The secretary of the sinking fund committee Martin A. Gemuender called it "the biggest proposition that the city has ever had to consider."<sup>315</sup>

Columbus voters approved a \$3,500,000 "channel improvement" bond in 1916, but action was delayed and a lawsuit was filed.<sup>316</sup> In January 1917, the Franklin County court "formally rejected the Alvord-Burdick plan of flood protection for the West Side."<sup>317</sup> City officials responded by offering to come up with a "cheaper system."<sup>318</sup> By July 1917, a groundbreaking ceremony was held. The *Dispatch* ran a large photograph under the headline "Entire City Represented in Throng That Witnessed Actual Start on West Side Flood Proteection [sic] Improvement."<sup>319</sup>

A noticeable characteristic of the news articles is the emphasis on how the proposed work was for the "West Side," suggesting that the project would not benefit the whole city and indirectly raising questions about the fairness of investing so much money for only one part of the city.

Unlike narrow floodplains or ravines, the Bottoms were too wide to bypass entirely. The neighborhood had become an established section, and the city's main east-west thoroughfare Broad Street would continue to pass through it. As a result, new private real estate development efforts and municipal investment instead focused on the edges. The Hilltop opened as new residential suburb at the west end, and a new public high school and improvements along the Scioto River were planned for the east end. The area across the Scioto from downtown became the focus of a major civic improvement effort, inspired by the 1908 Plan.

Columbus did not straighten the river bend, as suggested by Alvord and Burdick. But they did undertake a number of projects in years after the flood, especially in the 1920s when an explicit attempt was made to link the section of The Bottoms closest to downtown into a grand new Civic Center. The river was widened, new levees were constructed, and new bridges linked Franklinton to the downtown.

#### Municipal Intervention

The early efforts of reformers in four domains (sanitation, parks, flood control, and housing) were often independent of, and uncoordinated with, any city plan, zoning, or other emergent city planning efforts. Indeed, many cities embarked on proto-city planning efforts, including physical and social surveys, mapping, report writing, and proposals for redevelopment before "city planning" existed as a concept, much less a facet of municipal regulation and administration. When zoning and planning arrived, municipal planning efforts were perhaps less "constructive" then Aronovici and other reformers may have hoped. In comparison to the sanitary and landscape efforts of the earlier era, the new planning efforts were much less concerned with topography.

As germ theory advanced, health inspectors, doctors, and researchers left the sanitary survey behind and moved into the laboratory. Microbial causes meant microbiological research, effectively ending the era of environmental intervention as a medical remedy. In architecture, the City Beautiful movement, with its emphasis on civic art, grand plazas and thoroughfares, and monumental architectural compositions, faded from view. It was replaced by a new emphasis on the efficiency and function of cities, expressed in the formation of municipal commissions, rules and regulations regarding the review of urban development, and the categorical organization of the urban landscape into zones of allowable (and prohibited) uses.

As the case of the proposed Central Park in Nashville shows, parks were not always motivated by the same rationales advanced by landscape architecture's leading thinkers. Often, they were advanced with quite different agendas in mind.

