

“SOME DAY ON AMERICAN SOIL:” THE MATERIAL RECORD OF NEW
PHILADELPHIA AND THE MIDDLE CLASS ON THE AMERICAN PRAIRIE

By

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ABSTRACT

“SOME DAY ON AMERICAN SOIL.” THE MATERIAL RECORD OF NEW PHILADELPHIA AND THE MIDDLE CLASS ON THE AMERICAN PRAIRIE

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The following dissertation asks: What is the material expression for the emergent middle class on the American prairie during 19th-century? It develops a model of a prairie-middle-class based on the material and documentary datasets at New Philadelphia, Illinois. These two datasets comprise a single historic-archaeological record that was created by people living in this town during the middle decades of the 19th century. New Philadelphia was a founder town, established by “Free” Frank McWorter, an African American, who was born into slavery but who purchased his freedom, along with 13 family members. Chapter 1 presents the research question: What is the material expression of the emergent middle on the 19th-century American prairie? Chapter 2 outlines the historical developments necessary for the emergence of the middle class on the American prairie during the 19th century. Chapter 3 presents the theoretical context for examining the historical archaeological record at New Philadelphia. Chapter 4 presents the methodology of historical materialism to explain social change through processes of change. A model for the expansion of the capitalist mode of production is stated. This model forms the basis for four hypotheses about the broad cultural experience with capitalist expansion. Each hypotheses leads to specific sub-hypotheses about the personal experiences at New Philadelphia. These sub-hypotheses are bridging arguments to connect the local manifestation to the wider process of capitalist expansion. Chapter 5 presents conclusions and suggestions for future work.



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CHAPTER 1: INTRODUCTION

Introduction

The following dissertation asks: What is the material expression for the emergent middle class on the American prairie during 19th-century? It develops a model of a prairie-middle-class based on the material and documentary datasets at New Philadelphia, Illinois. These two datasets comprise a single historic-archaeological record that was created by people living in this town during the middle decades of the 19th century. This is where they interacted with a local political-economic environment that was, in turn, part of the expanding capitalist mode of production.

New Philadelphia was a founder town, established by Free Frank who was born into slavery but purchased his freedom, along with 13 family members.¹ While in Kentucky, Frank took advantage of the booming market for gunpowder created by the wartime economy at the turn of the 19th century. With money raised from mining saltpeter deposits, he first purchased his wife's freedom 1817 and then his own in 1819. After that, he invested capital in the frontier land market around his home in Kentucky. With those profits, Frank moved the free members of his family to Illinois where they platted New Philadelphia in 1836 (Figure 1.1). The ability to sell town lots allowed Free Frank to take advantage of the speculative market created by Illinois's expanding transportation infrastructure. Free Frank passed away in 1854 having secured enough assets to manumit 13 family members from slavery.²

New Philadelphia grew throughout the 1860s peaking at about 160 residents by 1865.³ In 1869, the Hannibal & Naples Railroad connected two towns flanking New Philadelphia. By not linking New Philadelphia as the middle depot between Griggsville and Barry, the H&N railroad's loop (just one mile north of New Philadelphia) was enough of a bypass to cause a rapid decline in New Philadelphia's population.⁴ By 1885, the town was vacated from the Pike

County rolls and its land was designated for agricultural use. By the 1930s, no obvious signs of the town's existence remained. In 1976, the town was formally designated an archaeological site (11PK455) by the Illinois Archaeological Survey (Figure 1.2).⁵ From 2002 to 2010 three archaeological surveys collected cultural material and documented intact archaeological features related to the former town. In 2005, the site was listed to the National Register for Historic Places, and in 2008 it was elevated to a National Historic Landmark.⁶ The following dissertation uses archaeological and historical dataset originated from the first two archaeological surveys.

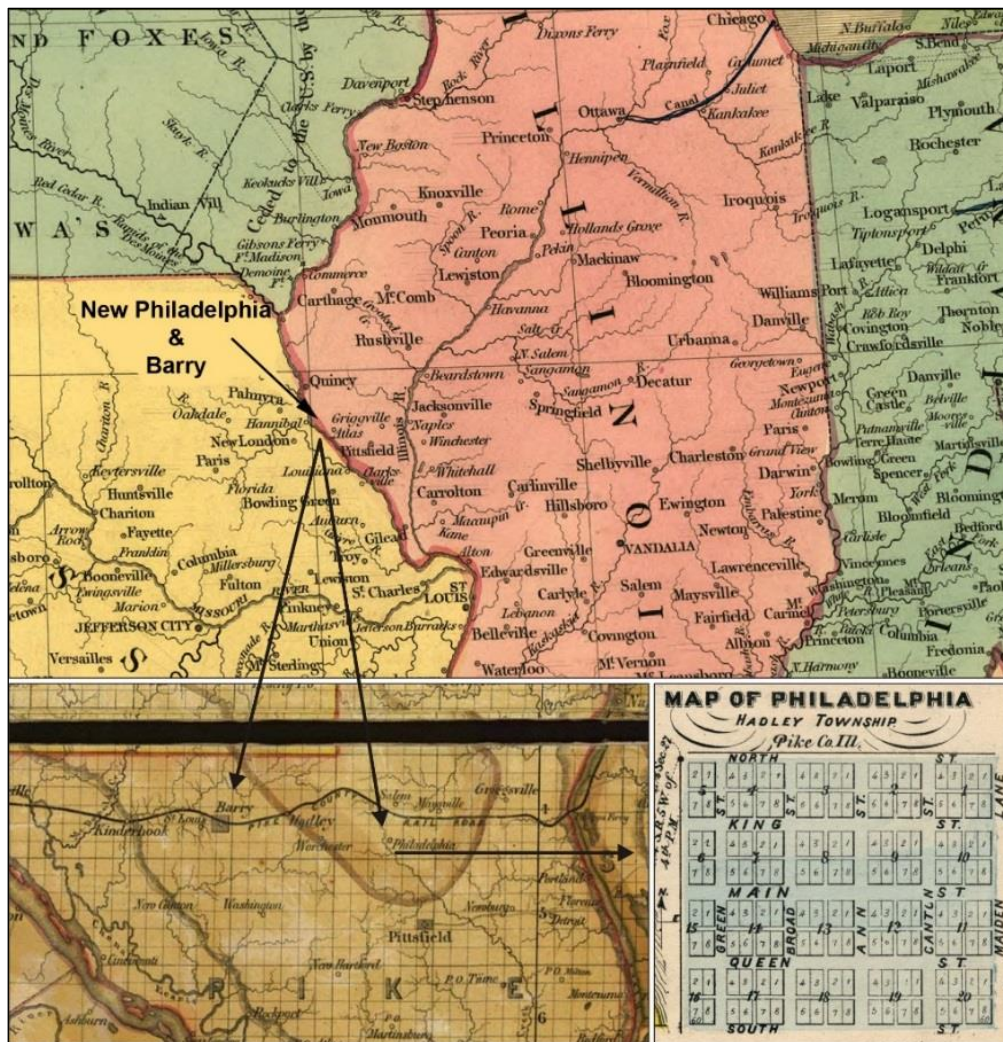


Figure 1.1. New Philadelphia General Location. Top image shows Illinois in 1839. Bottom left shows Barry, New Philadelphia, and Griggsville in 1861 with the proposed route for the H&N Railroad. Bottom right shows the plat map for New Philadelphia as it was laid out in 1837.

Dissertation Research Scope

The majority of Illinois is located on the prairie peninsula of the American Midwest (Figure 1.3).

It is here that citizens of the early United States created a unique settlement pattern that was composed from US liberal politics, profit-generating markets, and demographically dependent family units. Taken together, these qualities created a prairie middle class who benefited from public/private partnerships for important infrastructures, who viewed settlement as a means to generate profit, and who were dependent on the unique technological and social relationships created by the capitalist mode of production.

The term “material remnants” is used here to define a dataset composed from items left by people in the past as political documents and as cultural artifacts. The goal of this dissertation seeks to understand how the social behaviors of New Philadelphians crystalized into both historical documents and archaeological artifacts.

The dissertation’s basic unit of analysis is the community at New Philadelphia represented by two complimentary datasets: 1. the documentary record (historical), and 2.) the material record (archaeological). Because each of these datasets can be described as independent entities, there is an abundant array of disparate variables contained within each set. The criteria for selecting the appropriate variables for analysis is whether or not they measure some sort of connecting relationship between New Philadelphians and the general model of the prairie middle class. For example, there survives an enormous amount of documents from the economic activities of communities neighboring New Philadelphia. These documents are found inside the same oversized, leather-bound clerks’ book beneath the offices of the Pike County Courthouse. Their physical proximity speaks to the similarity in life experiences between New Philadelphians and their neighbors, but because the central question here focuses on what New Philadelphians

themselves generated, documents about next-door Barry are not appropriate at this stage.

Dissertation Research Problem

The expansion of European capitalism was a process that assimilated productive social relationships into a mode of behavior seeking profit reproduction over any other biologic or social reproduction. Capitalism's flexibility to assimilate (rather than re-invent) older social forms allowed it to spread farther than all other historic modes of production.⁷ Because its market forces led the way into new geographic areas and because it reshaped existing social forms in often subtle ways, it can be difficult to identify capitalism as a faceted social phenomenon (richer than simple mercantile exchanges).

At New Philadelphia however, there is a rare opportunity to gather data in a setting where 1. neither capitalism nor any other state-level society existed, 2. where people constructed social forms explicitly to exploit profit-making opportunities through capitalist markets, and 3. where we can delineate a sharp distinct between progressive social and conservative political behaviors. This was a place where social roles of race were reshaped but were done so only to allow a member of a racial category to engage in traditional political economic role. So because the racial progress was explicitly designed to manifest itself as market conservatism we can also isolate the effects of those processes in similarly contrasting degree on the historical archaeological record.

Because capitalism assimilated existing social forms, it can be difficult to identify new *kinds* of relationships it produced. But, at New Philadelphia, there was no previous habitation and people settled there purposefully to exploit capitalist markets. So the capitalist engagement here is observationally clearer than in other parts of the U.S. with a colonial-era material record.



Figure 1.2. Aerial View of New Philadelphia, 2005 with town lot overlay. Numbered blocks are areas of archaeological excavation. www.anthro.uiuc.edu/faculty/cfennell/NP/mapindex.

Dissertation Research Relevance

The middle class in general is the most important social grouping within capitalism because they tend to serve as the pivot point for maintaining order in a contentious social system. They can relieve social tensions by forcing ruling classes into progressive compromises which is best exemplified by this period's revolution(s) in England, North America, and France. They can, however, also serve to contain roiling class tensions by enforcing state-sponsored exploitation through their participation in bureaucratic institutions like courts and criminal-justice systems.

On the 19th-century American Prairies a new kind of middle class developed because of the expansion of capitalism into the United States Midwest. Modeling this group of people identifies the three critical variables for analyzing a political-economic structure: governance, markets, and demographics. On the 19th-century American prairie the political economic context was a subset of macro processes of expansion that took place on three interrelated fronts: 1. Political expansion, 2. Market expansion, 3. Demographic expansion. Understanding how each of these three fronts provided an essential element for the development of an American-prairie middle class provides the best starting point for future analyses of other aspects of middle class social development (e.g. religion, race, ethnicity, etc.); for the development of classes on the upper and lower ends of the labor spectrum; and for the development of capitalism in other locations. Here, though, we can establish the preliminary elements that created the seed-bed for a prairie middle class. These are:

1. Political expansion – provided protection of property resources and investment in transportation infrastructure
2. Market expansion – provided access to mediums of exchange, materials for adapting to the natural and cultural environment, and new ways to engage in the labor spectrum with a modicum of protection.
3. Demographic expansion – provides the security associated with the physical presence of a co-operative citizenry and selects for a social unit particularly dependent on political and market institutions.

“Middle Class” is a relational definition that describes a social category of people who have acquired a degree of financial stability in between the opposite poles of a capitalist economy. On one end of the economy sits the laboring classes of people who must sell their labor in a wage

market. These people have virtually no control over the valuation of their efforts or the political institutions supporting the economic system.

The opposite end from laborers is the ownership class. These people purchase the productive capacity of everyone engaged in capitalist production. They have near complete control over the evaluation of labor and of the political intuitions that support it.