The influence of landscape architects and park designers within the emerging planning movement was eclipsed by procedural and regulatory efforts, led by planning consultants, planning commissioners, and planning directors. The primary tool in this regard was the zoning, which dramatically changed the rhetoric of planning and the image of the city. The earlier influence on the symbolism and expressiveness of grand civic architecture and landscapes was replaced by a "Monopoly" board-type interest in the relations between private land developers and government reviewers. Zoning maps ignored topography, as did zoning classifications. Mostly they attempted to take the existing set of land uses and fit them into the schema of what became known as Euclidean zoning, a double-meaning descriptor evoking both the Supreme Court case involving the Ohio town of Euclid and geometry. This new geometry of the city was "pyramidal" in concept, but flat in practice.

~~~~~ ~~ Chapter 6 ~~~~~~~~

Zoning the Lowlands, Redefining the Residential-Industrial Mix

The new institution of zoning, particularly the invention of the zoning map, required city officials and planning commissioners to categorize all land uses, and the intensity of those uses, within a city's boundaries as well as to label every existing parcel of land with a designation. Determining a place for everything, and deciding the category of use for every place, required data. Land use surveys of all areas of the city were untaken, including the neglected and notorious lowlands. While previous efforts focused on economic development, infrastructure needs such as sewerage, public health, and parks, the process of developing the zoning map required planners to catalog land uses in the lowlands and to project a future for them.

Zoning emerged out of property concerns about the unpredictability of the land market, and the financial risks to private property inherent in what might be termed unregulated adjacencies. That is, a factory could be constructed in a residential district, leading to a decline in residential property values. In densely developed and crowded cities like New York, "problems of light and air, traffic, and aesthetic monstrosities" also prodded real estate interests and reformers into action.³²⁰ Zoning attempted to deal with the compatibility or incompatibility of particular land uses, the proper limits on building bulk and height, and the optimal arrangement of, and relationship between, buildings and the land they occupied. New York City adopted the first comprehensive zoning act in 1916, a "single law [that] forever changed how cities would be built: government regulation of development now became a dominant force in shaping the form of the city."³²¹

A primary purpose of early zoning efforts was to create regularity and order in the real estate market. Commenting on the Sixth National Conference on City Planning in 1914, Frank Williams wrote:

The tendency of districting is to convert interests in land—which in undistracted cities have proved to be of uncertain and fluctuating value—from speculative into conservative investments. It is like changing a somewhat risky 10 percent bond or stock into a conservative one. The result is an increase of fully 50 percent in its value, with no lack of buyers.³²²

Zoning commissions and planners applied a powerful set of legal tools to the existing city, supported by an underlying set of social and physical assumptions. Embedded in the early concept of zoning was the idea of a pyramid of uses, with a strong focus on protecting single family homes, the top of the pyramid, and large areas set aside for industrial use that were mostly unregulated, the bottom of the pyramid. Fittingly, the lowlands tended to end up in the bottom categories— but not always.

Urban lowlands with existing residential and industrial uses were typically zoned as "industrial" or "light industrial," meaning that they allowed all uses "higher up" on the pyramid as well as industrial use. In effect, the classification system directed new industrial investment towards the areas "zoned for it" as it would not be allowed in the new residential-only or residential- and commercial-only districts. Low-income families, workers, immigrants, African Americans, and poor people living in these areas were thus zoned into classifications that were not considered residential. In effect, they were categorized as adjuncts to industries, not worthy of any "protection" such as that accorded to the districts of single-family homes zoned "residential." As a result, they were highly unlikely to see housing improvement efforts. In fact, it became more likely that they would be pushed out, as industrial uses were now confined to limited areas: the main "purpose" of the land they lived on was now dedicated to industrial needs. This chapter examines how four of the case study sites were zoned: the Bottoms, Columbus; Frog Hollow, Hartford; the Flats, Los Angeles; and Black Bottom, Nashville.

The Euclid Decision

"The immigrant is in the fiber of zoning," wrote Seymour Toll in his brilliant analysis of zoning history in the United States.³²³ His analysis is particularly relevant to the case of the lowlands. For example, in Los Angeles, San Francisco, and other California cities and towns, municipalities passed a series of anti-Chinese zoning laws beginning in the late nineteenth century. Ostensibly the new measures were designed to regulate the "nuisance" of laundry operations. In fact, they were aimed with equal force at the Chinese community itself—some of whose members had been in the American West for many decades before Anglo lawmakers arrived. A series of lawsuits over these new laws became known as the Laundry Cases, key precedents in establishing the power of municipalities to designate uses and districts.

In the early twenty first century, zoning is familiar and unquestioned, and often considered arcane and worthy of little attention. But in the late nineteenth century, elected officials and civic elites found the regulation of urban space by municipal ordinance to be a powerful new tool for organizing city life. The question of what uses would be allowed where, and by extension *who* would be allowed where, suggested that new legal tools might be developed to manage urban conflict. The anti-Chinese zoning laws clearly show that cities like Los Angeles attempted to use government regulation to manage the segregation of the population. These measures were developed against a background in which white lynch mobs and so-called law and order leagues used terror to attempt to control the extent and location of non-white ethnic groups within the city. As planning historians such as Christopher Silver and Charles Connerly have documented, Southern cities viewed zoning with similar interests and motivations related to the segregation and designation of limited geographic areas of black residence within the city.³²⁴

In New York, it was conflicts related to garment manufacturing on Fifth Avenue that provided a major impetus for the adoption of a comprehensive zoning ordinance in 1916. Retail merchants and mansion owners opposed the presence of immigrant workers as much, if not more than, the presence of industry. Toll describes pre-zoning activities of the Fifth Avenue Association as "creating and applying private power to private ends," actions later reflected in the zoning "commissioners' overriding concern for private property values."³²⁵

Toll argues that social attitudes and legal developments were key factors in the adoption of zoning, but often forgotten is the major influence of a nationwide political campaign to urge cities to adopt it. Zoning's proponents worked diligently to spread zoning across the country in the hope that the widespread adoption of such practice would make it appear reasonable in the eyes of the courts. In a surprise decision, the United States Supreme Court upheld its constitutionality in *Euclid v. Ambler*.

In the decade between New York's adoption of a comprehensive zoning ordinance and Court's decision in the *Euclid* case in 1926, cities across the country adopted zoning ordinances—each with its own district map, designating uses in every part of a city. Of the cities in this study, only Nashville adopted zoning after 1926 (see Table 5). Planning consultants and zoning experts assisted planning commissions in the preparation of the new laws. Although many of the new ordinances were based on a model ordinances or a standard set of guidelines such as those developed in enabling legislation, individual cities used their own language and terminology. Local variations in the law were in accordance with a national legal system based on state power that designates the power to regulate local matters to local governments. Ordinances differed in such aspects as the number of districts, the delineation of prohibited uses in particular zones, and whether or not they regulated height and area (as well as use).

The Supreme Court case involved an Ohio realty company that owned vacant land and intended to develop it for industrial uses. The Ambler Realty Company challenged the constitutionality the town of Euclid's use of zoning and the restrictions it placed on the possible future uses of their property. They argued that the zoning designation lessened the value of their investment and deprived them of due process under the Fourteenth Amendment. The court decided in favor of the town, upholding the constitutionality of zoning. In doing so, the court recognized both the city's interest in designating particular geographic areas that prohibited industrial purposes and the city's interest in designating particular geographic areas that protected areas of single-family homes. Justice Sutherland wrote the majority opinion in the *Euclid* case, taking special note of the negative influence of multi-family housing on "detached house sections."

The matter of zoning has received much attention at the hands of commissions and experts, and the results of their investigations have been set forth in comprehensive reports. These reports, which bear every evidence of painstaking consideration, concur in the view that the segregation of residential, business, and industrial buildings will make it easier to provide fire apparatus suitable for the character and intensity of the development in each section; that it will increase the safety and security of home life; greatly tend to prevent street accidents, especially to children, by reducing the traffic and resulting confusion in residential sections; decrease noise and other conditions which produce or intensify nervous disorders; preserve a more favorable environment in which to rear children, etc. With particular reference to apartment houses, it is pointed out that the development of detached house sections is greatly retarded by the coming of apartment houses, which has sometimes resulted in destroying the entire section for private house purposes; that, in such sections, very often the apartment house is a mere parasite, constructed in order to take advantage of the open spaces and attractive surroundings created by the residential character of the district. Moreover, the coming of one apartment house is followed by others, interfering by their height and bulk with the free circulation of air and monopolizing the rays of the sun which otherwise would fall upon the smaller homes, and bringing, as their necessary accompaniments, the disturbing noises incident to increased traffic and business, and the occupation, by means of moving and parked automobiles, of larger portions of the streets, thus detracting from their safety and depriving children of the privilege of quiet and open spaces for play, enjoyed by those in more favored localities -- until, finally, the residential character of the neighborhood and its desirability as a place of detached residences are utterly destroyed. Under these circumstances, apartment houses, which in a different environment would be not only entirely unobjectionable but highly desirable, come very near to being nuisances (emphasis added).326

Sutherland's decision highlighted one of the main purposes behind zoning: the creation and maintenance of separate residence zones within the city, organized by social class. While the prohibition of apartments from designated city areas would benefit homeowners in those locations, it was to the detriment of working

class and low-income tenants who would be barred from living there. Even worse off were the tenants who lived in newly-designated industrial areas, banned from restricted residential zones and lacking any protection within their own area at the same time.

Toll argues that social Darwinism, especially enthusiasm for the ideas of Herbert Spencer, strongly influenced the Supreme Court justices in the *Euclid* case, as well as the proliferation of zoning across the country in the 1920s. In this early period of city planning history, many elected officials, civic elites, and professionals viewed intervention in the economy, the application of scientific knowledge to government decision-making, and regulation of the uses of private property as a necessary means to properly guide the "natural" course of events. In this sense, the strict separation of residential areas by social class was considered natural.

Of course, in the lowlands, the "natural" separation had been the "hierarchy of altitude" created by rapid urbanization, migration, municipal neglect, selective investment, prejudice, and, occasionally, violence. Suddenly city leaders, real estate interests, and elites had a new tool that could be used to remake the social geography. New professional planners and other experts would join the mix. Citizens and neighborhood groups like homeowners association and business groups would assert their rights to influence the decisions now vested in the hands of appointed planning commissioners, city councilors, and mayors. They would all be looking to see how the new two-dimensional zoning maps, stretched across the city's topography like a blanket over rocky ground, would classify their own places of work and their own homes.

Zoning "the Bottoms"

On Columbus's West Side, "the Bottoms," the largest of the six case study sites in this dissertation, the city adopted a zoning ordinance and map on August 6, 1923. Based on a study by the well-known planner, and co-author of the nation's first comprehensive zoning ordinance, Robert Whitten two years earlier, the ordinance established five use districts. Inscribed on the inside front cover of the report was the words "Without zoning you are powerless to prevent the destructions of the comfort of your home and the value of the property through the erection nearby of a: Public garage, Sanatorium, Junk Yard, Oil Filling Station, Steam Laundry, Grocery Store, Ice Plant, Supply Yard, Iron Works, Factory."³²⁷ Of course, if you lived in an area that would be zoned as industrial, you remained powerless.

Regarding the apartment house, Whitten wrote in the same report, three years before the *Euclid* decision: "Zoning will keep the apartments out of the private house sections. The coming of the apartment drives out the private home. Only by setting definite limits to the spread of the apartment can the city be preserved as a city of homes."³²⁸

In Columbus, "the Bottoms" was zoned for multi-family residential, commercial, and industrial. As seen in Figure 54, the central section of the neighborhood is divided into roughly three sections: 1) the areas west of Glenwood Avenue; 2) the rectangular shaped area bounded by Broad Street, Sandusky Street, Sullivant Avenue, and Glenwood Avenue; and, 3) the area from Sandusky Street to Belle Street (near the bend in the Scioto River). Land adjacent to the river on the north side of the neighborhood is marked with a dotted pattern representing heavy industry. The section bounded by Sandusky, Broad, Belle, and Sullivant, as well as both sides of Glenwood Avenue to the west, are shaded with dark diagonal lines indicating the light industry or "first industrial" district. Solid blocks of shading represent commercial zones, with Broad Street,

Sandusky Street, and Sullivant Street serving as the main commercial areas (three sides of the rectangular district at the center of the neighborhood). A small area across the river from downtown is also shaded solid, it would become the site of the Central High School, an architectural expression of the City Beautiful era Columbus Plan of 1908 (later converted to become the Museum of Science and Industry). The city plan had envisioned a major new civic center on both sides of the Scioto River, a vision only partially realized. West of Sandusky Street, the two long linear boulevards traversing the lowland, Broad Street and Sullivant Street, were also zoned for commercial use. Most of the area west of Sandusky Street, between Broad and Sullivant is zoned for residential use. For the most part these zoning classifications appear to reflect neighborhood existing conditions with the exception of the area's eastern section (between Sandusky and Belle). This area contained dozens, if not hundreds, of residences, including some of the oldest houses in Columbus. The new zoning classifications offered no protection to these homes.

Zoning for Multi-Family Residences in Frog Hollow

In Hartford's Frog Hollow, the neighborhood defined by six-unit multi-family dwellings known as perfect sixes, the residential area was zoned for multi-family use under the C-1 category (see Figure 64). Capitol Avenue from Broad Street to the Park River was zoned as Business No. 2, while the other side of the Park River was zoned Industrial. Park and Broad Streets were zoned primarily for business or commercial use, with the intersection standing out as a prominent commercial node. All six "residence zones" allowed the same uses, but were subject to different height and area restrictions. Zone C created a maximum height of six stories or 75 feet, a maximum of 140 families per acre, a maximum building area of 70% of an interior lot and 90% of a corner lot, and mandated a rear yard.

Frog Hollow's zoning classifications present an interesting contrast to the approach taken by other cities. The densely developed area of multi-family housing was zoned for multi-family use. As seen in Columbus and elsewhere, often neighborhoods that combined industrial and residential uses would be zoned entirely for industrial use. Again, Harford appears to be the exception to the rule with regard to lowland development patterns.

Zoning for Industry in the Flats

The Flats of Los Angeles was zoned for industry, similar to low-lying land on the west side of the Los Angeles River (see Figure 65). Los Angeles had experimented with zoning more than a decade earlier than many cities. In fact, in 1908, the city adopted the nation's first citywide use zoning, a partial measure that would late amended and modified by the "comprehensive" process. On the zoning map, planners marked the area closest to the river with "crossed" lines to represent "zone E" with the eastern half of the lowland marked as "spotted" to represent "zone D." Above the bluff on the east side, planners designated land in Boyle Heights as "shaded" to represent "zone B," with areas around major street intersections (such as the meeting of Pleasant, Aliso, and Macy Streets with Brooklyn Avenue, and where Boyle Avenue intersected with First, Fourth, and Seventh Streets) as commercial zones ("black" for "zone C").

Zone E was "without restriction... provided [it] is not prohibited by law or ordinance," while zone D corresponded to what was called "light industry" in other cities. In the Flats, planners assigned zone E to the area closer to the river (the western section) and zone D to the area closer to the bluffs (the eastern section). The line separating them ran along the west lot line behind Utah Street, corresponding to property divisions extending back to the 1880s based on the location of the west branch of old zanja number 7.³²⁹

In the early 1920s, the Flats included industry, businesses, and residences. In fact, more than a hundred homes were located within this area—a fact not recognized by the city's classification of the area (see Figure 66).

The light industry zone placed over this residential area allowed all uses except for twenty-six explicitly prohibited activities or "similar obnoxious purposes" detailed in the ordinance. They were:

...Ammonia, chlorine, or bleaching powder manufacture; asphalt manufacture or roofing; brick and tile terra cotta manufacture or storage; boiler works, cretsete treatment or manufacture; crematory; distillation of coal, wood, or bones; fat rendering; fertilizer manufacture; gas (illuminating or heating) manufacture; glue manufacture; gun powder, fireworks or explosives manufacture and storage; incineration or reduction of garbage, offal, dead animals or refuse; iron foundry, lamp black manufacture; lime, cement and plaster of paris manufacture; paint manufacture; petroleum, pumping refining and storage; pickle, sauerkraut, sausage or vinegar manufacture; railroad yard or roundhouse; rawhides and skins, curing and tanning; rolling mill, scrap iron, junk or rags storage or baling; slaughter of animals or fowls; smelting of iron, soap manufacture; tallow, grease and lard manufacture; tobacco (chewing) manufacture; or similar obnoxious purposes.³³⁰

Immediately adjacent to the residential neighborhood, between it and the river, the City designated the area "heavy industry" where all the activities detailed above were permitted. The residents of the Flats were completely ignored by the new zoning maps.

Zoning Black Bottom

In Nashville's Black Bottom, planners zoned all land between McGavock Street and Peabody Street, from the rear alley west of Fifth Avenue to the Cumberland River as "industrial A" (see Figure 67). Around the edges of the neighborhood, such as the lots on the south side of Broad Street, and on its western portion, where the land was slightly higher in elevation, the city designated the land "commercial B." South of Peabody Street, uphill from the Bottom, areas of "residence C," "commercial A," and "residence B" (around the "Old Vanderbilt University site") could be found. Nowhere in the area is "residence A" to be found.

Interestingly, Nashville's zoning ordinance, adopted after the Supreme Court's *Euclid* decision, included a number of different types of non-residential uses under "residence A," including churches, farms, hospitals, parks, railroads, and railroad stations. "Residence B" included police and fire stations, cemeteries, and dormitories, as well as the more typical "detached dwellings for not more than four families or housekeeping units." "Residence C" allowed for hotels as well as "a dwelling for any number of families." "Residence E" specifically mentions "slum clearance" programs. "Industrial A" prohibited 51 uses, with language very similar to that used in Los Angeles.

Nashville's lowland Black Bottom area was zoned for industry. Based on data prepared for a 1937 study of housing conditions titled *Low Standard Housing in Nashville Tennessee*, the population of the area was about 2,300 people.³³¹ Based on 1930 U.S. Census data maps included in the appendix to this report, labeled "Negro Population Map" and "White Population Map," blacks and whites were roughly equal in population size in the neighborhood at the time. Also, unlike cities such as Washington D.C., where alley dwellings were frequently black residential areas, the African American population does not appear to have lived on the interior of these city blocks. The maps indicate that the black population was clustered around the west side of Fourth Avenue, the area that novelist Zora Neale Hurston referred to as the "Jook section" that originated the "Black Bottom" dance, while the white population was dispersed throughout the area. The housing report makes clear that Nashville's planners, like planners in Columbus and Los Angeles, were aware of the residential population in the area. They simply determined that the multi-block area in the low-lying area should receive a single classification and, based on the nine categories possible, "industrial A" was the proper one for a district of its type.



Figure 62: Oldest Known Extant Columbus Zoning Map showing "the Bottoms," undated and without key, courtesy of Building and Development Services department, City of Columbus. Notations in small circles indicate that this sheet was updated several times in the late 1940s and early 1950s. In 1957, planning consultant Harland Bartholomew noted that "[z]oning regulations were first enacted in Columbus in 1923... A revised zoning text was adopted by the City in 1954 but the zoning district map is basically about the same as that adopted over three decades ago."³³²



Figure 63: Details, oldest known extant Columbus Zoning Map, showing zoning classifications. Heavy striped lines indicate "first industrial," as noted in upper left quadrant; other classifications include light diagonal lines (marked here with the circles B1 and C2): both these areas appear to have been originally designated as residential areas. The reverse diamond pattern represents heavy industry.



Figure 64: Details, Hartford Zoning Map, undated. The title block notes that a zoning ordinance adopted 1945, but the map's classifications appear to date to the original 1926 In this detail, the Frog Hollow neighborhood and the south branch of the Park River are shown (above). An enlargement of the key is also shown (below). Notations added indicate neighborhood boundaries (dotted line), railroad lines, the south branch of the Park River, and major streets such as Broad Street and Washington Avenue. The heavy diagonal pattern, indicating "business no. 2," shows Park Street as a commerical area (lower right). Existing multi-family residential arees within the neighborhood were zoned C-1. Frog Hollow neighborhood is zoned Zoning map courtesy of Hartford History Center, Hartford Public Library, Hartford, Connecticut.



Figure 65: Detail of Los Angeles zoning map, 1925. The darker shaded area at center represents heavy industry and the lighter shade, on the east side of the Flats, light industry. Collection of Los Angeles City Archives. Notation added.



Figure 66: Detail, Baist's Real Estate Atlas, showing extent of residential development in the Flats in 1921. More than two hundred homes were located within the area zoned either "light industrial" or "heavy industrial" by the city that year. Notation added. Collection of Los Angeles Public Library.



Figure 67: Detail, Nashville zoning map and key, showing the Black Bottom neighborhood, 1933. The eastern part of the neighborhood, between the alley separating 5th and 6th Avenue and the river, was zoned Industrial A (black with white dots). The western part of the neighborhood was zoned Commercial B. The break between the two zones aligns with the terrain, as the area to the west is of higher elevation. Collection of the Tennessee State Library and Archives. Notation added.

Topography, Lowlands, Planning, and Zoning

Planners rarely indicated topography on zoning maps, but that is not to say that topography is absent. A

close read of these maps reveals the location of lowlands as "industrial" zones adjacent to rivers, creeks, or

streams. On the Columbus, Los Angeles, and Nashville zoning maps, for instance, areas located on low-

lying land close to the river were zoned industrial. To some extent these classifications represented existing

conditions; however, as the examples in this chapter illustrate, they often ignored the presence of people in these areas.

In general, under zoning, the city as a whole is represented in maps as a checkerboard pattern of potential investment sites. Major boulevard or thoroughfares stand out on these maps as dark lines denoting linear commercial areas, but elsewhere the city has been divided up into multi-block patches, panels, and swathes. Whereas earlier city governments had been reluctant to intervene in the private market, the new system meant that, in theory at least, elected officials, appointed commissioners, and professional planners would direct and manage the spatial character of urban development. But zoning developed largely separate from, and uncoordinated with, planning efforts. As Table 4 shows, some cities adopted city plans well before zoning, whereas others had zoning measures in place before ever attempting a comprehensive city plan.

| | Calumbura | Hantford | | N 1 11 | | |
|-----------------|-----------------|-------------------|-------------|------------------|------------|-------------------|
| | Columbus | Hartford | Los Angeles | Nashville | St. Paul | Washington D.C. |
| First City | 1008 | 1012 | 1060 | 1020 | 1000 | 4000 |
| Plan | 1900 | 1912 | 1909 | 1939 | 1922 | 1902 |
| Date that first | | | | | | |
| zoning | 1022 | 1026 | 1021 | 1022 | 1000 | 4000 |
| ordinance | 1925 | 1920 | 1921 | 1933 | 1922 | 1920 |
| was adopted | | | | | | |
| Total number | | | | | | |
| of land use | 5 | 7 | 5 | 9 | 6 | 4 |
| categories | | | | | | |
| Residential | Dwelling | | | | | |
| land use | house or | Residence A, | Residence | Residence | A, B, or C | |
| categories | Apartment | B, or C | A or B | A. B. C. D. or E | Residence | Residential |
| • | house | | | , , , , , , , | | |
| Commercial | | Ducinese | | 0 | | - : (|
| land use | Commercial | Business | С | Commercial A or | Commercial | First commercial |
| categories | | NO. 1 OF NO. 2 | | В | | Second commercial |
| Industrial | 1st Industrial | linht on lie erne | | l | Light or | |
| land use | 1° Industrial | Light of Heavy | D or E | Industrial | Heavy | Industrial |
| categories | Zing Industrial | industriai | | A or B | Industry | |

Table 4: City Plans and Comprehensive Zoning Ordinances in Six Case Study Cities

Only a few cities considered planning and zoning at the same time. Anthropologist and planner Constance

Perin writes:

Long-range comprehensive planning—the primary concept of planning—has been, historically, all too often an obsessive exercise, rarely coming to closure in municipal zoning regulations and capital improvement schedules at once technically, pragmatically, and socially appropriate. It is no mistake that planning is so often inconclusive. Not only does its failure often enough serve the interests of local realtors and developers, but... the interests of homebuyers as small-scale traders in real estate... Planning and zoning have certainly accomplished many good deeds for the general welfare and they have often been powerful in braking licentious practices, but all the same, zoning has been legislated widely die to the support primarily of real estate interests and secondarily of municipal reformers.³³³

In theory, zoning could aid public health by separating people and "residential sections from the potentially harmful byproducts of industry."³³⁴ However, as the example of lowland areas shows, these same areas were very often places where people lived, sometimes thousands of them. The difference was who—what types of people—and what types of residences were protected.

Zoning's widespread acceptance in the early 1920s, followed by the Supreme Court's Euclid decision in 1926, meant major changes for the urban lowland slum. These neighborhoods were redefined by municipal ordinance. The pyramidal approach to zoning, with its focus on prohibiting industry from most areas of the city and directing it to geographically bounded and limited areas, paired with a built-in hierarchy of social class reflected in residential categories, set the stage for remaking the lowlands. The relative value of particular locations within the city, the economic incentives (and disincentives) created by the new system, and the rules of the real estate "game" had changed, altering the dynamics of urban development and the trajectory of urban lowlands.

~~~~~ Chapter 7 ~~~~~~~

Demolishing Old Slums, Building Big Projects

By the 1930s, municipal governments would have another powerful tool for remaking lowlands at their disposal: federally funded slum clearance programs. Initially tied to the provision of public housing, slum clearance would later be facilitated through highway building and urban renewal programs. Between the late 1930s and early 1970s American cities were dramatically remade. Frequently, the lowlands were chosen as a site for this transformation. Earlier reluctance on the part of voters and city officials to disrupt lowland neighborhoods, often due to concerns about residents invading their own neighborhoods, faded in the mid-twentieth century. With federal funds available, changing patterns of residence and work in cities, concerns about the economic viability and future uses of downtown areas, and other social and economic changes, redevelopment trumped containment. This chapter examines the processes of demolishing and destroying the old lowland slums, some of which had persisted for nearly a century, and the products of the rebuilding. Four case studies highlight the contrasts and contradictions of this transformation, as lowland areas followed many different trajectories: in The Flats in Los Angeles, the eastern section was redeveloped as two large public housing complexes; St. Paul's Swede Hollow became a dumping ground for many years then a park; Foggy Bottom in Washington D.C. became a high-end residential district and home to government institutions, a major university, and a national performing arts center; and, Black Bottom in Nashville, renamed SoBro for "South of Broadway" and remade by a half-dozen multi-million dollar projects, including the Country Music Hall of Fame, in a span of fewer than fifteen years.

#### Clearing the Flats

In Los Angeles, the Flats were zoned industrial. The railroad facilities, warehouses, and small factories along the Los Angeles River were labeled "heavy industry," while the residential areas to the east, below the bluffs, were labeled "light industry." During this period, the enclave of Russian Molokans, Mexicans, Armenians, and other immigrant groups, the area that one *Los Angeles Times* reporter referred to as a "slum sandwich," continued to develop, with a mix of residences of all types intertwined with businesses and shop, alongside warehouses and factories. From the early housing surveys of 1906-10 through the New Deal funded studies of housing conditions in the 1930s, the neighborhood remained a subject of a great interest to public health workers, housing professionals, reformers, and elected officials. Community studies, social work efforts, and newspaper articles had brought attention to the Flats. In the 1920s and early 1930s, several new bridges literally passed over the Flats, soaring high above the river, connecting the industrial west side of the river directly to the Heights.

In the decades after the initial Utah Street clean up campaign, and the city's regulation of "house courts," housing conditions had improved in the neighborhood. The built environment exhibited a mixed character with dilapidated structures and simple small houses sitting side by side with properties in good condition. As Young described, it was a busy neighborhood, filled with life and activity, noisy, smelly, crowded, and polyglot. All of that would change in the late 1930s and early 1940s.

On the west edge of the neighborhood, the Los Angeles River would be transformed. The City and County responded to major floods in 1914 and 1934 by instituting a series of new flood control measures. Those efforts would be greatly expanded after 1935 when the federal government made Works Progress Administration (WPA) funds available for Los Angeles County flood control. By 1938, when another major

flood occurred, plans were already underway to put the river in a deep concrete channel over the course of its fifty-one mile length.<sup>335</sup> By 1940, the section of the river on the west edge of the Flats had been transformed into a massive concrete flood control structure.

In 1938, the Housing Authority of the City of Los Angeles (HACLA) was established. Based on previous studies of slum housing conditions as well as HACLA's own assessment of the economic and political feasibility of land acquisition in different areas of the city, the agency identified ten sites for slum clearance and public housing construction. Two of them were in the Flats. Nearly the entire residential area of the Flats would be demolished. Some of the houses on the Pico Gardens site were dismantled and offered for sale (see Figure 68). The houses were replaced by two new huge public housing developments: Pico Gardens, which opened on August 1, 1942 with 241 units, and Aliso Village, which opened on December 1, 1942 with 685 housing units (see Figure 69). In 1952, HACLA expanded Aliso Village by an additional 336 units.



Figure 68: Scoop! In 1942, HACLA offered houses from the Flats for sale. Source: Los Angeles Times, January 25, 1942, p. B14.



Figure 69: Newly constructed Aliso Village public housing development, as viewed from the newly landscaped hillside at the bluffs separating the Flats from Boyle Heights. Photo by Julius Shulman, collection of the Los Angeles Public Library.

A third massive civil engineering project brought still further physical change, and more concrete, to the Flats. The bluff would be encased, hidden from view, and covered over by a freeway. Between 1940 and 1948, the Hollywood Freeway was constructed.

Bounded by a freeway to the east and a flood control channel to the west, the remade neighborhood was isolated and separated from the rest of the city. The Flats were encircled in concrete: the river was channelized, the bridges defined the north and south ends of the area with their massive support columns,

and the bluffs were replaced by a freeway. Any sense of the natural landscape and topography was obliterated. The Flats were transformed into a walled enclave, a sealed depression, cemented in place and tethered to the side of the engineered drainage channel that replaced the river.

The demolition of the Flats under the "slum clearance" provisions of the federal housing legislation did not require the type of voter approval, or raise the same concerns about cost, as earlier proposals to eliminate Swede Hollow or Black Bottom. Instead, with federal money and authority to implement the project, HACLA planners quickly identified slum clearance sites for the ten new federal housing projects. Site selection processes varied, but without question, the federal emphasis on "equivalent elimination" and "slum clearance" rather than "greenfield" or undeveloped sites made it more likely that notorious places like The Flats would be chosen. They had already been surveyed by city government departments, identified as a problem areas in the press, and known colloquially by nicknames like "the Flats" as bad areas inhabited by strange people with odd customs down by the river.

In the *Provisional City*, architect Dana Cuff describes how HACLA redefined the multiple blocks, varied housing conditions, and mixed residential-industrial-commercial character of the Flats as a "project site." She describes how the neighborhood's reputation as an immigrant area and the attention paid to courts as a problematic housing type in the 1908-10 housing reports influenced perceptions of the area as a whole.

[T]here are two significant implications from the early housing reports: small-scale improvements were considered viable; and The Flats had been singled out among other low-income areas as an area with housing problems. In some ways, the most telling aspect of this early phase is that, unlike subsequent programs, early efforts to improve housing conditions in The Flats did not compromise a massive, totalitarian scheme. The housing commission had neither the budget nor the authority for this, probably because the problem had not yet been defined as a catastrophic threat. The 'emergency' did not become apparent until the Depression. No grand urban architecture was imagined, only slight improvements to benefit health and morality. Little by little, lot by lot, The Flats would be rebuilt, starting with the worst structures. There was, however, the constant underlying issue of race, and early documents record the commissioners' consistent stereotyping and discrimination. Not only was The Flats a highly concentrated center of low-wage, immigrant workers, but with them came the concentration of troublesome house courts. Together,

the population and the building stock helped outsiders draw a loose boundary around the area, which eventually would be transformed into a bona fide site. The city's intense focus on The Flats persisted for the next five decades.<sup>336</sup>

Cuff argues that the New Deal housing program was based in utopian ideals, fueled by modernist architectural zeal, and implemented with "totalitarian" thoroughness.<sup>337</sup> She emphasizes the rhetorical significance of the slum label, asserting that it paved the way for destruction and the physical remaking of the city. She also focuses attention on the notion of "site" and the process of "site selection," which she argues derived from stereotypical notions and racist fears about concentrated areas of immigrant settlement.

What Cuff misses is the fact that the neighborhood was already defined in several key respects as a unit, as a neighborhood, and, as a potential "site" by its topographical setting as lowland and by its urban identity and lowland name "The Flats." In Los Angeles, these areas became notorious, mythic, folkloric. The names were pejorative, but they could also be celebrated. They were stereotype, archetype, identity, and uniqueness rooted in landscape. These places, considered too country, too foreign, too uncivilized, did not fit into the image of the modern city. Not all of the places that got the slum label were of this type, but many were, including Dogtown, Chavez Ravine, Fickett Hollow, Frogtown... there were many such places in the rapidly growing city of Los Angeles.

Upriver in another industrial area on the west side of the river, closer to the old Plaza, Dogtown became the William Mead projects. Fickett Hollow, a settlement of small houses and shacks located in one of the ravines of Boyle Heights bluffs, only a short distance from the Flats, was slated to become the tenth of the ten HACLA.<sup>338</sup> After further consideration, however, HACLA did not build the tenth project there, instead placing it in Flats, too—it became Pico Gardens.

Together, the two projects would become known as Pico-Aliso. The remaking of the Flats was draconian.

The natural landscape was culverted, covered, drained, contained, passed over, reordered, re-framed, and

re-imaged. The Flats became Pico-Aliso, the bluff became the Hollywood Freeway, and the river became a

drain. But the name Flats did not disappear, as sociologist James Diego Vigil explains:

In the 1920s and 1930s, the area... was known as Russian Flats, for its first group of ethnic settlers. This area originally covered a large portion of Boyle Heights, bounded on the east by Lorena Street, on the west by the Los Angeles River, on the south by Olympic Boulevard, and on the north by Mission Road. Sometime in the mid-1930s, the Cuatro Flats gang emerged here, beginning as a group of youth claiming Fourth Street as its domain. Like the rest of East Los Angeles residents, the group had as its activities mostly just hanging around together and partying. Early in the 1940s, the area became known as Tortilla Flats, and later in the decade the *placa* (graffiti logo) 'Cuatro Flats' came into extensive use.<sup>339</sup>

The name was also used by young men around First Street who adopted the term Primavera Flats. Despite

all the remaking, a verbal connection to the neighborhood's past would persist.



"Flats" tathoo; valor relaxing

Figure 70: "Flats" tattoo worn by a Cuatro Flats gang member. Source: James Diego Vigil, *The Projects: Gang and Non-Gang Families in East Los Angeles* (Austin: University of Texas Press, 2007): 40.

# Burning Down Swede Hollow's Shacks

In 1917, when Carol Aronovici conducted his survey of sanitary problems and poor housing conditions, he recommended that Swede Hollow's residents be removed and the ravine be transformed into a park. In fact, water quality and sanitation in the Hollow had long been cause for concern. Hokanson describes how residents used the creek for waste disposal for decades.

Heavy rains occasionally helped clean the creek, as in 1900, a few years after we left the Hollow. The city health department received numerous complaints about the odors emanating from the refuse-filled stream that summer. Authorities suggested the construction of a sewer from Minnehaha Street to Fifth Street, but the estimated cost of the project was prohibitive. While they cast about for another solution, rain washed away the accumulated filth and sanitary conditions were temporarily improved. Unfortunately, Swede Hollow soon returned to its former ugly and cluttered state. The creek, which froze only at the edge in winter, continued to serve as a sewer until 1937, when it was diverted under ground through a conduit. A deep spring provided water thereafter.<sup>340</sup>

Sanitarians and housing reformers had repeatedly identified the valley as one with substandard housing

and unhealthful living conditions, but residents continued living there. By the 1930s, Mexican immigrants

had joined the Italians in the Hollow, establishing their own small enclave and traditions in nearly century

old "hamlet" in the city

Calls for a park at Swede Hollow persisted, too. In 1932, landscape architect George Nasen wrote;

There is at present a definite movement on foot to acquire certain lands in the valley of the old Phalen creek from Seventh avenue to Payne avenue, as a large park area which would be called Hamm park in memory of this early park builder. This area is often popularly known as 'Swede Hollow,' and is a beautiful and attractive valley with wonderful possibilities for municipal forest purposes. It lies immediately west of the home in which William Hamm spent his life. It would be an interesting addition to the St. Paul park system and a proper recognition of the work of William Hamm for the parks of St. Paul.<sup>341</sup>

But this park proposal, too, did not succeed. Residents were able to stay in their homes, although the

population in Swede Hollow had shrunk considerably from its peak population. Whereas more than 600 and

perhaps as many 1,000 people lived in the little valley at the turn of the century, in the 1950s only a few

dozen cottages remained. On December 11, 1956, the St. Paul Fire Department burned the last houses in Swede Hollow to the ground bringing to an end the residential history of Hollow.



Figure 71: Newspaper headline, December 11, 1956, St. Paul Dispatch. Collection of the Minnesota Historical Society.

The news report explained that the remaining houses "were burned on order of the city health department which had been working with the St. Paul Housing and Redevelopment Authority for months on vacating the area as a health hazard," adding that "[t]he homes had no sewer or water facilities and obtained water from a spring found contaminated. Outhouses lined the creek."<sup>342</sup> The City of St. Paul owned the land, reputedly assuming control after Wagener failed to pay property taxes.<sup>343</sup> Families had been paying "token rent of \$5 a month" to the City.<sup>344</sup>

The City had finally removed the ravine's residents, but not for a park. Newspaper articles from the time and the city's zoning for the area indicate that the City expected that the land would be occupied by "modern manufacturing plants" and other industrial uses.<sup>345</sup> At the top of the Hollow, Hamm's brewery continued brewing beer, but the huge old Hamm mansion overlooking the ravine was gone. "In April 1954, a 14-year-old arsonist set fire to the Hamm Mansion—out of boredom, he said. The last Hamm to live there died in 1933 and the house had become a nursing home. Fortunately, it had been abandoned just a few weeks before the blaze."<sup>346</sup> Some St. Paul residents proposed filling in the entire ravine. Later, it was suggested as a possible highway route. Finally, when no other possible use seemed feasible, and a group of neighborhood residents and park advocates urging action, the Hollow became a park. Lanegran explains:

For a while, the remains of Swede Hollow were neglected; then the valley became a site for dumping rubble from demolished buildings. Plans were made to fill in the Hollow to support a new highway toward Wisconsin. That proposal failed, however, and, in the early 1970s, the sorry-looking valley was selected as a site for a park to commemorate the success of the immigrants. The plan was adopted by the St. Paul Garden Club under the leadership of philanthropist Olivia Dodge. The club worked with the city government, the Neighborhood Youth Corps, and the Park Department to clean the area and develop some amenities. The site of the old Hamm mansion was incorporated into the park and an overlook was developed. After a long struggle, the railroad right of way was paved for a recreational path, and the Hollow is now accessible to bikers and other sports enthusiasts. Today the area around Swede Hollow continues to attract new arrivals to the city.<sup>347</sup>

The St. Paul Garden Club organized a community clean up of the hollow in 1973. The City constructed a new staircase to access the area, and installed interpretive signage. Swede Hollow, the narrow ravine on St. Paul's East Side, became a park, and, to a lesser extent, a site of memorialization, commemorating the immigrant experience.

# A New Foggy Bottom

The federal government would play a large role in the transformation of Washington's Foggy Bottom, with the major changes occurring between 1950 and 1970. But the federal government's role in Washington's development and redevelopment dates back to the city's founding as the nation's capital. At the turn of the twentieth century, several new planning initiatives were underway, with implications for Foggy Bottom. First, across the city, small houses and courts at the interior of blocks, a fair number of which were located in Foggy Bottom, began to attract the attention of sanitarians and social reformers. Labeled as "alley dwellings" and slums, these areas became the subject of investigations, exposes, and reports, much the way Jacob Riis had photographed and publicized conditions on the Lower East Side in New York.