The middle class, then, are people who occupy a political-economic position between the poles of the labor spectrum. They acquired enough financial security to influence the value of their labor and to have at least the basic access to the mechanism of government. On continental Europe these people are generally referred to as the bourgeois. In England, the term middling class, is used. But in every setting these are the people who take the form of merchants, artisans, landlords, managers, and bureaucrats. No matter their location or form, they are most completely understood within the context of their historic political economy.

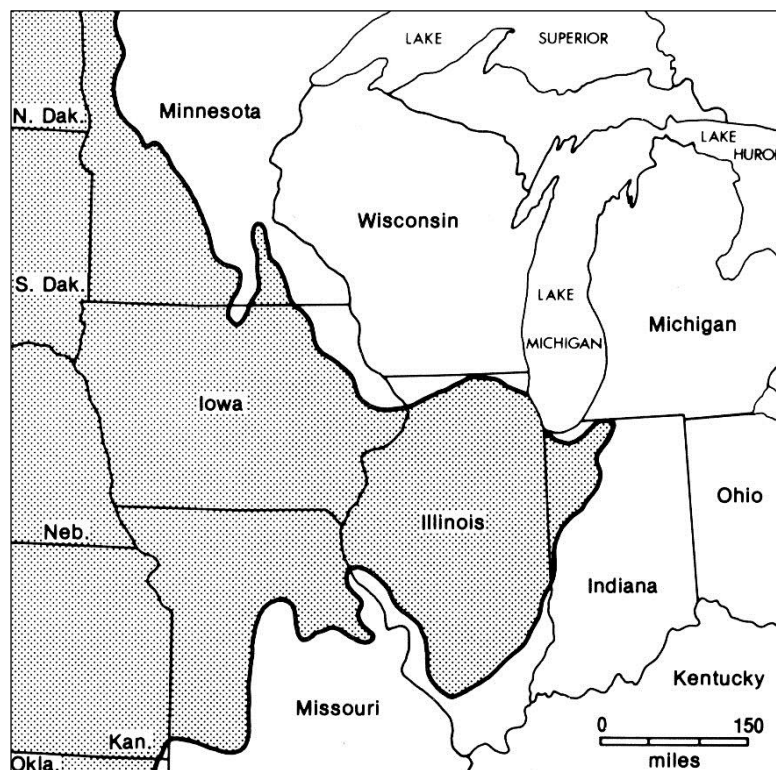


Figure 1.3. The Prairie Peninsula. Ronald E. Nelson, ed., *Illinois: Land and Life in the Prairie State* (Dubuque: Illinois Geographical Society, 1978), 86.

Dissertation Organization by Chapter

Chapter 1 provides the general introduction for the dissertation and presents the research question: What is the material expression of the emergent middle on the 19th-century American prairie? It also addresses the relevancy for the research question.

Chapter 2 outlines the general historical developments necessary for the emergence of the middle class on the American prairie during the 19th century. It does so by organizing the history of capitalist expansion into three broad scales for reference. First, the macro-scale divides the patterning of capitalist development for the United States into three broad periods: 1) the Colonial period 1492–1763, 2) the Expansionary period 1763–1877, and 3) the Deepening period 1877–1919. Second, the meso-scale explains the 19th-century process of expansion within Illinois from three events: expansion of government (political), expansion of markets (economic), and expansion of people (demographic). Finally, a micro-scale explains New Philadelphia as a founder town. As such, the life experience of Free Frank McWorter is critical to understanding how and why he established New Philadelphia on the Illinois frontier.

Chapter 3 presents the theoretical context for examining the historical archaeological record at New Philadelphia. It compares two approaches which have explanatory potential for New Philadelphia. The first approach is one in which racial dynamics are given primacy over economic ones. This approach would set the life experience and eventual creation of New Philadelphia along a continuum of legal freedom marked by the polar opposite experiences of white and black Americans. This approach has been used to great effect by researchers producing scholarship about New Philadelphia.

The second approach gives primacy to economic dynamics. This approach sets the life experience of Free Frank along a continuum of labor control which was marked, not by race, but

by his ability to profit from human labor. Here the poles are marked on the one side by bonded laborers who receive zero return from their efforts and on the opposite end by capital investors who do not perform their own productive labor but collect profits from multitudes of other people.

This second approach has two advantages. First, the historian Diane Miller Sommerville found it useful in explaining the seeming contradictions of racialized antebellum legal cases in which slave defendants were exonerated from rape charges made by white women. This occurred when the accuser was from a lower economic class than the defendant's legal owner.⁸ Second, placing the life experience of Free Frank along a labor continuum sees his movement to freedom as a transition into the middle class. These people have an appreciable amount of control over their labor but cannot necessarily control the labor of others. Because it is this class of people who settled the prairie Midwest they are naturally a more populous group than the smaller (albeit extremely impressive) group of entrepreneurial former slaves. So for comparative purposes, it is numerically logical to consider Free Frank as member of the prairie middle class.

Chapter 3 continues with a description for the archaeological and historical datasets used in this dissertation. It outlines the methodology and results for two related professional surveys that occurred from 2002 to 2006. The first survey was a pedestrian survey which revealed sufficient archaeological material to warrant further investigation. This further work was three field seasons of excavation and laboratory analysis conducted by professional archeologists and college undergraduates as a National Science Foundation – Research Experience for Undergraduates fieldschool program. The historical datasets used in this dissertation are then described. These datasets are a combination of published primary historical sources and digital GIS shapefiles that are also published.

Chapter 3 concludes with the presentation of eight observations drawn from the preceding material and from which analytical hypotheses are developed for bridging the material record at New Philadelphia to human behaviors.

Chapter 4 presents the methodology of historical materialism as a way to explain social change through the identification of three processes of change. These are all facets of the dialectical notions of cultural transformation that identify tension and conflict as the driving motor for change. From this perspective, a general model for the expansion of the capitalist mode of production is stated. This model forms the basis for four general hypotheses about the broad cultural experience with capitalist expansion. Each of these hypotheses lead to specific hypotheses (or sub-hypotheses) about the narrow personal experiences at New Philadelphia. These sub-hypotheses are bridging arguments intended to connect the local manifestation (that is the historical-archaeological record) to the wider process of capitalist expansion.

The first sub-hypothesis addresses the connection between the documentary record and the effects of capitalist relations of production. The political-economic influences for time and place in United States history created an energetic land market that had to be sanctioned by a government body. This was the best way to ensure that a mobile population would get consistent access to property rights were they were afforded as private property holders. This relationship is measurable by graphing the deed transaction related to New Philadelphia. Two show different aspects of this phenomena. The first graph charts deed transaction by time as related to the location in New Philadelphia recorded by the deed. This shows how New Philadelphia became a self-sustaining land market at early stage in existence. The second graph relates the deed transaction dates to the sellers of those deeds. It records seller other than Free Frank and his family. Each seller is located on the graph by two points; the first representing the earliest sale

and the second representing the latest sale. A straight line connects sellers whose transaction span multiple years. This graph shows that early land sales occur at a frenetic pace where people sold their holdings in quick succession. This trend reverses after New Philadelphia is removed from the county rolls as a residential town.

The second sub-hypothesis addresses the connection between the material record at New Philadelphia and larger process of subsistence patterns between the town residents. This hypothesis demonstrates that the material record can connect commercial activity to human behavior with material items that have the most instinctive relationship to capitalism.

Chapter 5 presents the conclusions and suggestions for future work.

¹ Juliet E.K. Walker, *Free Frank: A Black Pioneer on the Antebellum Frontier* (Lexington: University Press of Kentucky), 1983.

² Walker, *Free Frank*.

³ Charlotte King, "New Philadelphia Census Data," Center for Heritage Resource Studies, (College Park: University of Maryland), web resource: <http://www.heritage.umd.edu/CHRSWeb/New%20Philadelphia/New%20Philadelphia/censusfiles/CensusDataMenu.htm>. Last accessed Mar. 15, 2015.

⁴ Christopher Fennell, "Combating Attempts of Elision: African American Accomplishments at New Philadelphia, Illinois," in *Intangible Heritage Embodied*, D. Fairchild Ruggles and Helaine Silverman, eds., (New York: Springer, 2009)

⁵ Michelle Huttes, "National Register of Historic Places Registration Form," United States Department of the Interior National Parks Service, Jun. 29, 2005. Online at <http://www.anthro.illinois.edu/faculty/cfennell/NP/nationalreg.html>.

⁶ Paul A. Shackel, *New Philadelphia: An Archaeology of Race in the Heartland* (Berkeley: University of California Press), 2011.

⁷ See Eric Wolf, *Europe and the People without History* (Berkeley: University of California Press, 1982).

⁸ Diane Miller Sommerville, *Rape & Race in the Nineteenth-Century South* (Chapel Hill: University of North Carolina Press, 2004).

CHAPTER 2: HISTORICAL CONTEXT

For America after all was the ideal of all bourgeois; a country rich, vast, expanding, with purely bourgeois institutions unleavened by feudal remnants or monarchical traditions and without a permanent and hereditary proletariat. Here everyone could become, if not a capitalist, at all events an independent man, producing or trading, with his own means, for his own account. And because there were not, as yet, classes with opposing interests, our-and-your-bourgeois thought that America stood above class antagonisms and struggles. That delusion has now broken down, the last Bourgeois Paradise on earth is fast changing into a Purgatorio, and can only be prevented from becoming, like Europe, an Inferno by the go-ahead pace at which the development of the newly fledged proletariat of America will take place. – Frederick Engels, 1886.¹

The first settler in [Hadley] township after the Indians had been driven Westward was not a white man, but a colored one. He was known as “Free Frank,” and came with his wife and three children.... Mr. McWorter was a live, enterprising man, a reputable, worthy citizen, kind, benevolent and honest. He labored hard to free his posterity from the galling yolk of Southern slavery. He not only purchased his own freedom and that of his wife and children, but left provision in his will to buy grandchildren, which was done by his son. He died in 1857 at the ripe old age of 77. – History of Pike Illinois, 1880.²

Chapter Introduction

The following chapter describes the historical developments necessary for the emergence of the middle class on the American prairie during the 19th century. This historical context was a single process of capitalist expansion that is here described as three interdependent mini-processes (or abstractions). Those three abstractions are 1) political expansion, 2) market expansion, and 3) demographic expansion. Each of these is considered first within the broad context of United States history. Their affects over the narrower Midwest region of Illinois and its neighboring states is then discussed. Finally the smallest scale influences of the abstractions are then discussed for New Philadelphia.

Macro-Scale historical context

The general historical patterning of capitalist development for the first century of the United

States can be divided into three broad periods: 1) Colonial period (1492–1763)³, 2) Expansionary period (1763–1877)⁴, 3) Deepening period (1877–1919).⁵ Because the formation of the prairie middle class took place within the second period of historic capitalism, the first and third periods are briefly discussed for general context. The expansionary period for the US and for Illinois is discussed in more detail in the following sections.

Colonial period 1492–1763

The colonial period began with modern contact between the Eastern and Western hemispheres and continues to first half of the eighteenth century.⁶ This period witnessed the colonization of the Western hemisphere by European monarchs and the first liberal revolutions of those nations' merchants to secure economic and political independence. For English/British North American colonies, this period created two main points of tension where allocation of new land resources and access to other colonial markets were based on the production of wealth for the monarchy. These tensions finally resolved after two decades of political conflict starting with the Proclamation Act of 1763 and ending with the Treaty of Paris in 1783. Throughout this period Britain made several attempts to maintain conservative control over its colonies. But it was the wealth generating capacity of the British merchants in Europe and North America that simply made it an economic necessity to trade across international borders.⁷ Although the colonial mercantile system nurtured domestic production and provided safe harbors for oceanic trade, merchant colonists eventually gained a political disposition to allocate resources based on market necessities.⁸ This experience created the ideological base that a primary role of government was to foster and protect the mercantile interests of its citizens.

Expansionary period 1763–1877

The expansionary period begins with Proclamation Act of 1763 and the events leading to the

American Revolution. This period was further shaped by the Northwest Ordinance of 1787 that created the territory later divided into Ohio, Michigan, Indiana, Illinois, and Wisconsin (Figure 2.1 and Figure 2.2). These states were frequently referred to as the Old Northwest.⁹ The 1787 ordinance not only established the formal partitioning of land crucial for a healthy market, but it is the first allocation of land resources based purely on market principles and drafted without leaders from the nobility or clergy. It marked the first major land allocation by the mercantile (liberal) class.