Second, in 1902, the report of the McMillan Commission (Senator James McMillan of Michigan was the Chairman) proposed reclaiming sections of the Potomac River flats for expanding the city. The report titled *The Improvement of the Park System of the District of Columbia* would become known as one of the earliest comprehensive plans in the U.S.<sup>348</sup> Authorized by the U. S. Senate, and often referred to as the McMillan Plan, the report outlines a plan for the physical improvement of the monumental core of Washington D.C. as well as the development of parks and waterways.<sup>349</sup> Authored by Daniel Burnham (Chairman), Charles McKim, Augustus St. Gaudens, and Frederick Law Olmsted, Jr., the document is

lavishly illustrated with renderings of proposed new designs, photographs of European examples of classical excellence, and plans. The first half of the report is devoted to the key areas of the monumental core while the second half of the report contains proposals for other areas, including the development of Rock Creek Park.

Third, in 1904, George Washington University had its new name approved by Congress, previously it had been known as Columbian University, and soon thereafter it began a process of expansion which continued throughout the twentieth century. By 1912 the university had established itself in Foggy Bottom, and between 1912-1916, it purchased additional land on G Street, expanding its campus.



Figure 72: Aerial photo of Foggy Bottom prior to redevelopment, 1931. Source: George Washington University website.350

Breweries and other industrial uses constituted a significant portion of the area's buildings, intermixed with housing, churches, and the Naval Observatory prior to the 1930s. In 1934, Congress created the Alley Dwelling Authority "to eliminate the alley slums in the District," including St. Mary's Court in Foggy Bottom.<sup>351</sup> The Authority built the city's third public housing project there—segregated as black only.<sup>352</sup> "When it opened for occupancy by Negro families in January, 1938, St. Mary's Court was a gleaming replacement for the shacks that has been there. And it was a great victory for blacks who wanted to remain in the area over the protests of white realtors who wanted it rented to whites only."<sup>353</sup>

Following World War II, the neighborhood was completely transformed by demolition, landfill, and highway construction including the location of the offices for the State Department in the neighborhood in 1947, the construction of the elevated Whitehurst Freeway in 1949, and the removal of the Washington Gas Light Company tanks in 1954.<sup>354</sup>

In 1955 the *Washington Post* reported that Foggy Bottom was an "already partially rebuilt slum area," noting that "[p]rivate investors already have bought and renovated more than 110 of the 343 homes in proposed seven-block renewal area... bounded by Virginia ave., 27<sup>th</sup>, K, 24<sup>th</sup>, and H sts."—an area which included the once notorious Snow's Alley and Square 28 (see Figure 25) .<sup>355</sup> By May 1955, Snow's Alley was being touted as one of the "good examples of what private initiative can do to improve blighted areas"—a process Jane Jacobs would later refer to as "unslumming."<sup>356</sup> The "Snow's court dwellings," the author noted, were "a stone's throw [from] the new State Department building… [and] sell for \$15,000."<sup>357</sup> "But, a spokesman said, private enterprise has carried the renovation of the area about as far as it can go without Government help."<sup>358</sup> Throughout 1955 neighborhood groups, planning agencies, newspaper columnists, and residents debated the proposed urban renewal area and one immediately adjacent to it "for expansion of George Washington University."<sup>359</sup>
The size of the renewal area, what was included within it, and what was excluded became a major debate. The National Capital Planning Commission officially proposed a renewal area for Foggy Bottom "bounded roughly by 23d, 27<sup>th</sup> and E sts. and Pennsylvania ave. nw." that was approved by the Urban Renewal Council that November.<sup>360</sup> The plan, however, was opposed by the developers of a proposed Potomac Plaza project, an insurance company, property owners, the Washington Board of Trade, and the Washington Real Estate Board.<sup>361</sup> In the end, District Commissioners decided to cut the size of the urban renewal district back to ten blocks, an area "bounded by Rock Creek Park, Pennsylvania ave., 24<sup>th</sup> and H sts, and Virginia ave. nw.," excluding "the \$100 million Potomac Plaza development on the old Washington Gas Light Co. property, ...the new People's Life Insurance Co. office building. And the proposed Inner Loop Expressway and approaches to the projected Theodore Roosevelt bridge."<sup>362</sup> As the newspaper reports from the time make evident, both public and private (for-profit as well as institutional) development were at work in the area, sometimes at odds, sometimes working in concert with one another. Together they would remake Foggy Bottom.

In 1961-62, the Heurich Brewery, which opened in 1894 between 25th, D, Water and 26th Streets at the south end of the neighborhood, was demolished. In December 1964, President Lyndon B. Johnson broke ground for the John F. Kennedy Center for the Performing Arts.<sup>363</sup> Between 1965 and 1970, the Watergate complex was constructed, which included "two apartment buildings, two office buildings, a luxury hotel, two shopping areas and restaurants."<sup>364</sup> The public housing development at St. Mary's Court, originally constructed in 1938, was demolished in 1972.<sup>365</sup> It would be replaced in 1978 by "a 120-unit high-rise for elderly public housing tenants" developed by the Episcopal Diocese with funding from the Department of Housing and Urban Development.<sup>366</sup> In 1977, the Foggy Bottom Metro stop opened.<sup>367</sup>

Foggy Bottom's old mix of industry and housing, with alley houses and small townhouses, was completely transformed. The gas tanks, lime kilns, breweries, glass factories, shacks, shanties, houseboats, and small houses would all disappear. In their place, a major university, a hospital complex, a new subway station, the Department of State, the Kennedy Center for the Performing Arts, the Watergate complex, and a swirling, curling ribbon of concrete highways. Amazingly, Foggy Bottom kept its name. It is perhaps because "foggy" meant the primary associations with the word were not based on immigrant or racial associations, leaving the more meteorological and physiographic sense of term intact, despite the changes in the neighborhood's population.

## From Black Bottom to SoBro

Nashville's Black Bottom would be transformed by different processes than Washington's Foggy Bottom, one that took much longer and extended over many decades. In the mid-1950s Black Bottom was not a site for private rehabilitation or "unslumming" activities, it was becoming an area defined by parking lots, light industrial buildings, warehouses, and small repair shops. Located directly adjacent to the downtown, its parking lots could be used by downtown office workers commuting from distant neighborhoods and suburban areas.

Some local historians have attributed the beginning of the socio-economic decline of Black Bottom, and eventual loss of its residential population, to the relocation of several key institutions—black and white. Educational institutions were moving out of the neighborhood, rather than into it as George Washington University did in D.C.'s Foggy Bottom. Lovett notes that Pearl School closed in 1915, and the neighborhood "was so resented both by elite blacks and reform-minded whites that the city removed the Negro high

school from Black Bottom. By 1930, the black colleges and hospitals no longer existed in the area.<sup>368</sup> Meharry Medical College, a highly regarded school for black physicians, relocated "with contributions from the General Education Board and the Rockefeller, Rosenwald, Eastman, and Carnegie foundations, together with assistance from the City of Nashville and Meharry alumnae," from "South Nashville to… North Nashville, adjacent to Fisk University.<sup>369</sup>

Rutledge Hill, on the higher ground south of Black Bottom, had been a center for white-only educational institutions, including "Davidson College (1803-1806), which became Cumberland College (1806-26) and then University of Nashville (1826-1875). The campus, known as College Hill... also served as the early meeting place of what became the Vanderbilt Medical School."<sup>370</sup> It was surrounded by "fashionable townhouses... [b]ut after the University of Nashville became Peabody College and went west [in 1915] along with the medical school, Rutledge Hill was gradually abandoned as a residential neighborhood."

In 1933, Nashville planners zoned Black Bottom for commercial and industrial uses. Within two decades, businesses, especially auto-related ones, replaced housing in the neighborhood. The 1957 Sanborn fire insurance map, for instance, shows a Greyhound bus repair facility, used auto sales, and a filling station in one block of the neighborhood (see Figure 73). Following World War II, the neighborhood was not the primary focus of urban renewal efforts, which were concentrated on the low-lying area on the north side of downtown, down the hill from the State Capitol—the neighborhood known as "Hell's Half Acre." It was, however, included within a redevelopment zone labeled the Capitol Mall redevelopment area, which assisted in the purchase and transfer of property within the area. Another key administrative change occurred when in 1963 Nashville consolidated with Davidson County to form a new metropolitan government.



Figure 73: Land use changes in one block of Black Bottom, Nashville, 1888-1957. The area shown is bounded by Summer (5<sup>th</sup>), Demonbreun, Cherry (4<sup>th</sup>), and Molloy Streets. In 1914, small dwellings and "Negro tenements" could be found on western half of the block and a "dance hall" was at 215 4<sup>th</sup> Ave. By the 1950s, auto-related uses dominated the neighborhood and the housing was gone. Sanborn maps, collection of Nashville Public Library and Tennessee State Library and Archives.

The neighborhood remained as a low-density zone of parking lots, garages, and repair shops for many years. In 1995, Nashville's metropolitan government "announced plans to construct a seven-lane high-speed corridor through the area," sparking a major battle among land owners, planning and design advocates such as the Nashville Civic Design Center, and transportation planners.<sup>371</sup> Advocates offered alternative proposals, including the re-branding of the neighborhood with the name "SoBro" for south of Broadway. The proposed highway was defeated. Planners, downtown businesses, tourism interests, and developers, who had long hoped to transform the area, began formulating plans for a new neighborhood. The new attention unleashed a flurry of development activity with no less than five multi-million dollar projects completed between 1996 and 2010.

In 1996, a major new sports arena opened on the south side of Broadway between 5<sup>th</sup> and 6<sup>th</sup> Avenues.<sup>372</sup> It would become the new home of the Nashville Predators professional hockey team. In 2001, the Country Music Hall of Fame opened a major new museum on the south side of Demonbreun Street between 4<sup>th</sup> and 5<sup>th</sup> Avenues South. In 2003, the Schermerhorn Symphony Center opened on the north side of Demonbreun between 3<sup>rd</sup> and 4<sup>th</sup> Avenues South. In March 2008, Encore, a twenty-story condominium tower, opened adjacent to the new symphony hall.<sup>373</sup> Encore was followed by "The Pinnacle at Symphony Place," at 150 3<sup>rd</sup> Avenue South, a twenty-nine-story office tower that opened in February 2010.<sup>374</sup> A new convention center called Music City Center, which will stretch over multiple blocks of the old Black Bottom neighborhood, began construction in early 2010. Less than five months later Nashville was hit with its worst flood since the 1920s.

## Remaking the Lowlands

The divergent trajectories and redevelopment processes at work in the Flats of Los Angeles, St. Paul's Swede Hollow, Washington D.C.'s Foggy Bottom, and Nashville's Black Bottom illustrate a common theme: not one, but multiple physical and social remakings of these urban landscapes. In all four neighborhoods, city governments directed the removal of the residential population that characterized the area in its "slum" phase: recent immigrants, African Americans, and poor native whites. The processes varied: federally funded slum clearance and public housing program (Los Angeles), removal from publicly owned land (St. Paul), private market rehabilitation and urban renewal programs (Washington D.C.), and zoning changes combined with shifting patterns of institutional and residential location (Nashville). The products or "ends" of these transformation efforts varied, too, and some sites such as St. Mary's Court in Washington D.C. were redeveloped more than once between the 1930s and the 1970s.

Remaking meant a shift from the containment policies of the past, when voters and elected officials sought to maintain urban lowland slums as zones of segregated topography, to the redevelopment policies of the mid-twentieth century. The new tools of municipal governance, the desire for new modern cities, the availability of funds to pay for these programs, the restriction of immigration, and the suburbanization of metropolitan areas all contributed to this shift. With the exception of St. Paul's Swede Hollow Park, the result was physically transformed urban districts, with taller buildings, new architectural materials, and modern roads, located in the same low-lying depressions, bowls, basins, and plains known as bottoms, hollows, and flats. The neighborhoods changed, but the natural processes at work in "buried floodplains" continue.<sup>375</sup>

## CONNECTIONS AND CONCLUSIONS

~~~~~ Chapter 8 ~~~~~~~~

Containment and Redevelopment

Urban lowland slums were not historical accidents. Landowners, speculators, and elected officials produced bottoms, hollow, and flats as deliberately partial, incomplete, and unequal city districts during the late nineteenth century. In a period defined by laissez faire capitalism, these urban landscapes became familiar—as an element of the railroad landscape, as districts populated by mass immigration and a movement to the cities produced by powerful social and economic forces, and as consequences of rapid urbanization and industrialization within cities. Those structural phenomena and broad historical patterns of events, in turn, were facilitated by government decisions made by elected officials: awarding permits and grants, directing investments, regulating private market real estate development, and constructing public streets, buildings, facilities, and systems. Inhabited by urban strangers such as foreigners, Negroes, and poor country whites, bottoms, hollows, and flats would be defined by floods, inadequate sanitation, and poor drainage.

In the making of the lower section of the American city, municipal officials, influenced by real estate developers, speculators, and business interests, privileged industrial development over other uses, viewed railroad corridors and their surrounding lands as economic throughways, and created spaces that allowed for workers to be close to jobs but kept away from the middle and upper classes. As they developed,

lowlands slums functioned as quasi-planned containment areas, physically made through a combination of selective investment and targeted neglect.

Poor and working class residents have historically had a complex relationship with hazardous landscapes and the risks posed by lowland living in particular. Some owned or constructed their own dwellings in these areas. Others faced the prospect of unemployment or the inability to find work elsewhere if they left the area. Racial, ethnic, religious, and class prejudice often made it difficult, if not impossible, for recent immigrants and working families to find housing elsewhere in the crowded city. Finally, many lived on the land for generations, with memories and connections to the place that were their own—independent of the decision makers ideas about the spatial arrangement of the city as a whole. Lowland neighborhoods were places where people went to church and to school, played, worked, lived, died, and were buried. (In many cities and towns around the country they still are.) As such, debates about the physical reconstruction of these places cut across a wide range of experiences of the urban district itself. People saw the same urban space as engineering problem, as deteriorated city district, as place of work, as dumping ground, or as the place where poor people lived.

Many lowland residents desired to get up and out of low-lying neighborhoods, and move into better housing. Some residents saw positive qualities in their neighborhoods, viewing them as living environments and as social places. In different expressions of perceived neighborhood quality and resident perspectives (and histories of) the places they lived, the subjectivity of the "slum" label becomes apparent. For many residents, these neighborhoods offered affordable shelter, and sometimes, as ethnic enclaves, social networks and community support not available elsewhere. Marginal lands could also mean social places: communities of people living together on the land.

Remaking the lowlands into more profitable urban spaces, removing residents and replacing stigmatized language and images with new place identities, required concerted action. As containment spaces, bottoms, hollows, and flats served a function. Nineteenth century city residents often opposed remaking the lowlands because of fears about where the people would go. Containment and redevelopment were at odds.

Remaking advanced when these fears were allayed. Zoning codified early twentieth century American moral values and strategic real estate thinking about the city into a regulatory system: an ordering of urban space to allow for private development, a means to making land transactions and building decisions more predictable and less risky, a reification of the moral superiority of the single-family house as a home. In this way, resident removal became less problematic. But zoning was only one of many changes that reshaped the lower section of the American city in the early twentieth century. The spatial structure of the city also changed. First streetcars and then automobiles facilitated the rapid territorial expansion of cities and suburbs into dispersed metropolitan areas. Development pressure and potential profits made redeveloping centrally located, low, marginal lands financially plausible. Federal officials funded these projects, and state and municipal officials distributed other forms of government assistance to remake the lowlands. Legal and administrative changes in municipal finance and administrative structure (especially the creation of redevelopment and housing agencies) meant that projects no longer required voter approval of bonds or other measures. Boosters, speculators, developers, tourism interests, and elected officials desired new images for their cities and sought to remove unsightly slums.

Remaking involved new processes like zoning, as well as new products like federally subsidized public housing. Developers, elected officials, and professional planners employed at least six means of remaking, or processes, in a three-step sequence of removing residents, demolishing existing housing and other

buildings, and constructing new urban environments. They included private land development; city plans; government land takings involving eminent domain; municipal condemnation; zoning for uses different than existing conditions; and, funding and technical support for big projects. Although the extent of private real estate influence in urban regimes has varied historically by city, in most cases, elected officials and planners acted in certain key respects in concert with private landowners or led the redevelopment process using one or more these processes simultaneously. Before the New Deal, city governments used slum clearance through eminent domain sparingly.³⁷⁶ For example, historian Max Page explains that slum clearance advanced on New York's Lower East Side when "slum clearance would no longer require the enthusiasm of a single, vociferous champion [such as Jacob Riis] but would become institutionalized in law, in government programs, and in state and federal budgets, driven forward not by revealing photographs but by planning logic."³⁷⁷ As Nashville's debate over a proposed Central Park between 1905 and 1910 shows, parks had been one of the only products authorized by state law to invoke the process of eminent domain. First zoning, then redevelopment law would change all of that, and transform the lowlands.

Remaking took many urban forms. Products of remaking included new public housing complexes, highways, parks, expanded university campuses, cultural centers like museums and concert halls, transit systems, and government buildings. Slum clearance was directly tied to public housing construction, as seen in the Los Angeles case. Proponents claimed that the public housing program would eliminate any further possibility of slums through its intelligent design, expert site planning, and selective occupancy standards. Slum clearance could occur through combined private and public means, as lowlands like Foggy Bottom in Washington D.C. were revalued according to their locational benefits and potential for new, large-scale development projects between 1950 and 1970. A similar process unfolded in Nashville's Black Bottom between 1980 and 2010. Remaking could also lead to vacant land or parks. But, most of all, remaking meant envisioning a new use for urban lowlands without poor people residing there.

What do these six sites have to tell us: The Bottoms of Columbus, Hartford's Frog Hollow, The Flats of Los Angeles, Nashville's Black Bottom, St. Paul's Swede Hollow, and Washington D.C.'s Foggy Bottom?

"The Bottoms" in Columbus and "Frog Hollow" in Hartford continue to be residential neighborhoods with low-income families and rental housing. Nashville's "Black Bottom" and Washington D.C.'s "Foggy Bottom" were redevelopment areas that are now comprised almost entirely of buildings constructed after 1950 and defined by large-scale, high profile projects like the Country Music Hall of Fame or Watergate. St. Paul's Swede Hollow is a park. The Flats of Los Angeles remains divided into two sections, with the area closest to the river reserved for warehousing and industry and the area below the bluffs twice redeveloped public housing (in the 1940s, and again in the 1990s under the HOPE VI program). Sites that were zoned industrial were much more likely to be remade, while areas zoned for multi-family residential use such as "the Bottoms" and "Frog Hollow" remained residential. Indeed, Frog Hollow's working-class housing stock is substantially intact, if dilapidated on some blocks in the neighborhood, in 2010.

The six sites in this study followed different trajectories, and were shaped by local circumstances and demographics including race and ethnic dynamics, contingent factors like floods, and landscape-specific conditions such as land forms and proximity to downtown. Nevertheless, these lowland sites all exhibited to one degree or another the land use patterns and common problems of poor sanitation and association with disease, potential for park development, challenges of flood control, and need for housing improvements.

The best policies and plans to address such problems, not to mention the intentions and agendas of the people promoting plans, were not transparent, or at least not what they may have appeared to be on the surface. As the example of Nashville's Central Park shows, sometimes a park is not a park. In that case, at the turn of the twentieth century, a park was an end that allowed the use of eminent domain as a means that was the power needed to "eliminate" the neighborhood.³⁷⁸ Nashville voters rejected the proposed bond measure.

All six cities grew rapidly in population between 1870 and 1930, but at different rates. Washington D.C., by far the largest city of the set in 1870, remained among the largest cities by 1930, second only to Los Angeles in this group. In contrast, Los Angeles began as the smallest and grew to the largest, with a population of more than a million people in 1930. Columbus, Nashville, and St. Paul, all state capitals, grew in population during this period, and could well be considered as medium sized cities. Hartford, though it too was a state capital, dropped from the second largest city to the fifth largest over this time period. It should be noted that during this same period the land area of these cities also changed, with Hartford remaining fairly small geographically while Los Angeles annexed surrounding territory to cover a huge geographic area.

| | 1870 | 1880 | 1890 | 1900 | 1910 | 1920 | 1930 |
|-----------------|---------|---------|---------|---------|---------|---------|-----------|
| Columbus | 31,274 | 51,647 | 88,150 | 125,560 | 181,511 | 237,031 | 290,564 |
| Hartford | 37,180 | 42,015 | 53,230 | 79,850 | 98,915 | 138,036 | 164,072 |
| Los Angeles | 5,728 | 11,183 | 50,395 | 102,479 | 319,198 | 576,673 | 1,238,048 |
| Nashville | 25,865 | 43,350 | 76,168 | 80,865 | 110,364 | 118,342 | 153,866 |
| St. Paul | 20,030 | 41,473 | 133,156 | 163,065 | 214,744 | 234,698 | 271,606 |
| Washington D.C. | 109,199 | 147,293 | 230,392 | 278,718 | 331,069 | 437,571 | 486,869 |

Table 5: Population Changes in Six Case Study Cities, 1870-1930

| Table 6: Population C | hanges in Case | Study Cities, | 1940-2000 |
|-----------------------|----------------|---------------|-----------|
|-----------------------|----------------|---------------|-----------|

| | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Columbus | 306,087 | 375,901 | 471,316 | 539,677 | 564,871 | 632,910 | 711,470 |
| Hartford | 166,267 | 177,397 | 162,178 | 158,017 | 136,392 | 139,739 | 121,578 |
| Los Angeles | 1,504,277 | 1,970,358 | 2,479,015 | 2,816,061 | 2,966,850 | 3,485,398 | 3,694,820 |
| Nashville | 167,402 | 174,307 | 170,874 | 448,003 | 455,651 | 488,374 | 545,524 |
| St. Paul | 287,736 | 311,349 | 313,411 | 309,980 | 270,230 | 272,235 | 287,151 |
| Washington D.C. | 663,091 | 802,178 | 763,956 | 756,510 | 638,333 | 606,900 | 572,059 |

One surprise of this investigation has been the persistence of bottoms, hollow, and flats over the period from about 1870 to 1940. Places like Swede Hollow lasted even longer, nearly a century. One might have imagined that the shantytowns and squatter settlements in this study would have been the first to be demolished. Instead, it was Los Angeles, the fastest growing city in the group and the largest by 1920, which led the wave of lowland destruction-- the old Flats neighborhood was demolished in 1941. The two largest cities by 1910, and remaining in that rank in 1920 and 1930, Los Angeles and Washington D.C. had significantly remade the two lowland neighborhoods in this study by the mid-twentieth century. These trajectories suggest that larger cities had more resources and greater access to federal resources than smaller ones. Washington D.C. had the added attribute and unique municipal structure and status as the nation's capital, and Foggy Bottom's transformation was partly a federally planned and financed redevelopment process.

Floods and Floodplains

Many of the areas described in this study remain subject to floods, notably Nashville's former Black Bottom neighborhood which was inundated in May 2010.³⁷⁹ The lowlands were defined by floods, and remain subject to floods in many areas despite (and sometimes because of) civil engineering interventions. Swede

Hollow's Phalen Creek, Hartford's Park River, Los Angeles's Arroyo de los Posas, Nashville's and Wilson's Spring Branch were all put underground.

The May 2010 flood in Nashville was a major disaster, but one with a different pattern of spatial effects due to changes in city form and urban-suburban residential patterns. The extent of displacement within the old city limits, for instance, did not compare to earlier floods. In 1926, for example, thousands of "housing refugees," who were "mostly negroes," took shelter in the Ryman Auditorium, churches, and other buildings around the city.³⁸⁰ Fewer people live near the river in the central city, especially in SoBro which, with the exception of the Encore condominium tower, contains mostly non-residential uses, such as the Symphony and The Pinnacle office tower, both of which suffered extensive damage.

Historically, repeated floods defined low-lying places as dangerous and undesirable. Lowland residents were driven down into the flats by lack of housing supply, municipal neglect, and prejudice, but they were frequently "driven out" (at least temporarily) by floods. In this way, floods as "natural" events could accomplish what was impossible for reformers or mobs seeking to remove black or immigrant residents from the city altogether couldn't. But the displacement was often temporary. Residents returned, and often newcomers arrived, too, and property owners, investors, and individual homeowners reconstructed the built environment of lowland neighborhoods.

As the Columbus case shows, this rebuilding or remaking could take place in multiple ways: constructing new flood walls and levees, returning to previous development patterns, or advancing selected redevelopment projects that aimed to reclaim the area and re-brand it as part of the downtown or civic center. (Nashville has been undertaking this approach recently in SoBro.) But where some saw an opportunity to remake the city, to change the location of its industrial district to safer, higher ground, or to

move residences out of the floodplain, others saw the state interfering with property rights. The mix of railroad, industrial, warehouse, and residential structures that comprised a "bottoms" district were connected to property interests and profit. And city planners and officials saw the importance of existing transportation lines and the connections it provided. Bottoms ended up as urban settlements for good reasons: the benefits of location and the availability of flat land. Doing something about the problem, relocating an entire section of the city or making infrastructure improvements would cost millions.

Disasters and Redevelopment

Urban researchers and scholars have recently focused new attention on disasters, human made as well as "natural," and the ways in which cities may exemplify resilience.³⁸¹ Of course, in the case of urban lowlands, flood disasters are both human and natural.³⁸² Floods are often followed by the question of whether or not rebuilding is warranted, and under what circumstances. A policy of buyouts and relocation has become a key part of federal flood response over time. Following the Great Columbus Flood of 1913, engineers Alvord and Burdick advocated government purchase of inundated lands to remove people from harm's way. They suggested, designed, recommended, and occasionally oversaw the construction of civil engineering works, parks and designed open spaces, parkways and highways, and other non-residential uses. Reformers and advocates for lowland residents also proposed changes in city design, seeing opportunity in disaster. Floods, they reasoned, could be the impetus to improve living conditions in the worst city neighborhoods, to promote new housing ideas, or to encourage relocation to higher ground, out of danger. In many cases, the suggestions of professional experts and reformers alike were ignored.

From a city planning history perspective, it is interesting to note that these proposed interventions and, in the broadest sense, ways of conceptualizing the relationship between built and unbuilt, natural and constructed, "nature" and "city," were put forth well before the formalization and professionalization of the city planning field in the 1910s or widespread adoption of zoning in the 1920s. As planning historians have described, it was landscape architects, sanitarians, housing reformers, architects, and municipal engineers that would lay the groundwork for the establishment of the new domain of city planning.³⁸³ Of course, ideas of cities and their proper arrangement are as old as cities themselves. The professions were called upon to solve the "problem" of floods for cities, to address the destruction of property and disruption of urban economic life caused by unruly and (purportedly) unpredictable natural events, in the period when urban lowlands became intensively developed with industrial, commercial, and residential uses in the late nineteenth and early twentieth centuries.