For the United States, this period lasted from 1787 to 1877. This period witnessed the resolution of tensions between the old European elite and the growing capitalist class through military confrontations in North America and Europe. In Europe, liberal reforms provided the foundation for the technological and social transformation necessary to design new machinery so that large groups of laborers could gather within specialized factories that gave a new kind of fury to the pace of production that hallmarked the Industrial Revolution.¹⁰ In the United States, the Industrial Revolution was realized most closely to the European experience on the Northeast Coast in manufacturing centers like Lowell, Massachusetts and New York City. Although the American South experienced a dramatic economic boom from new machinery like the cotton gin, this region maintained a tense relationship with liberal political reforms necessary for the fluid markets for land and wage-based labor.¹¹ Perhaps the most uniquely American experience of the Industrial Revolution was seen on the expanding western edges of the United States. At the beginning of this period, the United States held only nominal title to areas west of the Mississippi, but through revolutions in transportation and an unprecedented commitment for civil engineering, U.S. expansion occurred with a physical velocity unimaginable even one generation earlier.



Figure 2.1. The United States of North America, with the British territories. 1793. Library of Congress Geography and Map Division Washington, D.C., <http://lcn.loc.gov/98685647>.

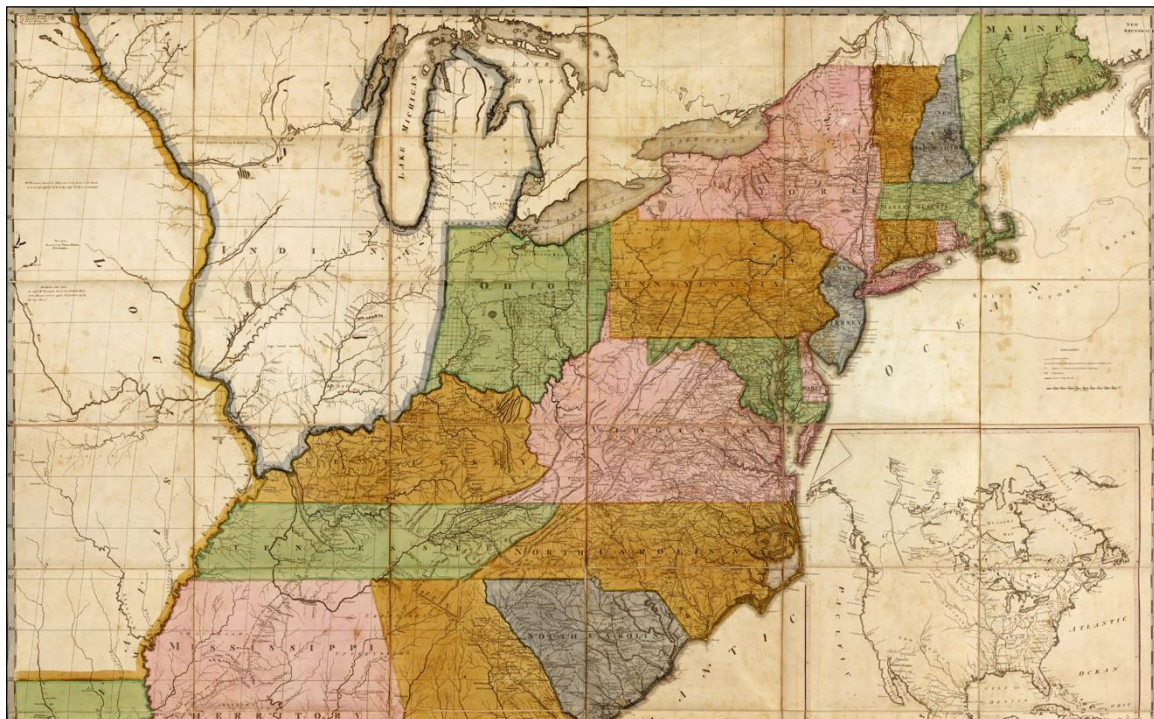


Figure 2.2. Bradley's Map of the United States, 1804. Library of Congress Geography and Map Division Washington, D.C., <http://lcn.loc.gov/2003630384>.

Deepening period 1890–1919

The deepening period lasted from 1890 to 1919. This period witnessed the consolidation and alignment of global economic resources to the production demands of major European powers.¹² In the United States, this period began with the resolution of tensions between the slave-holding South and the wage-laboring North. The density of railroads dwarfed the former transportation networks based on natural water routes (Figure 2.3 and Figure 2.4). This created opportunities for developing market tools like limited liability corporations, joint stock markets, and futures markets. In the Midwest, agriculture technologies in the field and town led to higher per acre yields and quick sales of grain stuffs as farmers could now sell orders directly to large grain silos. This not only lessened the demand for agricultural labor, but also reduced farmer control of prices. Because the period addressed in this dissertation centers in the expansion period United States, it is addressed in more detail below.

United States Expansion

The expansionary period within the United States can be characterized through a series of events that influenced either the political, market, demographic complexion of the prairie middle class. This section summarizes the timeline of those major historical events.

Northwest Ordinance 1787

This Ordinance set the political precedent that government land policies should be based on market principles. It established a formal process for incorporating new land into the government of the United States. It also formalized discrete subdivisions of land to facilitate the smooth functioning of a real estate market.¹³

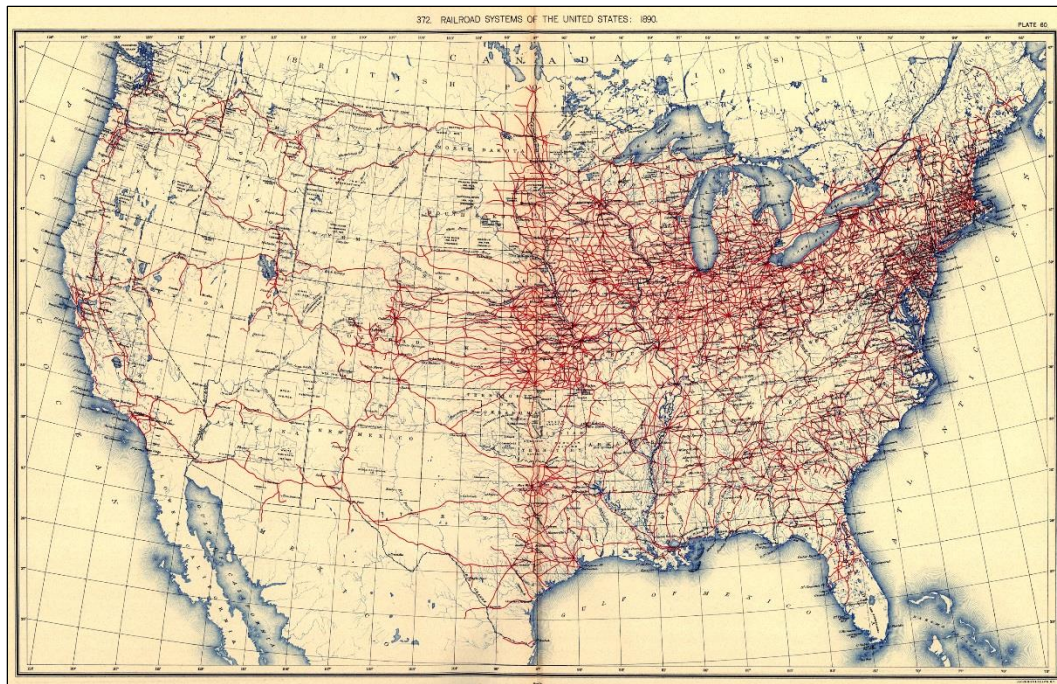


Figure 2.3. Railroad Systems of the United States, 1890. Statistical atlas of the United States, based upon the results of the eleventh census by Henry Gannett, <http://hdl.loc.gov/loc.gmd/g3701gm.gct00010>.

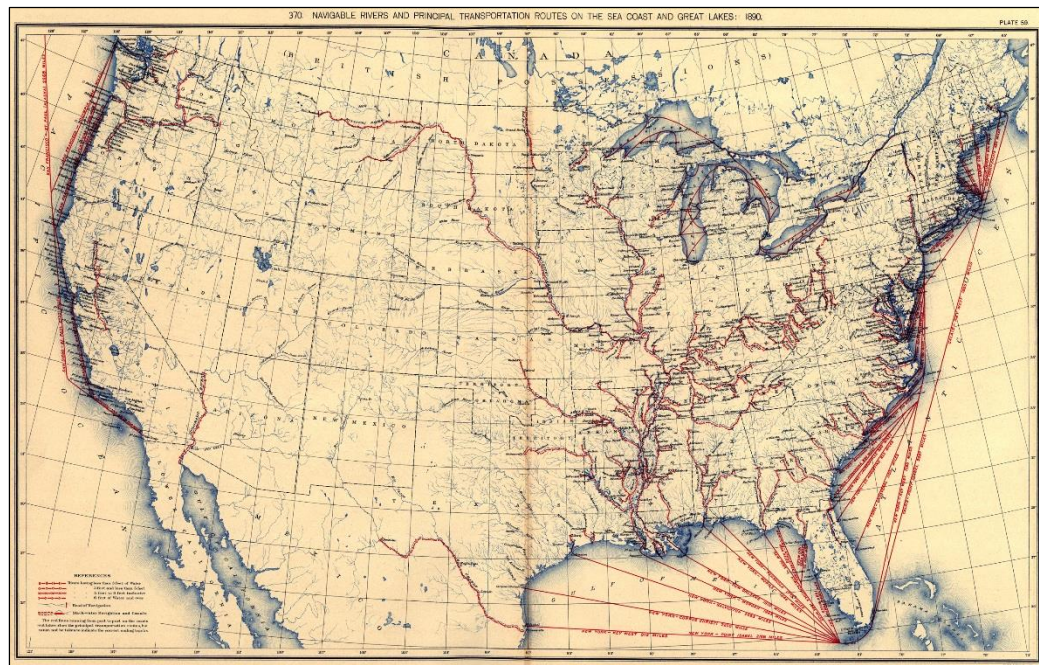


Figure 2.4. Navigable Rivers and Principal Transportation Routes on the Sea Coast and Great Lakes, 1890. Statistical atlas of the United States, based upon the results of the eleventh census by Henry Gannett, <http://hdl.loc.gov/loc.gmd/g3701gm.gct00010>.

Construction of the Erie Canal 1815

This canal was the first major transportation project that involved public/private partnerships. It also proved that investments in infrastructure returned enormous profits for capitalist markets.¹⁴

Financial Panic of 1837

This panic caused an economic depression by nearly eliminating all lines of credit from private banks. It severely restricted the amount of hard currency in circulation which adversely affected western land purchase by small family-sized purchasers.¹⁵

Opening of Oregon, California, and Overland trails (late 1840s)

This created a steady flow of westward migration of settlers who relied on the production and availability for Eastern finished goods and Midwestern building materials. It also propped up the Midwestern land market by ensuring a rapid turnover of farmland purchasers.¹⁶

American Civil War and Reconstruction Amendments (13th, 14th, and 15th)

This war ended the rapid migration westward and resulted in a population decline across major parts of the Midwest. The Reconstruction amendments formally ended slavery and verified the property rights of former slaves.

Post-Civil War Reconstruction

This era saw renewed industrial activity staled by destruction of war. It also began a wave of intensive railroad construction across the Midwest that created new market networks and reconfigured older ones.¹⁷

Meso-scale historical context: Illinois Expansion

Pattern of expansion

The following explains the 19th-century process of expansion within Illinois from three events: expansion of government (political), expansion of markets (economic), and expansion of people

(demographic). The expansion period within Illinois is part of the general process of United States expansion discussed above. But, there are local events that shaped the development of the prairie middle class.

Demographic expansion

The local pattern of settlement in Illinois during the expansion period was first laid out by geographer Harlan Barrows in 1910.¹⁸ He highlighted a sequence of settlement events that are summarized as follows:

1. “Geographic conditions determined the fact that the middle Illinois valley [see Figure 2.5] was settled first and slowly by southerners, and later and rapidly by northerners....”
2. “The early settlers were distributed with reference to geographic features. They established themselves within easy distances of the Illinois or a navigable tributary, usually avoided the unhealthy flood-plain, frequently chose terrace sites, and on the uplands, clung for years to the edge of the timber.”
3. “When the woodlands were taken up, newcomers were forced out upon the prairies.” [see Figure 2.6]
4. “The river was a great commercial highway during the period of the Illinois steamboat, 1835–1855. Its connection with Lake Michigan by the Illinois and Michigan canal, made possible by the physiographic process, marked an epoch in the history of the valley, and modified its life in important ways.”
5. “The occupation of the great prairies back from the streams and away from the timber was finally permitted in the decade 1850–1860 by the building of railroads and the introduction of modern farming machinery.”¹⁹

Building on Barrows's and later geographers' description of Illinois settlement, we can further characterize the local settlement pattern for the expansionary period within the study area. This was shaped by political expansion.

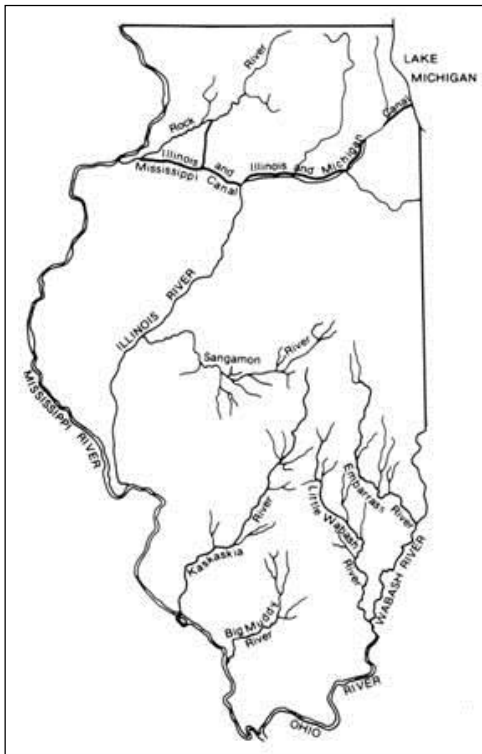


Figure 2.5. Illinois Rivers. Ronald E. Nelson, ed., *Illinois: Land and Life in the Prairie State*, Dubuque: Illinois Geographical Society, 1978), 125.



Figure 2.6. Illinois Prairies and Woodlands. Harlan H. Barrows, *Geography of the Middle Illinois Valley*, Bulletin No. 15 (Urbana: Illinois State Geological Survey, 1910), 69.

Political Expansion

First, expansion was predicated upon the previous history of cultural contact between Amer-Indians and Europeans of mostly French origin. Figure 2.7 shows the dispersed nature of French settlements. The irony of this history is that it allowed expansion to begin on as near a blank slate as one could imagine. Figure 2.8 shows how the initial settlement of towns populated the southern river valleys in an evenly distributed fashion. For the first generation of US citizens, there was no appreciable density of inhabitants. Displacement of Amer-Indians, begun by

Europeans, had effectively removed control of land resources from these groups. Although the resolution of colonial-era hostilities is officially marked by the end of the Black Hawk War in 1832, this conflict is better understood as the transition of Illinois – in settlers’ perceptions – from a risky frontier to stable place for homesteading.²⁰

Similarly, French settlement activity dating from the late seventeenth century remained marginal and confined to a few fortified trading locales mostly along the Kakaskia River in the south. As a result, the initial settlement of Illinois by US citizens was influenced as much by the historical circumstances specific to 19th-century US political-economics as it was by other external factors like natural terrain or prior occupancy. Beyond internal disagreements and their mastery of the physical world, nothing really blocked the new Americans from making their own history on the Illinois prairie.

Second, settlement by US citizens occurred in two major demographic migrations. These migrations began as settlers from the US southern states moved northward along the lower river valleys. This first migration was constrained by the need to access natural waterways and the need to settle on land with enough timber reserves for constructing homes. Once the Illinois & Michigan canal opened, the timber resources surrounding the Great Lakes could be shipped profitably into the prairie interior. This sparked the second wave of migration as settlers from the northeast were able establish farmsteads on land without standing timber reserves Figure 2.9. shows the population growth of Illinois based on density of inhabitants per square mile.

The Northwest Ordinance of 1787 is remarkable in that it was the first official land policy designed solely by democratic/liberal government and with purely market necessities as its core logic. But although it established an orderly hierarchy for local administration and created market tools for private individuals to purchase, sell, and resolve disputes over land; it did so

with a confused set of compromises endemic in the early republic's conflict over free and slave labor.²¹ So while the territory of Illinois did not allow slavery, there was never any consistent policy for the practical implications of free labor. As a result, the territorial and state legislatures argued over such instances as whether slaves living in the territory prior to 1787 were immediately free, whether slaves born in other areas were free upon entering Illinois, and what restrictions should be placed on the free enterprise of former slaves.

This last issue best illustrates the complexity of tensions brought about by designing a nation with two competing modes of production.²² Particularly for Illinois, it established tense political relations between white settlers with Northern or Southern affiliations. And it set up a second set of tensions between white settlers on either side and free black settlers. For our purposes, the important point is that in a capitalist system property rights are solidified by bureaucratic instruments (e.g., circuit courts, land offices, labor boards, etc.). Disputes cannot be considered legal if they remain outside the bureaucratic framework (e.g., vendettas, vigilantism, lynch mobs, etc.). When the governing body is internally conflicted, it is impossible to maintain coherent and consistent policies for its population. This leads to policies that favor single groups over the interests of others, but also to ones that force members of other groups to step outside of their group identity and present themselves as individuals. This leads to policies in which former slaves were required to present cash bonds as pledges of good behavior and self-sufficiency.

Market Expansion

It is best to identify three time periods to organize the market expansion in Illinois that contributed to the development of the prairie middle class. These periods are familiar to Illinois historians and social geographers and overlap characteristics already discussed. The periods relate to changes in the land market and they are: Early Settlement (1809–1837), Pre-Civil War

Settlement (1837–1860), Civil War and Recovery (1860–1880).²³

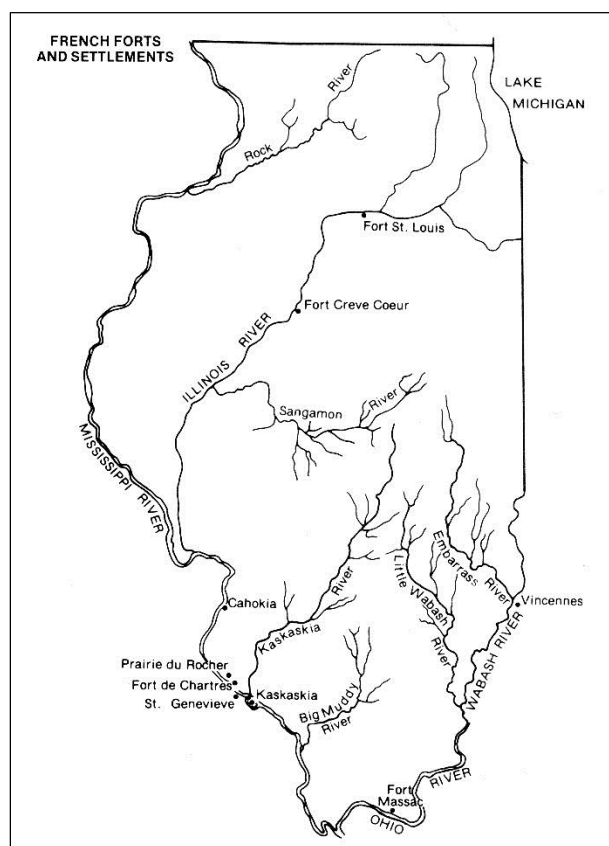


Figure 2.7. French Settlements in Illinois. Ronald E. Nelson, ed., *Illinois: Land and Life in the Prairie State*, Dubuque: Illinois Geographical Society, 1978, 113.

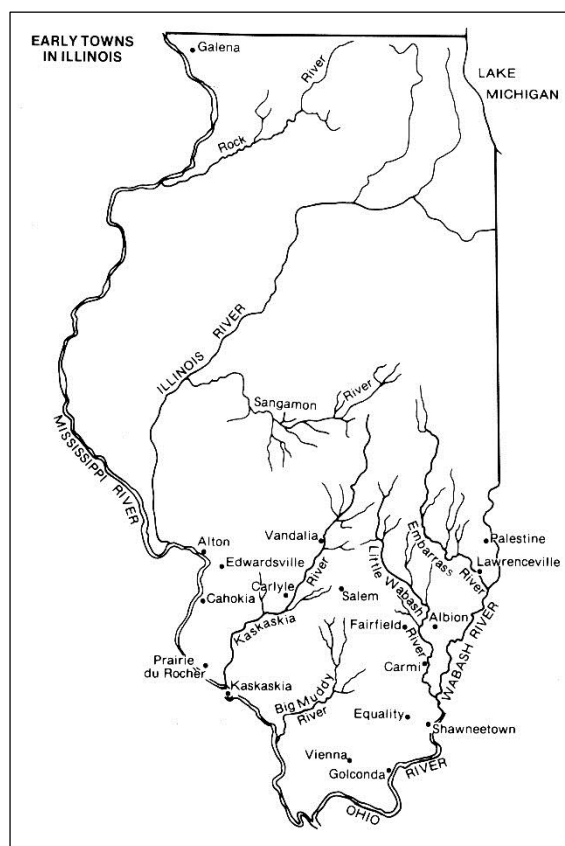


Figure 2.8. Early American Settlements in Illinois ca.1830. Ronald E. Nelson, ed., *Illinois: Land and Life in the Prairie State*, Dubuque: Illinois Geographical Society, 1978, 118.

Early Settlement 1809–1837. This period's two most important political events are the formation of the Territory of Illinois in 1809 (Figure 2.10) and its statehood in 1818. These events set the stage for the nature of land allocation that took place in the land market. Figure 2.11 shows Illinois at the year of statehood and indicates how the spread of government relied on the ability to set boundaries for private land ownership. This bureaucratic function presents itself as just the trivial nitty-gritty business of land ownership, but actually is the first stone for the foundation of modern state power. This is how strangers can come to live in a new community without needing