At the same time that floods shaped images of the lowlands, and the people that lived there, they also shaped the socio-spatial development and urban form of the city itself. Conzen refers to floods as an exogenous force that influences urban built form, calling them "perturbations," but noting that some scholars have found a "remarkable morphological inertia [resulting] from the mutual rigidities of high-fragmented property ownership and weak government."³⁸⁴ The six lowland cases in this study indicate that remaking or redevelopment advanced largely due to other considerations and historical trends such as the expansion of municipal power and availability of federal funds, but that floods significantly influenced the gap or contrast effect between dirty, filthy, debris-wrecked, disordered slum environments and potential profit-making to be found in the remaking of the built environment.

Obviously, in the immediate aftermath of floods, buildings, bridges, railroad tracks, homes, and other built features were destroyed. But over the longer term, floods sometimes shaped city space in unexpected

ways. After streetcar networks were established, developers promoted new residential areas as "the highlands"—pushing development in new directions, away from hazards and offering the amenities of fresh air and views. Floods presented image problems as well as city building challenges, and some cities responded with schemes intended to extend the downtown and replace unwanted lowland uses.

Flood events and flood districts were trapped in a negative symbiosis, a mutually reinforcing bad relationship, paradoxical and contradictory in its effects. Floods reinforced negative ideas about place, but also stimulated the desire to rebuild there or remake the area. Floods served as catalysts to new opportunities or incentives to locate in lowlands with cheaper property values following the disaster lowlands became a place where newcomers might settle being unable to go anywhere else. People who arrived to help rebuild might decide to stay. Property interests might use the opportunity to gather more property or expand operations.

One might call this resilience with a negative cast: incomplete, ad hoc or partial rebuilding with continued stigma and deference to property rights. It took time, and with time, projects were delayed, new initiatives and new priorities arose. But this is not to suggest that no changes were ever made. It was comprehensive reorganization that was rare, for obvious reasons: cost, reluctance at government intervention, contesting political and other visions of the future, the symbolism of rebuilding. Cities, and city districts, in these locations were remarkably fixed, even in the face of destructive floodwaters. They were there for a reason, and once established they kept on going. And part of that continuance, or persistence, meant that people would still be living there. Often the response involved a hardening or renewed determination to make the area "flood proof" or "flood protected." A faith in engineering solutions that often complicated the problems by increasing the risk, and making failure all the more deadly.

The Past and Present Language of the Bottoms

Foggy Bottom in Washington D.C., once considered "a part of the city... inhabited principally by the lower classes of white and colored people," is now home to a major university, a Metro stop, the Watergate complex, the Kennedy Center for the Performing Arts, and the U.S. Department of State.³⁸⁵ Indeed, Foggy Bottom became a metonym for State. Transit planners used the name to designate the local subway stop. The old neighborhood name lost its association with the socio-economic character of the "bottom," taking on new meaning.³⁸⁶ In contrast, Nashville's elected officials, boosters, mapmakers, and tourist industry leaders have eliminated the name Black Bottom, replacing it with SoBro. The old term is no longer used, and appears only occasionally in historical descriptions of the neighborhood's history. In Columbus, "the Bottoms" does not appear on any map, but remains very much alive in common usage. Hartford residents consider Frog Hollow a familiar neighborhood name, commonly used. In both Washington D.C. and Hartford, one may visit historic districts with the old neighborhood names: the Frog Hollow and Foggy Bottom historic district were listed on the National Register of Historic Places in 1977 and 1987, respectively. Commemorative intent and ethnic pride in the humble beginnings of immigrants also influenced the naming of Swede Hollow Park. The name can be found on maps of St. Paul. Interestingly, though, historical-interpretive panels installed in the 1970s were defaced and removed, and little in the way of historic interpretation is available to park visitors today. One prominently placed entrance sign erroneously welcomes visitors to the "historic forest." In Los Angeles, local residents know the name "the Flats," but few use the term unless they are referring to local gangs like Cuatro Flats.

As these sites illustrates, urban lowland place names have changed in their usage and meaning. Furthermore, the names associated with these places do not provide a reliable guide as to their

development trajectory. For example, Hartford's Frog Hollow is quite unlike St. Paul's Swede Hollow. Knowing something about the physical landscape, the housing types, the socio-economic character of the neighborhood, and its relationship to places of work and downtown can help answer the question as to why these places ended up as such different places in the early twenty-first century.

But language remains an ongoing connection, as well, albeit in different forms with changing meanings. Urban lowlands developed negative reputations, based in some fact—particularly the environmental health risks. But they also were mythologized and stigmatized as mysterious places. Lexographer Clarence Major dates the common usage of the phrase "the bottoms" from the 1870s to the 1930s.³⁸⁷ However, the term remains in use in at least two distinct ways: 1) some places which got their name historically from their combined low-lying character and low-status development/residents continue to be known by the name, and 2) some places that are very low status, the worst off, the most desperate, and the most exploitative of places can be known by this name—it has become a phrase used by the homeless and very poor people to describe their environment.

L.A.'s downtown boom is a dizzying phenomenon. Seemingly every month or so brings more groundbreakings, new announcements of high-priced, high-income projects. In mid-June, the city unveiled plans for a \$750 million, 1,000-room hotel complex, with a four-star Marriott and a five-star Ritz-Carlton, next to downtown's Convention Center. Meanwhile, a few blocks away, in "The Bottoms" -- the most infamous blocks of skid row -- members of LACAN were videotaping city cleanup crews sweeping up homeless people's blankets and clothes. "The Bottoms," the area of skid row where the missions and the street dwellers are concentrated, is a stunning slice of thirdworld poverty, a village of souls lost to the bottle and the needle, a depressing testament to human frailities, physical and mental.³⁸⁸

Across the river from neighborhood once known as "the Flats," the "Bottoms" section of Los Angeles's Skid Row connects past and present. Developers and city officials seek to remake the residential-industrialrailroad neighborhoods while at the same time containing the city's poor within a designated zone. As Mike Davis has eloquently and polemically described, in the late twentieth and early twenty-first century, the character of containment in Los Angeles's Skid Row is specialized as an area of social services and temporary shelter for the desperately poor homeless, criminalized as a space of police round-ups and mass arrests, and militarized in its fortressed built environment and security cordons.³⁸⁹ These "Bottoms" of the early twenty-first century exhibit a marginality and vulnerability that makes use of term understandable, and historically rooted in the experiences of poor people in American cities. It connotes the worst of past lived experiences in low places, while generalizing the term to describe social and economic conditions of 2010.

Race

Bottoms, hollows, and flats were landscape descriptors, socio-economic characterizations, pejorative labels, and familiar place names. Race played a significant role in all four dimensions. African Americans found few opportunities in white neighborhoods and they were forced down in the lowland areas. The neighborhoods where they lived tended to be mixed income, with areas of severe poverty. Names like Black Bottom may have sometimes originated in descriptions of soil conditions and mud, or alluvial lands suitable and desirable for agricultural use, but they took on racial meaning. It appears that Nashville's Black Bottom neighborhood was one well-known example of this phenomenon, and one that may be the source of the Black Bottom dance as well as the transference and continued use of the term Black Bottom in Northern cities. Finally, race became inscribed on the landscape. Black Bottoms became known as black places, and before the word ghetto entered everyday parlance, a commonly understood phenomenon within cities and towns.

In 1940, sociologist Walter Chivers described how African American neighborhoods were stigmatized and neglected.

Negro city dwellers live in isolated neighborhoods. In the south and border states particularly, these

neighborhoods are closely knit geographic units. They are generally known as Negro Communities, often designated by nick-names, which, for some reason, tell the world this is where Negroes are concentrated—'Tanyard Bottom,' 'Beavers Slide,' 'Peacock's Mart,' 'Yamacraw,' 'Frog Town,' 'Ybor City,' and the like. Such districts are created co-jointly by majority group pressure and municipal, county, and state neglect or indifference.³⁹⁰

He continued,

In many cities these 'Negro neighborhoods' are actually located across the railroad tracks; in others, this is in the main a figure of speech. The writer's observations have been that where the tracks are a reality, the degree of disadvantages suffered by Negro residents is more intense than where 'the tracks' are simply a figure of speech. Nevertheless, in both situations Negro neighborhoods in comparison with white neighborhoods have fewer paved sidewalks and roads, insufficient police protection, receive less attention from the sanitary department, more darkened streets, rarely a playground or municipal parks.³⁹¹

Chivers correctly and astutely notes the fact that neighborhood like Black Bottom were both real and imagined. As historian Alan Mayne has argued, they were imagined in that they were subject to fanciful and exaggerated newspaper stories, designed to capture readers' attention and sell papers.³⁹² The practice of segregation of vice, and designation (officially or unofficially) of red light areas, led to the practice of "slumming." One went slumming in the bottoms. Reports of these experiences and the mystery, stigma, danger, excitement, and shame associated with these activities in the late nineteenth and early twentieth centuries contributed to this image. As seen in minstrelsy, black face, and other racist practices, black life was recreated as entertainment and notions of black places and black cultural practices loomed large in the white imagination. Eventually, many of these practices became familiar aspects of American culture. The Black Bottom dance of the 1920s, it turns out, was a passing fad.

The material conditions of these neighborhoods and the place naming practices were intertwined. In this respect, Mayne departs too far from the physical conditions and risks that characterized low-lying slums in particular. It is the interconnections between real and imagined that make both more powerful, and that served to further marginalize and stigmatize lowland residents, whether African American, immigrant, or "low white." Chivers makes a unique observation about these connections when he writes that "the tracks"

could be metaphorical, but when they were real the "disadvantages [were] more intense."³⁹³ This observation underlines how the physical and the social combined in these place names: terms that later become known as primarily social descriptions were rooted in real material conditions produced by municipal neglect, real estate development practices, and racist and anti-immigrant fears. The most "low down" living conditions combined the social problems of other slums with the health and safety risks accompanied by poor drainage, inadequate city sanitation and water supply, and floods.

African Americans and Irish immigrants inhabited two neighborhoods in this study: Nashville's Black Bottom and Foggy Bottom were in locations became very desirable real estate due to their proximity to downtowns. They both were completely redeveloped, with few indicators of their former status of "black" places remaining in the built environment or urban landscape today.

The correlation between lowlands, race, and poverty is an historical phenomenon that persists in many areas. While many cities embarked on redevelopment of their lowlands, others remain low-income residential areas. In a 2006 study entitled "Racialized Topographies: Altitude and Race in Southern Cities," geographers Ueland and Wharf found "strong positive associations in cities in the interior South... and an inverse relationship near the coast, where whites dominate higher-valued coastal properties.³⁹⁴ They argue that "the broad dynamics of racial segregation" related to the "particularities of individual places" produced this pattern. Although it was beyond the scope of this investigation, it seems plausible that further research might uncover the historical roots, and neighborhood names like Black Bottom, that tie this finding to the broader phenomenon described in this thesis.

Many Trajectories, Significant Commonalities

Lowlands were not the only areas of urban immigrant settlement, and they were not always the worst neighborhoods in terms of poverty or housing conditions. Urban lowland slums were also not singular entities, some cities had more than one. In addition, bottoms, hollows, and flats could be uniquely different from one another in their physical as well as social characteristics. Urban lowland slums were also remade in a variety of ways, demonstrating many possible trajectories. These cities also grew at different rates, and were of different sizes. But none of these factors negate the relevance of the urban lowland slum to the growth and spatial structure of the American city in the nineteenth and early twentieth centuries.

In certain respects, every bottom, hollow, or flat was idiosyncratic, a blend of physical and social characteristics particular to an individual city. They were not, however, so different from one another that they cannot be understood as a phenomenon. The commonalities of these sites, their overlapping histories and sequences of events, illustrate how the powerful associations forged between poverty and low ground, and conversely wealth and highlands. The common experiences of land transformation for the purposes of real estate development, poor people's residence, stigma associated with strangers, and floods demonstrates several patterns significant in American urban history and city planning history.

The paradox of the lowlands is that the physiographic characteristics that encouraged their nineteenth century development, and defined their association with dirt, mud, filth, and debris, were obscured and forgotten when real estate interests and elected officials, aided by professional experts like city planners, took the lowlands back. They buried creeks in sewers, and obscured the connections to how water moves in the city. They sometimes changed the name of these districts, too, such as in Nashville, where Black

Bottom is now known as SoBro. They removed or demolished slum housing. But often they also ignored the physiographic characteristics of the area in their site planning and architectural decisions. As the May 2010 flooding of Nashville's SoBro neighborhood showed, some facets of the "Bottom" remain. The very factors that defined these "natural process lands" as marginal, and made them available (or, from a resident's perspective, vulnerable) to remaking, were not entirely erased.

Both public and private entities participated in these transformations, as municipal governments aided real estate interests in attempts to maximize the potential of location, viewing these landscapes in relation to the dynamics inherent in the relative location of urban land uses. In this formulation, topography was (and is) conceptualized as an aberrant characteristic of a two-dimensional lot with rules established by a two-dimensional zoning district. The environmental connection to the old slum districts, once prominent in labeling and stigmatizing of them, was no longer considered relevant once the slum dwellers were gone. New devices and tools for the differentiation of urban residential districts, and the segregation of the poor, replaced the once prominent nineteenth century reliance on topographical conditions.

The ubiquity of the urban lowland slum phenomenon in American urban history is illustrated by the number of places that still carry these names in spite of remaking, redevelopment, and re-branding efforts. These case studies, from different regions of the country with different populations, city sizes, ages, local environmental and physiographic conditions, and thousands of other local particularities, suggest that a common pattern, while familiar, has mostly been overlooked. More prominent in inland cities than coastal regions, intermediate and hilly cities than flat ones, and places where creeks and streams flowed through hillsides or met up with rivers, the phenomenon nevertheless expressed itself in some form in every American city. In Chicago, the historic development of the marginal lands, industrial districts, and poor people's places around the North Branch of the Chicago River manifest the phenomenon. In New York, the