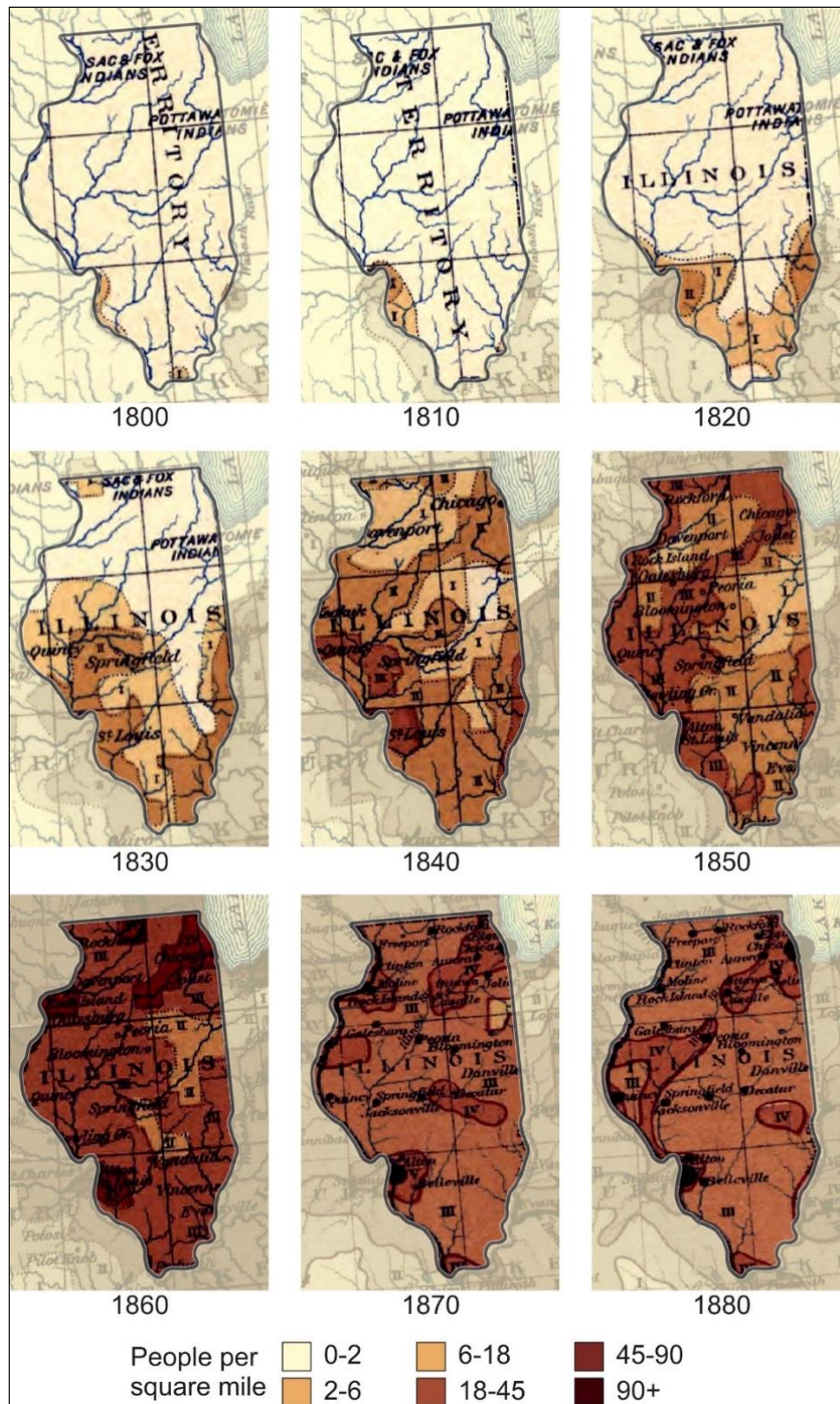


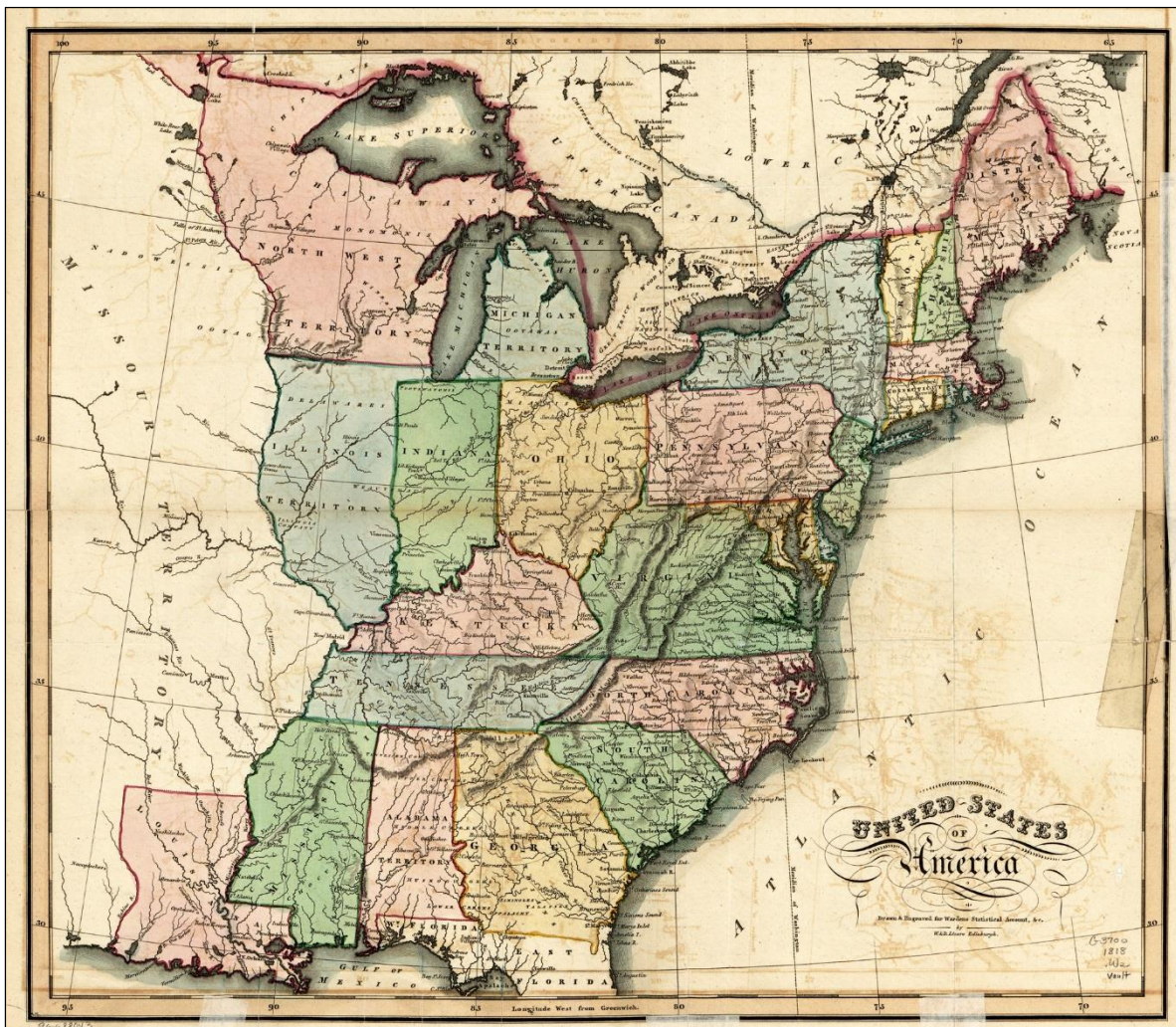
Figure 2.9. Illinois Population as Inhabitants Per Square Mile, 1800–1880. Statistical atlas of the United States, based upon the results of the eleventh census by Henry Gannett, <http://hdl.loc.gov/loc.gmd/g3701gm.gct00010>

personal agreements about sharing resources; the government made that decision for them.

Because private landholdings were inconsequential in the early part of the 19th century, access to land resources was gained primarily through US government sales. These sales were approximately 84% of land transactions and occurred in one of two ways.²⁴ Land was either purchased directly from the government in cash sales at government land offices (Figure 2.12), or it was acquired from the War Department as part of the Military Tract. The Military Tract was a 2.8-million-acre section of western Illinois set aside for War of 1812 veterans (Figure 2.13). These men drew lots for 160-acre quarter sections of land on which they could settle themselves or sell to someone else.²⁵

By the late 1830s, two important market conditions coalesced to dramatically speed land sales in Illinois. First, large portions of land were taken up by real-estate speculators so that transactions could occur outside the limited number of government land offices. Second, the overabundance of notes handed out as credit to private individuals by regional banks fueled a purchasing boom for Illinois real estate. As a result, the strong real estate market meant that more money was spent on land in Illinois between 1835 and 1836 than had been spent in the previous twenty years.²⁶ In actual acreage, these two years accounted for more than 50% of public domain land sold since 1820.²⁷ Besides farmsteads, much of the land sold became incorporated into towns for both real and speculative purposes. Between 1835 and 1837, more than 500 towns were platted throughout Illinois. James Davis recounts a tale from an Eastern magazine during this period in which a traveler to Illinois claimed that whenever someone introduced themselves to a farmer “before he returned your civilities, he draws from his breeches pocket a lithographic city, and asks you to take a few lots, at half their value, and earnestly presses you to buy as a personal favor conferred on you.”²⁸ By 1837, however, a collapse in private credit market

Throughout this period, the migration into Illinois was mainly confined to the lower portions of the state with most settlers arriving from the southern states. General population densities shown in earlier Figure 2.9 show this growth of habitation in a southwest to northeast trajectory. These settlements followed the natural waterways and preferred areas with easy access to wood lots for fuel and construction.



As shown earlier in Figure 2.9, by the next period (1837–1860), a second population center began in Chicago and moved southeast. This second wave was not only demographically

different from the first, but also occurred only because of the construction of artificial transportation infrastructures.

Pre-Civil War 1837–1860. Although this period began with a bursting of the land market bubble, two changes took place that insured growth in the population of Illinois. First, the invention of an affordable steel plow allowed a small family to bust prairie sod with greater speed and fewer laborers than before. A family-sized farmstead could now be brought to profitability well before every member household could make a productive contribution.

Second, the construction of canals and railroads meant that farm produce could be shipped out of areas away from rivers while open prairie locations could receive loads of heavy construction material. So not only could more acres now be considered profitable, but farmland could also be taken up in a sort of cellular fashion by many small-family social units. This was a pattern repeated across the Midwest in which young families would purchase quarter-section lots of 160 acres. As long as land prices were low and transportation to produce markets was cheap, the adults could plan to put only about 40 acres of land under cultivation by themselves. That many acres was usually enough to support the household and pay taxes on the fallow fields in order to save them for adult children or sell at a profit.²⁹

This migration pattern required two important political assumptions. First, homesteaders needed assurances that the property boundaries of their purchases would legally enforced and easily verified. This was the most basic practice function of clerk's offices in county courthouses; someone had to literally hold and keep unaltered paperwork. Second, homesteaders needed blanket unbiased application of property law. This was the only way to expect legal protections as a newcomer, but also was needed for encouraging mobility of others into the area which is



Figure 2.11. Map of Illinoise [sic]: Constructed from the Surveys in the General Land office and other documents by John Melish, 1818. Library of Congress Geography and Map Division Washington, D.C., <http://hdl.loc.gov/loc.gmd/g4100.ct000892>

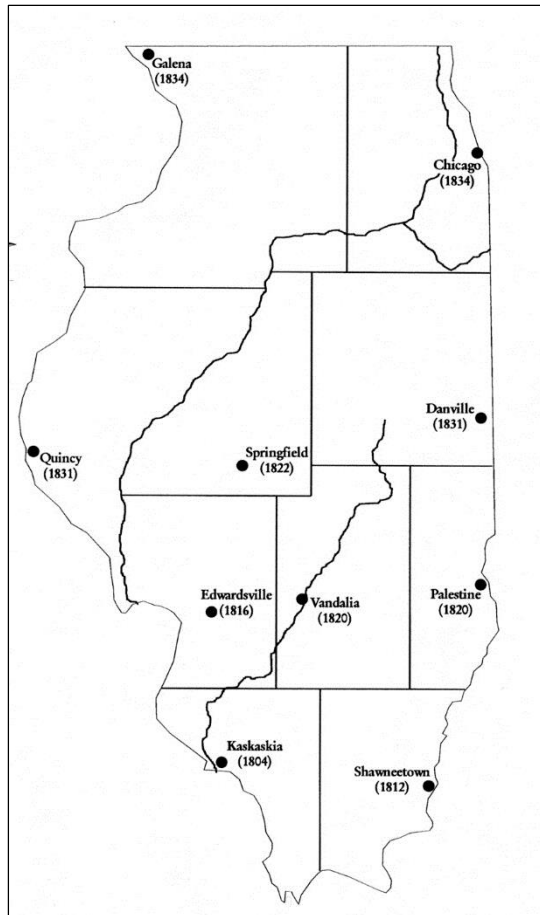


Figure 2.12. Illinois Districts and Land Offices, 1834. James E. Davis, *Frontier Illinois*, (Bloomington: Indiana University Press, 1998), 118.

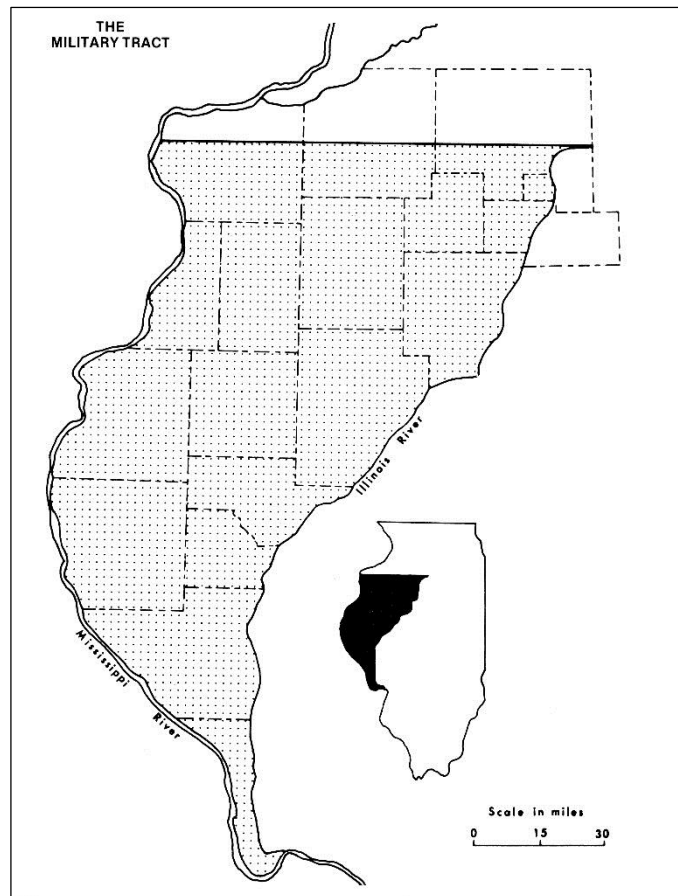


Figure 2.13. Illinois Military Tract. Ronald E. Nelson, ed., *Illinois: Land and Life in the Prairie State* (Dubuque: Illinois Geographical Society, 1978), 13.

essential in a land market designed for high volume-low acreage sales. As a result, these people were not only dependent on industrial technology for survival, but they were also dependent on a political structure that guaranteed property rights and encouraged state-wide improvements.