historic development of the Collect Pond, the marshy area that became Washington Square Park, and settlements around creeks and streams in all five boroughs offer similar histories. In Boston, lower Roxbury near the Neck, South Boston's marshy lower end, former creeks and stream beds found in parts of the Dudley neighborhood, Franklin Field, and numerous other locations tell these stories, albeit without the names bottom, hollow, or flat. In West Philadelphia, Mill Creek became "the Bottom" after "Black Bottom" was destroyed in urban renewal.

The language of low-lying slums often suggests that they are natural, shaped by evolutionary forces that can be equated to cycles of decline, death, and rebirth; invasion and succession; or, the workings of a mysterious force, guiding people to place as if by an invisible hand. Particularly in the writings of sociologists of the Chicago School, one gets a sense of the city as a totality, a system that seems to function on its own, beyond the grasp and outside the reach of individuals.

Similarly, it is sometimes said that the poor "end up" in the cheap places, the inexpensive housing, on the unwanted lands. But lowland slums did not simply emerge. They were not populated by the "sifting and sorting" of populations. They were made. City leaders, landowners, and real estate developers made lowlands into urban lands. They converted wet places into urban territory, enough to transform them into commodities—parcels that could be bought and sold, or held until a new profitable use became a possibility. Then, after decades of selective investment and targeted neglect, when they served as containment areas for the city's poor and unwanted, they were remade. The lowlands were an urban nexus point where modification of the natural environment, profit-making, social segregation, and city planning intersected. The history of urban lowland slums illustrates how the powerful used the rules of the real estate market and the tools of municipal governance to marginalize the powerless by taking advantage of topography for the purposes of containment and redevelopment.

EPILOGUE

The Bottoms, Frog Hollow, the Flats, Black Bottom, Swede Hollow, and Foggy Bottom have been remade multiple times. In 2009-10 I had the opportunity to conduct field investigations in each of these former low-lying slums. A brief discussion of the existing conditions in each of these neighborhoods is followed by a gallery of sixty photographs based on those observations.

The Bottoms, Columbus, Ohio

In Columbus, the Great Flood of 1913 became the defining event for "the Bottoms"—one that continues to influence perceptions of the neighborhood in the twenty-first century. As neighborhoods like the Hilltop and the suburbs to the west developed as desirable new places to live, "the Bottoms" lost population and economic vitality. It has been the subject of numerous planning initiatives, several big projects (especially on the side closest to downtown along the Scioto River), and multiple civic campaigns organized around the idea of neighborhood revitalization. In 1925, Central High School was constructed directly across from downtown at the Bend in the river, replacing industrial and residential uses with a large school building. Never completely implemented, the Civic Center plan attempted to tie together the two sides of the river. Following World War II, construction of Ohio highway SR315 destroyed buildings along Sandusky Street, once a center of the community. In the center of the neighborhood the Mount Carmel medical center

expanded into a major complex and a visual landmark. But the biggest initiative, project, and campaign of them all would be the Franklinton Floodwall.

In 1983, FEMA declared the area a "floodplain," subject to insurance requirements and other federal regulations. The decision served as an impetus for a major campaign for additional flood protection for Columbus culminating in the 1993-2004 construction of the Franklinton Floodwall, a \$120M project of the Army Corps of Engineers. Newspaper articles in the 1990s expressed optimism that the Bottoms would be rebuilt as an extension of the downtown area, with appropriate recognition as the historic site of the city's founding.

Franklinton, the low-lying part of Columbus popularly known as the Bottoms, is rich in history, celebrating its 200th anniversary this year. Rich in history but stuck for decades in the economic doldrums, Franklinton has the potential to benefit greatly when it gets a double boost from completion of the floodwall project and a new home for Ohio's Center of Science and Industry, incorporating part of old Central High School. The floodwall will enable the city *to encourage, rather than discourage*, construction in the neighborhood. COSI is expected to draw hundreds of thousands of visitors per year, and that is likely to spark interest in restaurants and specialty shops (emphasis added).³⁹⁵

That recovery has been slow in coming, and the Bottoms remains in the "doldrums" in 2010. In an historic twist, the city that began as "the high banks opposite Franklinton," now regards Franklinton as the poor central city neighborhood opposite downtown.

Interestingly, though, the Great Flood's effect of the city's development and form has been portrayed quite differently. As early as the 1930s, journalists and city observers described the Great Flood as "the short of shock needed to rouse the community of its lethargy."³⁹⁶ In the early twenty-first century, city publications and public histories chart a linear narrative of continuous improvement, a trajectory that begins in 1913 and culminates in the completion of the Floodwall. Indeed, a major 1959 flood, although less destructive than the Great Flood, is rarely mentioned, except perhaps as a brief interruption in the path of progress.

Newspaper columnists, reporters, and writers continue to describe the 1913 flood as a blessing for city, if

not the Bottoms-paving the way for architectural improvements and city planning successes. In this way,

the river is characterized as an agent in Columbus's history.

Little by little, the Scioto has shaped Columbus's destiny. If not for the river's frequent flooding, Ohio's early lawmakers might well have chosen Franklinton, the first settlement in the area, as the site of the state capital. Throughout the nineteenth century, floods were a fact of like in Franklinton and other low-lying parts of Columbus. Then, in March 1913, the river's raging floodwaters washed away four bridges and left 20,000 people homeless. *This tragedy provided the impetus for civic leaders to take action to minimize dangers* of future flooding while at the same time making public improvements that eventually led to the creation of the Civic Center. Buildings on both sides of the Scioto River were cleared, the river was increased to nearly twice its width, and a concrete retaining wall was built along the east bank. Three new bridges were constructed in the Neoclassical style, and between 1924 and 1934 public buildings were constructed along both the east and west banks, creating a unified and cohesive Civic Center (emphasis added).³⁹⁷

Similarly, the webpage for the Franklin County Engineer's webpage offers lessons of the Great Flood.

[It] left behind a great legacy of watershed management and urban renewal projects [including] river widening and embankment reconstruction; building of the O'Shaughnessy Dam and Reservoir (1925) and Franklinton Flood Wall (2004); the Civic Center Plan to build Central High School (1925), now part of the Center of Science and Industry (COSI), City Hall (1928), Central Police Station (1929), Ohio State Office Building (1933), now home of the Ohio Supreme Court, and Joseph P. Kinneary U.S. Courthouse (1934); and development of Alexander/AEP Park, Avenue of Flags, Battelle Riverfront Park, Bicentennial/John W. Galbreath Park, Genoa Park and Amphitheater, North Bank Park, and Franklin County Veterans Memorial Auditorium and Park.³⁹⁸

Franklinton has not fared as well.

In 2010, Franklinton exhibits a mixed character. It continues to maintain a low-income residential population in a mix of older housing and at least one remaining public housing complex. The highway SR315 forms a major neighborhood barrier, as do the railroad embankments (the same ones that contributed to the death and destruction in 1913 by intensifying the velocity and power of flows). The east side of the neighborhood has been redeveloped, with new buildings and large areas of surface parking, According to city plan, East Franklinton is now considered part of the downtown area. Central High School was redeveloped as the new home of a major educational museum, the Center of Science and Industry (COSi) designed by Arata Isozaki, at a cost of \$130M. Vacant factories and warehouses stand on several blocks in the eastern part of "the Bottoms." In a few places historic buildings, like the old train station, have been rehabilitated for new use. Historic signage seems to be scattered around in a few places. Throughout the middle section of the neighborhood, empty lots and boarded up buildings are a common site. Newspaper and TV reports on crime and violence in the neighborhood are common, such as this one from 2001.

She walked alone under the orange hue of streetlights, her eyes watching each passing car in the neighborhood known as The Bottoms. A car slowed as it went by, then returned. At a stoplight on W. Broad Street, she slipped inside and offered the driver oral sex and intercourse for \$30. Instead, the handcuffs came out, and 27-year old Elena Maria Chandler was arrested.³⁹⁹

The Bottoms persists as a poor, urban neighborhood with a bad reputation. In Spring 2010, a search of the *Columbus Dispatch* for the term "Franklinton" before my second site visit yielded the story of one young man with a history of mental disability who had fired a gun into his neighbors house after he went off his medication, and a second story about a young woman from the neighborhood who had become a prostitute to pay for her drug addiction.⁴⁰⁰ She was found dead in a local creek. She had been there several days before someone found her. A few days later the headline read "Woman shot to death in Franklinton this morning."⁴⁰¹

The making and remaking of The Bottoms is an urban process that took place over decades, from the time when the *Ohio State Journal* could report in 1874 that "remarkable" growth was occurring on the West Side "filling up what was for so many years a broad gap between the old city limits and the venerable village of Franklinton."⁴⁰² The same writer added that "[t]hese manufacturing interests have attracted a large population to the west side of the river. The men employed in the factories and shops have located themselves convenient to their work, and houses go up so rapidly that one must visit the locality frequently to keep up with the times... The land is favorable for building purposes, and growing industry makes a solid

demand for homes."⁴⁰³ Columbus had a brief, and geographically limited, but nevertheless significant industrial period. The Bottoms, rapidly developed between 1870 and 1913, tell an important part of this story. As the city grew and annexed territory over the twentieth century, the Bottoms became a pass-thru area, a netherworld on the near west side of downtown.

Columbus had three major planning efforts in the twentieth century, hiring some of the most famous consultants in the country: a City Beautiful Plan by architects Austin W. Lord, Albert Kelsey, Charles N. Lowrie, Charles Mulford Robinson, and H.A. McNeil in 1908; a zoning report authored by Robert Whitten in the 1920s; and, a ten-volume study by Harland Bartholomew in the late 1950s. Each planning initiative included recommendations for "the Bottoms," and more than a dozen neighborhood-level reports and studies have followed, but "the Bottoms" has not been remade in the same manner as say SoBro in Nashville or Foggy Bottom in Washington D.C. In Columbus, the flood danger has been much greater and the physical extent of the floodplain much larger. In this respect, Columbus has an opportunity. It can choose to remake the Bottoms with full consideration of natural processes, social equity, public history, and economic development.

Frog Hollow, Hartford

Hartford's Frog Hollow also stands as something of an exception—but for different reasons than "the Bottoms" in Columbus. It retains much of its housing stock from the period of its initial development. Floods played a major role in reshaping the urban landscape of Hartford, but those physical and social changes occurred, for the most part, on the neighborhood's western and northern edges. Indeed, the Park River was put underground between 1936 and 1943.

Following World War II, the neighborhood saw little investment and its building stock began to decline. Unlike downtown, however, where urban renewal and highway projects changed the face of the city, few buildings in Frog Hollow were demolished, and it remained a residential neighborhood. Newcomers from Puerto Rico developed cultural institutions and became the largest ethnic group in the neighborhood. The factories closed, as gun manufacturing and the machine tool industry moved elsewhere.

In 1979, the National Park Service designated the neighborhood a National Register historic district. The State of Connecticut converted several older factory buildings into office space, and the Billings Forge was converted to housing. The district, which originally covered "35 square blocks south of Capitol Avenue between Oak Street and Park Terrace," was furthered expanded in 1984. The effort, begun in the mid-1970s, was part of a nationwide reaction to urban renewal and highway building projects. Newspaper articles at the time describe the neighborhood as an "urban village," a reference to the anti-urban renewal position. Frog Hollow was celebrated for its unique architecture (including the perfect six, a type of worker housing similar to the triple-decker found in Boston), its industrial history (particularly its associations with Pratt and Whitney and other manufacturers), and its ethnic heritage/ immigrant history.

The National Register nomination describes the historic significance of the area as follows:

Frog Hollow is significant because it provides an unimpaired demonstration of the development of a nineteenth century, factory-based, urban neighborhood. The district is a rare remaining example of how simultaneous growth of industrial and residential facilities complemented each other as the process of urbanization progressed. While the great majority of individual buildings are not architecturally distinguished, they do provide excellent, well preserved examples of their types, and Hartford's best architects of the era are represented by several buildings in the district. In addition, technical developments in machine tool manufacture gave the area's factories an important place in the industry of the period (NR nomination 1977).

Frog Hollow is the only one of the six sites that remains substantially intact, suggesting that the remaking of the lowlands proceeds at different rates depending on the municipal and regional context. As of 2010, according to socio-economic data, Frog Hollow is one of the poorest communities in New England. Numerous economic development and investment projects are underway. It remains to be seen whether or not Frog Hollow will experience the kind of remaking seen in other lowlands, as the National Register listing in and of itself does not prohibit demolition of historic neighborhoods, or whether another process, such as gentrification, will remake the neighborhood in other ways. As of 2010, Frog Hollow appears much as it once did historically.

The Flats of Los Angeles

The Flats have been remade multiple times, notably through the federal Department of Housing and Urban Development's HOPE VI program. Large sections of the Pico-Aliso public housing developments were demolished in the late 1990s and early 2000s to make way for a new mixed-income, New Urbanist style development. In 2009, an extension of the Gold Line light rail system, with a stop at First Street in the Flats, returned streetcar service to the neighborhood for the first time since the earlier system was dismantled in the 1950s. The new station serves as a link between downtown, the river, the Flats, and the Heights. Still primarily a "public neighborhood," the Flats remains home to several thousand public housing residents and low- and moderate-income families, below the Hollywood Freeway and next to the constructed channel of the Los Angeles River.

SoBro, Nashville

As the photographs included at the end of this Epilogue show, Nashville's former Black Bottom changed significantly between 2009 and 2010, during the time I was making field observations. Construction began on the Music City convention center, a massive development covering several square blocks of the old neighborhood in early 2010. Furthermore, after I completed my on-site work, a massive flood hit the city in May 2010, inundating the basements and lower levels of SoBro's new developments. I had visited Nashville just weeks before the flood in April 2010.

The new image of SoBro seeks to completely erase the neighborhood's past. While the old St. Paul Church remains standing, almost every other structure built before 1995 has been removed from a thirty-block area. In my early visits to the neighborhood, I often walked through acres of surface parking lots. That stage in the history of the area has now come to a close, as a massive construction site now occupies the center of the old neighborhood—the space once defined by the open creek known as Wilson's Spring Branch.

St. Paul's Swede Hollow Park

Swede Hollow Park is changing, too, in 2010. In fact, in the space between visits over a few days in May 2010, the pathways on the east side of the ravine were paved in asphalt Although the entrance sign on the neighborhood's west side says "historic forest," the current planning efforts and physical improvements made by the City of St. Paul suggest that "recreation corridor" or "bike path through former lowland slum" might be more appropriate labels. Since the 1970s, park design efforts have been directed at improving