Even if they only understand this reality in an intuitive sense, it is this shared dependence, not necessarily on each other, but on external forces that was the basis for their class structure.

James Davis described this mindset nicely by stating:

Most settlers craved permanency and certainty. Although pioneers hunted, gathered, fished, and in other ways supplemented their income, most aspired to become commercial farmers or businessmen, eager to relegate hunting and fishing to sporting or recreational pastimes. They

welcomed transportation breakthroughs to speed their farm produce to distant markets and receive manufactured goods from remote sources, and they championed improved wholesale and retail distribution systems and enhanced credit arrangements. This implicitly meant town growth.³⁰

A household as an individual unit can appear totally independent and can even fiercely defend suggestions to the opposite. They, however, all experienced the same intense need to keep farm machinery in working order, to realize fair prices at the market, and to protect their property through the courts. Since all these things tended to stay in the background, it was only when some aspect of their mutual dependence became threatened that they responded in a single class-like voice.

For these reason, it is not surprising that there was always a co-mingling of public and private interest in transportation investment. These partnerships were first established early in this period with “an Act to establish and maintain a general system of Internal Improvement” on February 27, 1837. This act allowed for \$10 million of state funds to construct an internal network of railroads through Illinois. A commission of state representatives was created to ensure the rail network was evenly distributed throughout the state.³¹ Although the early railroad commission never accomplished much, it set the precedent for state government involvement in transportation projects. Two of these project were most transformative for the settlement of Illinois in this period.

a. Illinois and Michigan Canal 1848

The first transformative project was the Illinois and Michigan Canal (see top portion of Figure 2.5). Construction of this canal began in 1836 as a state sponsored project but was later rescued by private funds.³² The canal had supply problems of every kind and had labor difficulties and was not completed until 1848. But when it finally connected Lake Michigan with the Illinois River via Chicago, it effected settlement across the state in two major ways.

First, it reversed the flow of agricultural goods within Illinois. Formerly, trade circulated throughout the country in a counter-clockwise motion. Finished goods moved north and west from the Erie Canal across the Great Lakes and then down the Mississippi. Agricultural goods flowed down stream to the Mississippi where they were sailed east and north around the US coast. The construction of the Illinois and Michigan Canal allowed agricultural goods especially from Illinois towns to move north up to Chicago. This gave an Illinois farmer options for choosing the best market to send products. By the mid-nineteenth century, for instance, “a farmer in a northern Illinois town on the Mississippi River found that a bushel of corn could be shipped to Chicago for only 12 cents, while the steamboat freight to St. Louis was 30 cents.”³³

Second, the Illinois and Michigan Canal made affordable shipments of Great Lakes lumber to the Illinois interior prairies. This contributed greatly to the independence felt by newcomers from the North who could buy land previously considered inferior because it lacked wooded reserves. These lots were generally already taken up by first-wave settlers or absentee land speculators.

b. Illinois Central Railroad 1850

The second transformative transportation project was the Illinois Central Railroad. The Illinois Central Railroad was a private company that was incorporated through state legislation. The company was possible only because the US Congress passed a land grant legislation to sell 2.5 million acres of federal land throughout Illinois. The Illinois Central at that time was likely the largest land holder in the state. It not only allowed for a single entity to further develop the transportation network through the state, but it also allowed the railroad to sell large portions of its land grant to stimulate farming activities along its route. By 1859, the railroad sold over 1.2 million acres. But more important was the fact that these acres were sold in over 11,000 different transactions. Many of these sales were purposefully divided into 40-acre tracts specifically to

encourage the development of a dense, family-based agricultural customer network³⁴

Railroad construction set off a second wave of town building frenzy. Figure 2.14 shows how dense the railroad in Illinois was by 1855. This second wave of town building, however, was also a more noticeable downside. As Davis described, “railroads crippled towns they bypassed”:

A Chicago & Alton train vitiated Auburn in 1852 when it pulled into nearby Wineman, which also had a telegraph. Auburn's robust stage service vanished by 1853. Bypassed Auburnites responded by lifting their homes onto ox-drawn sledges and dragging them to Wineman.³⁵

c. Civil War and Recovery 1860–1880

This period is marked by demographic shifts in Illinois population from the aftereffect of the American Civil War and the concurrent economic depression. In general, the rural population of Illinois had greater access to manufactured goods flowing from the industrial factories of northeast US. At the same time, their improved output created an economic stagnation in prices that contributed to a large portion of the rural population moving toward growing urban centers like Chicago. As a result, as the center of the state declined in population density, there was a corresponding rise in populist politics seeking to protect agrarian political rights.³⁶ In many respects, this last part of the expansion period represents a thinning out of the excess growth of the previous decades.

As the artificial infrastructure became solidified, so too did the placement of towns. And more importantly, the division of agricultural labor took firm hold. Figure 2.15 shows the basic division of farm production in the state by the mid-20th century. The two figures to the right show the number of farms owned by a farm operator and the average size of each farm. Taken together these figures show at least an ostensible link between the densities of property holders with the type of farm production in an area.³⁷ This signals a patterned trajectory from the chaotic

period of town formation in the early 19th century to the ordered division of labor in the mid-20th century. To explain this process requires hypotheses developed from theories based on labor analyses.

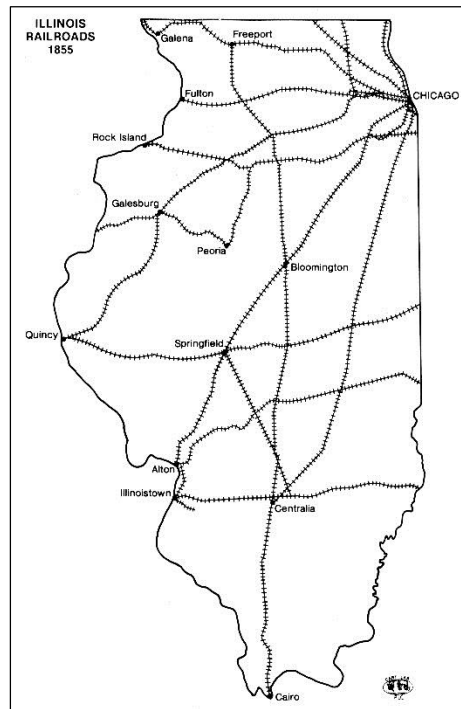


Figure 2.14. Illinois Railroads, 1855. James E. Davis, *Frontier Illinois*, Bloomington: Indiana University Press, 1998, 367.

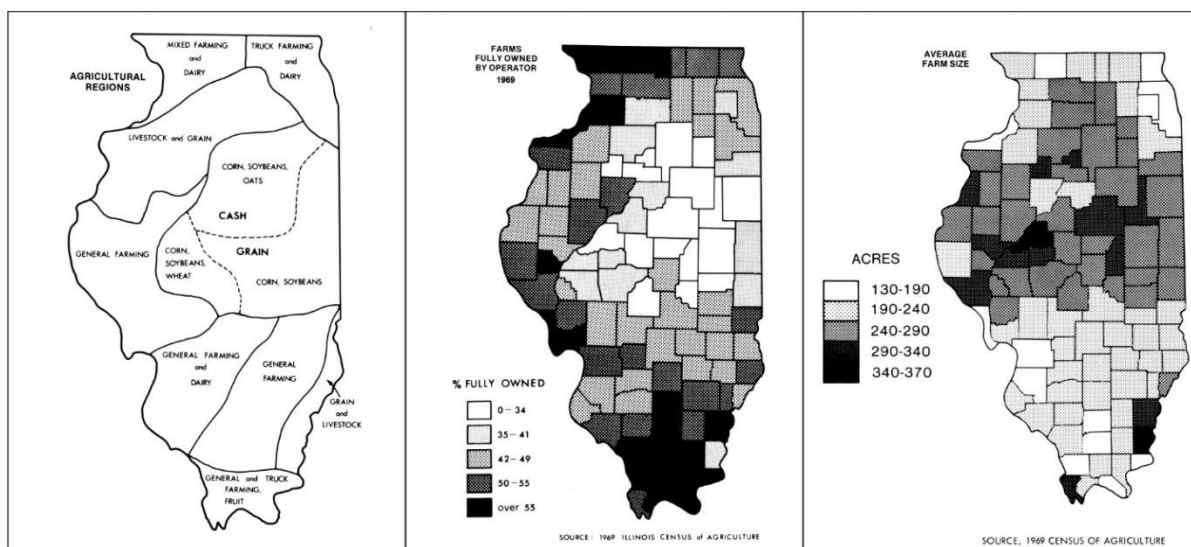


Figure 2.15. Illinois Farm Production and Land Holdings, ca.1967. Ronald E. Nelson, ed., *Illinois: Land and Life in the Prairie State* (Dubuque: Illinois Geographical Society, 1978), 184, 200, and 206.

Micro-scale historical context: New Philadelphia Expansion

New Philadelphia Introduction

When Frank McWorter handed his paperwork to a clerk in the Pike County Register of Deeds, he was performing an administrative routine occurring unremarkably throughout the Midwest. But this particular exchange, however, was extraordinary. Unlike other landowners in Illinois, McWorter was not white. And although he was as legally free as any white man, his racial status prevented him from bringing lawsuits against whites. Without this most basic political tool, McWorter was defenseless against the common risks of business i.e. enforcing contracts and protecting property. Because of this, McWorter was forced to ask for what white men were automatically given at adulthood.

In 1836, he successfully petitioned the Illinois legislature for basic legal rights to “sue and be sued, plead and by impleaded, purchase and convey both real and personal property.”³⁸ But unlike every other town in Illinois, or perhaps the nation, this newly registered town of New Philadelphia was created “understanding and believing that the said Frank has laid out the town intending to apply the proceeds of the sales for the purchase of his children yet remaining slaves.”³⁹ No other town was created under this bold of a banner against American slavery. But even with the circumstances and reasons for New Philadelphia’s creation being unique, we still cannot ignore the role of routine—this is where we find the dialectic of social change.

It was precisely because McWorter had to take the extra steps of arguing for the mundane right to hire a surveyor and to gain legal protection against non-payment of debts, that are reflected the clearest limits of black legal agency. The simple routine of laying out town grids and profiting from land speculation, gives a false appearance for a mundane aspect to the whole enterprise of New Philadelphia. But under this placid surface there was something very exciting

about the foundations for the community at New Philadelphia. And by any cursory examination of their material possessions, their lives were as plain and routine as any of their contemporaries. They seem to have bought the same types of goods as everyone else, made their livings like everyone else, and lived as squarely as anyone would in a flat square town. But because New Philadelphia was a founder town, platted by a single person, its formation needs to be understood within the biographical context of Free Frank. His is a story rich in evocative content and one that is anything but square.

Free Frank transitions to Frank McWorter

In 1777, Frank was born in bondage in South Carolina. Family oral history implies that George McWhorter, who owned Frank's mother, was the most likely candidate for Frank's father.⁴⁰ During the American Revolution, McWhorter and his family lived in the Piedmont region of South Carolina. This area was a sparsely settled frontier and it is from here that George volunteered with Colonel Henry Hampton's light dragoons who fought at the Battle of Camden.⁴¹ After the British victory at Camden, the growing uncertainty for American independence exacerbated tensions among Piedmont settlers who had divided loyalties for the Crown. In an area like the Piedmont with low population density and high evaluation for family loyalty, it was common for wartime infighting to continue as bitter feuds well after the Revolution. Although not proven, this seems a likely factor for George McWhorter's decision to move his family and five slaves to Kentucky sometime before December of 1795.⁴² Moving to Kentucky benefited McWhorter for other reasons as well because it was here in the Pennyroyal region of the state's interior that McWhorter purchased state subsidized land through the Kentucky Head Rights Claim System.

His initial purchases were made under the state's first land provision requiring the purchasers

to have resided in Kentucky prior to 1796. By the time McWhorter purchased more attractive land in Pulaski County, the Heads Rights Claim System now conditioned purchases to those who “live on the land, fence two acres, and cultivate a crop of corn.”⁴³

With the clear intention to allocate land to individuals who intended to apply their labor toward commercial improvements, Kentucky had to make some compromises for the legal use of slaves on the frontier. For instance, slaves could carry firearms after obtaining a permit from a local justice of the peace. They could also leave their owner’s property without supervision, but they could not travel to another residence without written permission. Across the frontier region of the South similar conditions existed. And it was common for slaving owning households to not only keep small numbers of slaves (perhaps less than six) but to also hire out their services to other households with none or just a few slaves. This was true particularly at times of high labor demand like harvest or construction.⁴⁴

While this dispersed ownership created higher mobility and a larger measure of quasi-independence for slaves than in the large plantation south, there were a number of state regulations restricting other aspects of how a slave could control their labor. For instance, slaves could not legally enter into a contract with a white person whether for wages or for supply orders. Even if the contract was within the undertaking of general hiring-out event, the act of negotiation between a slave and free person could not create a valid contract.⁴⁵ Slave Codes such as this acknowledged the labor needs of property owners on the frontier while also seeking to ensure the State’s responsibility for ensuring a stable power structure.

For a slave, however, this pattern of mobile labor did allow for nominal profit making opportunities. It was in this narrow opening that the rare circumstances for Free Frank’s experience and the development of New Philadelphia took root.

By the first decade of the 19th century, George McWhorter and his slaves carved a working farmstead from their original land and had generated enough profit for George to purchase more than 700 acres of unimproved land in Kentucky. In 1810, he purchased more unimproved acres but this time in neighboring Tennessee.

George's actions followed a typical frontier setter/speculator pattern wherein a commercially minded person bought land at low government prices, improved it to farm-ready condition, sold it for profit, and then moved on a new frontier section. Because most unimproved farm acres took one to two years of preparation before they could begin growing commercial crops, a family of settlers would need at least this much time to live off their cash reserves. Settler/speculators like McWhorter served to reduce the risk for these start-up years and had an important role in the practical aspects of westward migration⁴⁶

Although George McWhorter's general migration pattern was fairly typical for the period, his decision to leave Frank unsupervised on the Kentucky farm was less common. Tending the farmstead gave Frank a large degree of effectual freedom and seems to have transformed his relationship with George McWhorter into one similar to share-cropping arrangements common in later half of the century. Regardless of the details for their agreement, 1810 was a fortuitous year for Frank to gain more control over his labor.

The combination of western population growth and intensification of hostilities between the US and Britain caused a spike in gunpowder prices. Pulaski County sat in the heart of the crude niter reserves found throughout Kentucky. Niter was fairly easily refined to form saltpeter, one of the three key ingredients of gunpowder. Producing saltpeter from the surrounding limestone cave system required only a minimal capital investment in basic mining tools and boiling pots, but really was more an investment in brute labor. Because the price of saltpeter between 1810

and 1812 increased approximately 588%, Frank's saltpeter operation meant that his surplus labor now had enormous commercial potential.⁴⁷

Juliet Walker provided convincing estimates for Frank's earning potential during the peak years from 1810 to 1816. Working three days per week, if he produced half as many pounds of saltpeter as the average laborer in nearby mills, and he if sold his product for only half the average reported market price; Frank would have easily generated enough cash to pay his standard monthly hiring-out rate and to save for the two manumission payments he made in 1817 and 1819. The first payment for \$800 he delivered to William Denham to release his pregnant wife Lucy. The second payment again for \$800 he gave to George McWhorter's sons for his own manumission (McWhorter died four years earlier). Once released, Frank registered himself under the name Free Frank.⁴⁸ If nothing else, this demonstrates the power of human labor set mobile within perfect market conditions.

For the next decade, Free Frank lived in Kentucky where he continued his commercial activities and began purchasing unimproved land with other speculator partners. During this time, he and Lucy were involved in a court case with the estate of Lucy's former owner. This lawsuit and the strategy Frank used in land dealings will be discussed in the next chapter. Here it is important to note that the period of freedom in Kentucky demonstrated a number of Free Frank's entrepreneurial qualities. First, he was willing to take commercial risks in frontier land speculation. Second, he was willing to partner with white speculators who, at the very least, provided an implicit political insurance against spurious property disputes. Third, even though Frank and Lucy fought, and won, legal battles against their former owners in Kentucky, they nevertheless took large financial risks to leave the slave South for just a slight increase in political rights afforded them on the prairie.

Leaving the South was later cited as an important reason for purchasing land in Illinois. In a deposition given to the Circuit Court at Pike in 1856, Joseph Porter recalled that “Frank became desirous to remove from Pulaski County to a free state. Dr. Elliot hearing this made a proposition that he would take Frank’s land in Pulaski for one of the tracts he got from Oldham in Illinois.”⁴⁹ Porter recounted how he agreed to visit the Illinois property and recommend that Free Frank and Elliot make the trade. The land in question was part of the Military Tract surveyed for War of 1812 veterans and was a 160-acre quarter section touching the north end of the plot where Frank would lay out New Philadelphia. This transaction, however, was only the first requirement Free Frank and his family needed to satisfy before lawfully settling in Illinois. Since its first days of statehood, the Illinois legislature passed a number of Black Codes that regulated the movement of slaves and freedmen within its borders. After 1828, any black settler looking to homestead there had to present their county courthouse with a “Certificate of Good Character” and a bond for \$1,000. Free Frank’s certificate spoke to his life history as a skilled and honest business and was signed by four local white residents (including Joseph Porter). The second requirement for a \$1,000 bond was satisfied by Free Frank showing he owned enough land to keep his family from becoming wards of the State.⁵⁰

In 1830, Free Frank and Lucy moved to their new land in Illinois. They brought with them three of their free-born children and a son whom they recently manumitted; but they had to leave three other enslaved children in Kentucky. Before leaving, Frank sold his remaining land for just over \$355: Walker estimates his original investment at only \$10. This sum of cash surely was crucial for covering the startup expenses of homesteading, but was not actually the most fungible assets Frank and Lucy carried.

In a bitter realization of the added hazards free blacks faced traveling the American frontier,

Walker estimates the 1830 market value for Frank and Lucy's family was at least \$4,000.⁵¹ This put Frank and Lucy at real peril because the fast, popular route to Illinois crossed lengthwise through Kentucky. This was terrain widely known for its infestation with opportunistic slave catchers. Considering the most generous estimate of Free Frank's material net worth at best was perhaps \$1,000, one can imagine that the potential market value of family's bodies was a source of heavy worry. For these reasons, it is clear why the family's oral history recounts their decision to take the longer, but safer, route north through Kentucky and then west through Indiana. This decision almost certainly delayed their travel so that they were forced to winter-over a few agonizing miles from their destination. Figure 2.16 shows Free Frank's likely route drawn over an 1835 travelers' guide from Walker's description. But even with this complication, Free Frank completed what was ostensibly a typical 19th-century migration pattern for southerners. It was, however, all the other atypical aspects of his life that proved the transformed potential of market relationships even over the most petrified racial ideologies. True, it was hard work and providence that set the context for Free Frank's success, but it was cold, hard cash that unlocked his labor from a state of zero control to one where he could set reasonable conditions for how he used his body. Self-control was then, as well as now, the non-negotiable criteria for a middle-class life.

From the initial 160-acre tract, Free Frank and sons began selling cash crops and raising livestock. They generated enough profits to increase their land holdings to 800 acres. Most of this land was purchased from the federal government at subsidized rates. Even at the generous terms, however, Table 2.1 shows the total cash investment made by Frank and his sons was an impressive \$2,042.⁵² Figure 2.17 shows the clustering of his purchases.

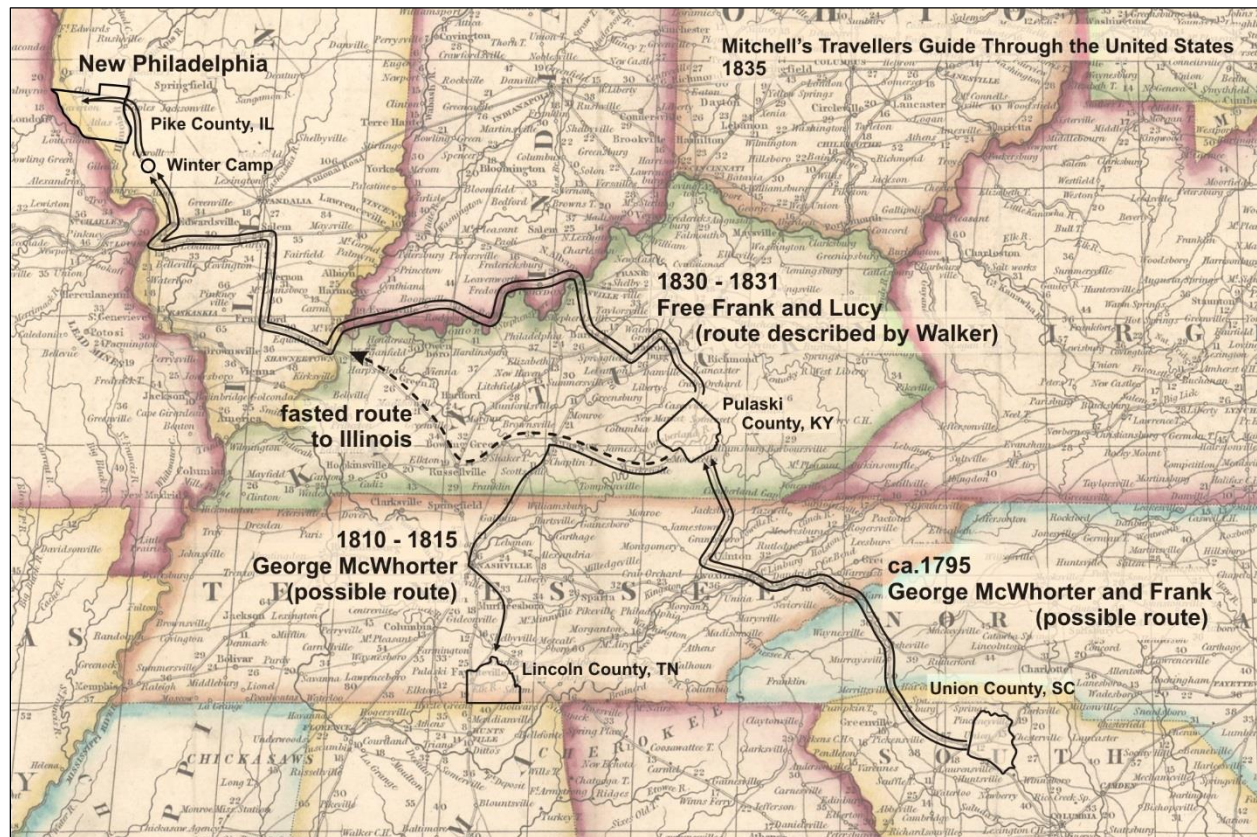


Figure 2.16. Free Frank's Migration drawn onto an 1835 Travelers' Guide (based on Juliet Walker's Narrative). Map detail from "Mitchell's Travellers [sic] Guide through the United States, 1835," Library of Congress Geography and Map Division Washington, D.C., <http://lccn.loc.gov/98685469>

The first land purchase Frank made was in 1835. This tract was an 80-acre section touching the southern end of his first farmstead. This was also the location where New Philadelphia was platted in 1836 (Figure 2.18 and Figure 2.19). Town founding was a popular form of land speculation in part of Illinois during the late 1830s. In Pike County alone, 23 towns were platted within three years of New Philadelphia's founding. These towns were taking advantage not just of the general growth in population, but also from the kind of demographic expansion that government was fostering. The two-fold effects from infrastructure expansion and Federal laws like the Preemption Act encouraged the transformation of frontier into farmsteads. These effects were intended to encourage the settlement of land by as many small family units as possible. The success of these policies created a dense network of family farms that needed the attendant

services from grocers, blacksmiths, farriers, etc. In this environment, the potential value of a well-positioned town was obvious. There were however, potential dangers for freedmen like Free Frank, who occupied an uncertain legal status.