public access, the partial day-lighting Phalen Creek, and the installation of several landscape artworks. In 1994, local community members formed a group known as Friends of Swede Hollow, an organization that continues to look out for the park and advocate for its care and maintenance. The brewery at the top of the hollow is closed and fenced off, with its hulking mass a neglected, and somewhat enticing, ruin. An installation of boulders and a stone pylon on a raised berm known as "Stonehenge" provides a weird neopagan element to the top of the hollow. A few hundred feet to the south, a designed landscape of paving stones, bench, and mature and overgrown decorative plantings marks the location where a section of the old stream emerges above ground into a constructed open channel. On my visits little in the way of flowing water was visible, as apparently most of the flow continues in an underground pipe. Along the path of the former streambed, three ponds, including a large one at the south end of the hollow, can be found. Neighborhood children told me about toads on one visit, and showed me their catch.

The history of the "little hamlet" of Swede Hollow, and the health and sanitation problems faced by residents, not to mention the combination of discrimination, lack of affordable housing, and municipal neglect that forced St. Paul's poor and immigrant working classes there in the first place, is not presented in the hollow. One interpretive sign may be found at "Swede Hollow Overlook," a grassy park with shade trees on the former site of Hamm's Mansion. The lack of interpretive signage does not deter visitors, as I discussed with Professor David Lanegran, who has been Swede Hollow's historian for several decades. Along with several others, he leads guided walking tours, and other visitors seek out the mythical place on their own. The reason, he told me, that there are no signs or other interpretive elements, is that signs placed there in the 1970s were defaced and removed. Perhaps it is time to try again.

Foggy Bottom, Washington D.C.

In 2010, Foggy Bottom presents a fragmented image to the visitor. Large sections of the neighborhood are dominated by highways, roadways, entranceways, paved streets, and access roads. Large-scale development projects abound, and George Washington University's buildings seem to be everywhere. Nonetheless, it is still possible to walk the sidewalks and investigate something of Foggy Bottom's past. The confluence of Rock Creek and the Potomac River provides a good viewing point for the two buildings which have come to define the river's edge, or "waterfront property"—the Kennedy Center and the Watergate complex. Surviving row houses, rehabilitated and modernized but historically intact, can be found in the Foggy Bottom Historic District. A few of the historic alleys remain, too—although now occupied by middle- and upper-class residents, they provide a glimpse into the spatial relationships that once defined who lived where and why in the nation's capital.

Photographs

I made the following photographs during fieldwork observations between April 2009 and May 2010.


Downtown Columbus, Ohio as viewed from "the Bottoms," April 2009.



The state highway replaced Sandusky Street next to Bellows School, now vacant. "The Bottoms," Columbus, Ohio, April 2009.



The Scioto River and "the Bottoms" as viewed from a downtown hotel, Columbus, Ohio, April 2010.



Standing at Broad and High looking west towards "the Bottoms." Columbus, Ohio, April 2010.



Parking lot in front of the Center of Science and Industry (COSI) with downtown in the distance, "the Bottoms," Columbus, Ohio, April 2010.



Railroad embankments continue to crisscross "the Bottoms," Columbus, Ohio, April 2010.



In the Great Flood of 1913, flood waters rushed through openings in railroad embankments like this one with deadly force, "the Bottoms," Columbus, Ohio, April 2010.



Abandoned building, West Broad Street, "the Bottoms," Columbus, Ohio, April 2010.



View west on Broad Street in "the Bottoms," Columbus, Ohio, April 2010.



Commercial storefronts on West Broad Street in "the Bottoms," Columbus, Ohio, April 2010.



Vacant lot and billboard at Skidmore and West Broad Streets, "the Bottoms," Columbus, Ohio, April 2010.



Correctional center, "the Bottoms," Columbus, Ohio, April 2010.



Houses in "the Bottoms," Columbus, Ohio, April 2010.



Franklinton Floodwall, Columbus, Ohio, April 2010.



Great Flood of 1913 Memorial, "the Bottoms," Columbus, Ohio, April 2010.



Perfect six, Frog Hollow, Hartford, Connecticut, July 2009.



Perfect sixes, Frog Hollow, Hartford, Connecticut, July 2009.



South Branch of the Park River, Frog Hollow, Hartford, Connecticut, July 2009.



Businesses and apartment buildings. Frog Hollow, Hartford, Connecticut, May 2010.



Shopping center, Frog Hollow, Hartford, Connecticut, May 2010.



The neighborhood below the freeway: the 101, atop the bluff, separates the Flats of Los Angeles from Boyle Heights. This northwest view from the 6th Street Viaduct shows Pico Gardens (gabled roofs, center), March 2010.



Bypassed by bridge. Constructed in 1932, the 3,546 foot long 6th Street viaduct connected Boyle Heights directly to the downtown area. At right, City Hall's pyramidal peak continues to claim a piece of skyline. March 2010.



Industry and residences continue to share space in the Flats, Los Angeles, March 2010.



The Flats of Los Angeles, March 2010.



Encore, a condominium tower, SoBro (formerly Black Bottom), Nashville, Tennessee, May 2009.



Fire hydrant in a field: a railroad depot was once located in this area, now fenced-off open land. The Encore (left) and Pinnacle towers (center, under construction) are two recent real estate developments in SoBro, the neighborhood formerly known as Black Bottom, Nashville, Tennessee, May 2009.



St. Paul's Church, the oldest remaining building in the neighborhood once known as Black Bottom, is now architects' offices, Nashville, Tennessee, May 2009.



Rutledge Hill, on the south side of the former Black Bottom neighborhood, was an area of exclusive residences in the nineteenth century, Nashville, Tennessee, May 2009.



View north from Rutledge Hill towards the depression in the land once known as Black Bottom, with downtown Nashville in the distance, May 2009.



Low-lying land, once Black Bottom, now SoBro. Wilson's Spring Branch ran through this depression in the land before it was put underground in a sewer in the late nineteenth century. Many of the buildings seen here were demolished later only a few months after this photo was taken to make room for the new Music City convention center, Nashville, Tennessee, May 2009.



Parking lots covered the low-lying land between Rutledge Hill and downtown Nashville in May 2009.



Country Music Hall of Fame, SoBro (formerly Black Bottom), Nashville, Tennessee, May 2009.



Wilson's Spring Branch runs under this land in a sewer where it meets the Cumberland River, So Bro (formerly Black Bottom), Nashville, Tennessee, May 2009.



Former railroad depot site along the Cumberland River, SoBro (formerly Black Bottom), Nashville, Tennessee, May 2009.



The new symphony hall, with condominium tower in the distance, SoBro (formerly Black Bottom), Nashville, Tennessee, May 2009.



Parking in SoBro (formerly Black Bottom), October 2009.


The Sommet Center (originally Nashville Arena, then Gaylord Center, since renamed Bridgestone Arena), at left, home of the Nashville Predators National Hockey League team), the Pinnacle (center), and Encore (right), SoBro (formerly Black Bottom), Nashville, Tennessee, October 2009.



My life in SoBro (formerly Black Bottom), street-level advertising panels, Nashville, Tennessee, October 2009.



Demolition at the heart of SoBro (formerly Black Bottom) to clear the way for the new Music City convention center, Nashville, Tennessee, October 2009.



Music City convention center under construction in SoBro (formerly Black Bottom), Nashville, Tennessee, April 2010.



Music City convention center under construction in SoBro (formerly Black Bottom), Nashville, Tennessee, April 2010.



Music City convention center under construction in SoBro (formerly Black Bottom), Nashville, Tennessee, April 2010.



Standing water in a parking lot in SoBro (formerly Black Bottom), Nashville, Tennessee, April 2010.



Swede Hollow, historic urban lowland slum, St. Paul, Minnesota, May 2010.



View of Swede Hollow Park from underneath the Seventh Street Improvement Arches, St. Paul, Minnesota, May 2010.



Seventh Street Improvement Arches, Swede Hollow, St. Paul, Minnesota, May 2010.



Recreational path, site of former railroad right-of-way through Swede Hollow along the west side of the ravine, St. Paul, Minnesota, May 2010.



At "Swede Hollow Overlook," one can see the tops of trees that have grown up in the ravine. Near this spot, William Hamm built his mansion. This sign represents the extent of historical interpretation at Swede Hollow Park, St. Paul, Minnesota, May 2010.



A staircase leading down into the Hollow from the east side, Swede Hollow, St. Paul, Minnesota, May 2010.



Paving the Hollow's paths, May 2010, Swede Hollow, St. Paul, Minnesota.



St. Paul school children make their way down into the Hollow on a field trip, Swede Hollow, St. Paul, Minnesota, May 2010.



Watergate and the Kennedy Center, two Foggy Bottom landmarks on the edge of the Potomac, Washington D.C., May 2009.



An older building now surrounded by roadway, Foggy Bottom, Washington D.C., May 2009.



Boats near the confluence of Rock Creek and the Potomac, Georgetown, looking towards Foggy Bottom, Washington D.C., May 2009.



Foggy Bottom, Washington D.C., May 2009.



An alleyway in the Foggy Bottom Historic District, Washington D.C., May 2009.



Row houses in the Foggy Bottom Historic District, Washington D.C., May 2009.



Watergate, Foggy Bottom, Washington D.C., May 2009.



Contrasts in built form, Foggy Bottom, Washington D.C., May 2009.



Foggy Bottom, Washington D.C., May 2009.

APPENDIX

An Urban Lowlands Lexicon

A

<u>alluvial land</u> floods, leaving deposits; flowing water carries sediment from place to place. The term suggests silt, sand, and mud, particles suspended in liquid form, traveling in a stream or flow overtopping banks, then coming to a halt, on flat land, resting as residue.

<u>arroyo</u> is a commonly used word in the American West, associated with Spanish lands and an arid landscape, but its origin is unknown. It is interchangeable with gully, but unlikely to be called a brook.

В

<u>backwater</u> describes the direction of flow, but it may also be stagnant and standing with little movement; big river floods might back up into smaller tributaries.

a <u>basin</u> is like a bowl; it collects water or contains it; although, it may not hold it for long, as when it drains across a watershed or flows downhill through a hollow.

a <u>bottom</u> is low, flat land next to a river, sometimes in the form of a basin (usually four-sided), a hollow (usually three-sided), or valley (appearing two-sided). It can also be used to describe the place where the poor people live, a "slum." It suggests alluvial land, where overflowing waters leave deposits. It is an old term, dating back at least to 1755 when Dr. Johnson defined it in his dictionary.

bottom-land, bottomland see bottom

a <u>branch</u> is another word for brook; it might also be called a run in some parts of this country.

С

a canal is a constructed feature, also called a channel, used for carrying or moving water.

a channel can be the area where the water flows, even its dry; it can be natural or human-constructed.

to channel means to wear, cut, or make a course, for stormwater, for instance.

<u>creek</u> is the same as brook, unless you are in England where the word originated with a different meaning. Stilgoe wrote eloquently about it, and many other terms, in *Shallow Water Dictionary*.⁴⁰⁴

a <u>culvert</u> runs beneath another human-constructed feature, usually in a perpendicular or "transverse" direction.

D

a <u>dale</u> is a valley, usually in steep territory like the mountains.

a <u>dell</u> is a hollow or vale with a pastoral ring to it

a depression is a low spot in the ground

intervale land is what New Englanders once called bottoms

F

the flats are plains or floodplains; flat is the shape and character of bottomlands; flats are not steep or rocky like a gorge or ravine.

a <u>floodplain</u> or <u>flood plain</u> is the area that floods; it is not necessarily the same as the area where alluvium is deposited.

a ford is a place to cross a brook or a river by going through shallow waters.

Η

a <u>hollow</u> is usually a three-sided low spot in the hills with a creek running down towards the open lower end.

L

a lowland may be as large as a country or region, or as small as a city block.

0

an oxbow is a part of a river that bends or loops.

R

a ravine is steep on the sides, deep to the bottom, and narrow in its width.

river-related words abound, words like riverflat, riverglade, riverterrace, and riverwalk; riverbasin, riverbend, rivermouth, and riversystem; riverboat, riversteamer, rivertraffic, riverflow, riverfed, riverformed, riverrat, and riverwise.

S

a sewer is an artificial channel that drains.

a stream is flowing water, like a creek or a brook.

T

a thalweg is "the line of lowest level," an area of interest to railroad engineers laying track.

V

a vale is a flat mountain valley, frequently used figuratively as in "vale of tears."

W

a <u>wash</u> is like an alluvial fan, an area that is sometimes covered over by water and sediment and rocks, or boulders that hurtle down mountains.

wetlands include marshes, bogs, swamps, and fens; seen from the waters, they are shallow places; seen from the land, they are murky and swampy.

END NOTES

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⁴ George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago and London: The University of Chicago Press, 1980), 18.

⁵ Lakoff and Johnson, *Metaphors We Live By*, 16.

⁶ Larry Millett, Lost Twin Cities (St. Paul: Minnesota Historical Society Press, 1992), 82.

7 Ibid.

⁸ William B. Meyer, "Bringing Hypsography Back In: Altitude and Residence in American Cities," *Urban Geography*, 15, 6 (1994):505.

⁹ William B. Meyer, "The Poor on the Hilltops? The Vertical Fringe of a Late Nineteenth-Century American City," *Annals of the Association of American Geographers*, vol. 95, no. 4 (December 2005): 773-788; William B. Meyer, "A City (Only Partly) on a Hill: Terrain and Land Use in Pre-twentieth-century Boston," in *Remaking Boston: An Environmental History of the City and Its Surroundings*, ed. Anthony N. Penna and Conrad Edick Wright (Pittsburgh: University of Pittsburgh Press, 2009): 127-147.

¹⁰ Allen, The City in Slang, 227.

¹¹ Ibid.

¹² Klingle, Matthew. *Emerald City: An Environmental History of Seattle*. New Haven and London: Yale University Press, 2007; Nancy Seasholes, *Gaining Ground: A History of Landmaking in Boston* (Cambridge: The MIT Press, 2003); Anne Whiston Spirn, *The Granite Garden: Urban Nature and Human Design* (New York: Basic Books, 1984).

¹³ Spirn, The Granite Garden, 18.

¹⁴ Sam Bass Warner, "Slums and Skyscrapers: Urban Images, Symbols, and Ideology," in *Cities of the Mind: Images and Themes of the City in the Social Sciences*, ed. Lloyd Rodwin and Robert M. Hollister (New York: Plenum Press, 1984).

¹⁵ Warner, "Slums and Skyscrapers"; Allen, *The City in Slang*.

¹⁶ Allen, *The City in Slang*, 231.

¹⁷ Walter Stix Glazer, *Cincinnati in 1840* (Columbus, Ohio: The Ohio State University, 1999).

¹⁸ Sandra L. Arlinghaus and John D. Nystuen, *Terrain Effects on Bus Durability* (Ann Arbor: Center for Transit Research and Management Development, University of Michigan Transportation Research Institute, Final Report, Prepared for U.S. Department of Transportation, January 1987).

¹⁹ Spirn, *The Granite Garden*, Preface.

²⁰ Ian L. McHarg, *Design with Nature* (Garden City, New York: Doubleday/ Natural History Press, 1969): 56-57. McHarg uses the phrase as follows: "The ecological method would suggest that the lands reserved for open space in the metropolitan region be derived from natural-process lands, intrinsically suitable for

¹ Lewis Mumford, *The City in History: Its Origins, Its Transformations, and Its Prospects* (New York: Harcourt, Brace & World, Inc., 1961), 458.

² Irving Allen, *The City in Slang: New York Life and Popular Speech* (New York and Oxford: Oxford University Press, 1993), 226.

'green' purposes: that is the place of nature in the metropolis." He also created a "hierarchy of urban suitability" based on "eight dominant aspects of natural process": "surface water; marshes; floodplains; aquifer recharge areas; aquifers; steep slopes; forests, woodlands; flat land." Read in this order, they are said to reflect "natural process value" or "degree of intolerance to human use." Read in the reverse order, they are meant to describe "intrinsic suitability for urban use."

²¹ Spirn, *The Granite Garden*; Spirn, "Urban Nature and Human Design: Renewing the Great Tradition," *Journal of Planning Education and Research*, 5, 39 (1985):39-51); Spirn, "Landscape Planning and the City," *Landscape and Urban Planning*, 13 (1986): 433-441; Spirn, "Restoring Mill Creek: Landscape Literacy, Environmental Justice and City Planning and Design," *Landscape Research*, vol. 30, no. 3 (July 2005): 395-413.

²² Spirn, "Landscape Planning and the City," 435-36.

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²⁴ In her 1986 article "Landscape Planning and the City," she writes as follows: "This vacant land was the floodplain of a stream, now buried, that was filled and built upon, and then abandoned" (Figure 1, page 435). For examples of the use of the exact phrase "buried floodplain" or "buried floodplains," see also: Spirn, "Buried Floodplains"; Spirn, "Restoring Natural Resources and Rebuilding Urban Communities," in *Planning for a New Century: The Regional Agenda*, ed. Jonathan Barnett (Washington D.C.: Island Press, 2001): 167-68; Spirn, "Urban Ecosystems, City Planning, and Environmental Education: Literature, Precedents, Key Concepts, and Prospects" in *Understanding Urban Ecosystems: A New Frontier for Science and Education*, ed. Alan R. Berkowitz, Charles H. Nilon, and Karen S. Hollweg (New York, Berlin, and Heidelberg: Springer-Verlag, 2003): 204.

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