Table 2.1. Real Property Purchased by Free Frank and His Sons in Pike County, 1830–1839 as Identified by Juliet Walker

Tract	No. of Acres	Date of Purchase	Purchase Price	Grantor	Grantee
A	160	9/13/1830	\$200	G. Elliot	Free Frank
B	80	6/11/1835	100	U.S. Govt.	Free Frank
C	80	2/12/1836	100	U.S. Govt.	Free Frank
D	40	4/23/1836	50	U.S. Govt.	Free Frank
E	40	5/13/1836	50	U.S. Govt.	Squire Frank
F	40	6/10/1836	50	U.S. Govt.	Commodore Frank
G	80	6/10/1836	112	Higbee	Frank McWorter
H	160	11/13/1839	480	Lamb & Dunlop	Frank McWorter
I*	120	9/29/1839	900	Adams	Commodore McWorter
Total	800		\$2,042		

*Final payment made in 1852.

Source: Pike County Tract Index, Hadley-Berry (T4SR5, 6W), Pike County Courthouse, Pittsfield, Illinois, Reproduced here from Juliet Walker, *Free Frank*, 94.

The Illinois Black Codes sought to limit the amount of free African Americans settling within the state. They also, however, limited the rights of those freedmen once they passed the extra scrutiny to settle. Although Free Frank could legally own property within Illinois, the Black Codes forbid him from a number of civil rights like voting and testifying in court. Without the last right in particular, Frank's property was always threatened from spurious preemption claims or any other contested business contract. To secure these rights, Free Frank sought official

recognition from the Illinois legislature and from the local white community. In January 1837, he gained formal legal recognition from Illinois General Assembly when they passed “An Act to Change the Name of Free Frank” that stated:

Sec. 1 Be it enacted by the people of the State of Illinois represented in the General Assembly, That the name of Free Frank, of the county of Pike and State of Illinois, be and is hereby changed to that of Frank McWorter, by which latter name he shall hereafter be called and known, and sue and be sued, plead and by impleaded, purchase and convey both real and personal property in said last mentioned name, and the children of said Free Frank shall hereafter take the name of their father, as changed and provided for by this act.⁵³

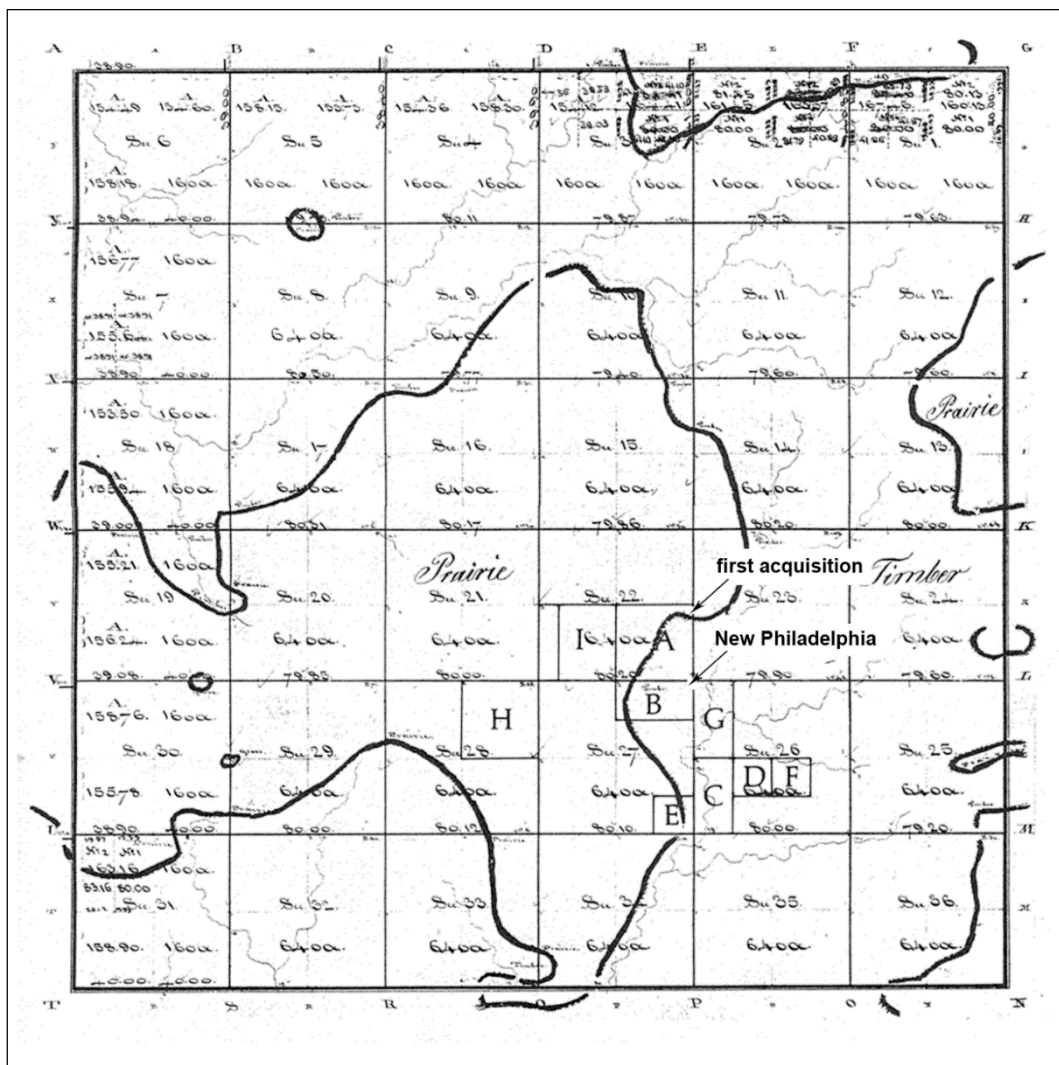


Figure 2.17. Section Map Showing Free Frank's Land Purchases in Illinois. From Juliet Walker, *Free Frank*.

In order to secure official recognition from his local community, Frank registered a certificate of good character at the Pike County courthouse. Although Frank had initially registered his Kentucky certificate soon after migrating to Illinois, this second one was almost certainly intended to safeguard against any property disputes from procedural technicalities after his name change. The certificate stated:

Pittsfield, Pike County Illinois

May 17, 1837

Whereas the person designated in the within certificate as Free Frank a man of color, has presented the paper referred to as a voucher of his character in Kentucky, and the Subscribers believing the same, and further having known him, many of us, for several years as a Farmer, owning and residing upon some land purchased by himself, and having around him the family mentioned in the within certificate, all of whom are respectable in their deportment, and knowing that the said Frank, by an act of the Legislature of the State of Illinois has been permitted to take the name which he now bears of Frank McWorter ... and that he has laid off a town which he calls Philadelphia, and understanding and believing that the said Frank has laid out the town intending to apply the proceeds of the Sales for the purchase of his family yet remaining as Slaves, two young women about twenty years of age—the said town is in a handsome country, undoubtedly healthy.

We therefore recommend this coloured man Frank as an honest industrious man to all persons who may take an interest in his behalf, and that of suffering humanity for Slavery. And further that we are informed and believe that Frank has for a valuable consideration purchased two of his sons, who are now free men.⁵⁴

In 1839, Frank secured Lucy's rights to their estate by officially remarrying her. This came forty years after their original marriage performed while they were both in bondage. These three acts illustrate the inanity of all bureaucracies in how they seem to universally require (and re-require) citizens to verify their public identity.⁵⁵ Doubtless how absurd these three performances must have seemed to Free Frank; the only person who could access power from the political infrastructure and deliver it to his heirs was the *new* man Frank McWorter.

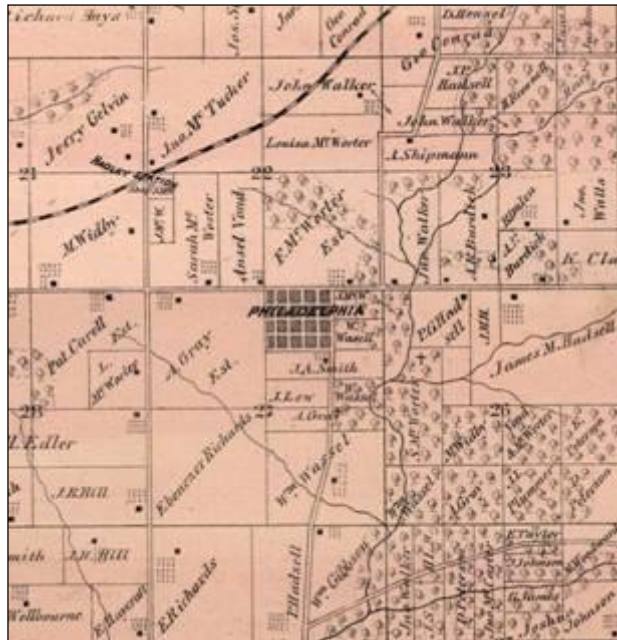


Figure 2.18. 1872 Section Map showing location of New Philadelphia.

<http://www.anthro.uiuc.edu/faculty/cfennell/NP/pindex.html>
/mapindex.html

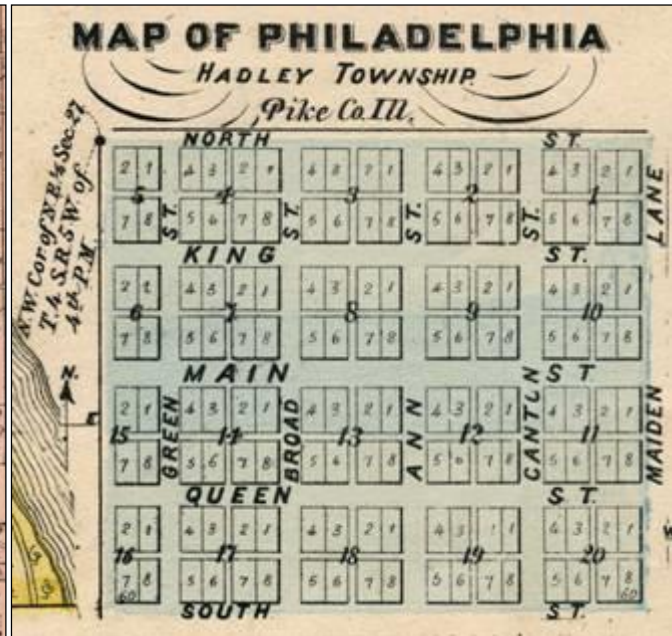


Figure 2.19. 1872 Plat Map for New Philadelphia.

<http://www.anthro.uiuc.edu/faculty/cfennell/NP/mapindex.html>

Development of New Philadelphia

By 1837, McWorter had the property rights equivalent to any white citizen. With these rights McWorter could confidently sell lots within New Philadelphia. After two years he sold at least four lots for between \$59 and \$60. More importantly though, New Philadelphia attracted the attention of a grocer from nearby Kinderhook who set up a satellite store. New Philadelphia sat in convenient location almost midway between the established road connecting the Pike County seat at Pittsfield and the land office at Quincy. Additionally, Pike County constructed two roads that touched New Philadelphia. One connected two established towns of Barry and Griggsville. The other connected New Philadelphia with Rockport. This location allowed McWorter to sell at least 4 more lots within New Philadelphia plus a 10-acre section adjoining it. These transactions generated enough proceeds to manumit Frank's daughter Sally in 1843.⁵⁶ Although the land

sales were certainly dampened by the economic panic of 1837, New Philadelphia was beginning to resemble a permanent habitation center by the early 1840s. A recorded account by the family of the mail carrier during this time stated:

There were only six houses on the mail route from Griggsville to Kinderhook when he carried mail. One of these was Joab Shinn's east of present New Salem. ... The next settlement after Shinn's was at Philadelphia (known also as New Philadelphia), bustling metropolis of the early days and the largest town on Wilson's mail route. There were three houses in Philadelphia. The celebrated "Free Frank" was proprietor of this early Pike county town, which at one time was a place of great promise. ... He platted the town into 144 town lots, 141 of them still unsettled when Wilson carried the mail [in 1841]. Main Street, over which went the mail, divided the town into equal parts, north and south. ... The center of the budding metropolis was at the intersection of Main and Broad Streets.⁵⁷

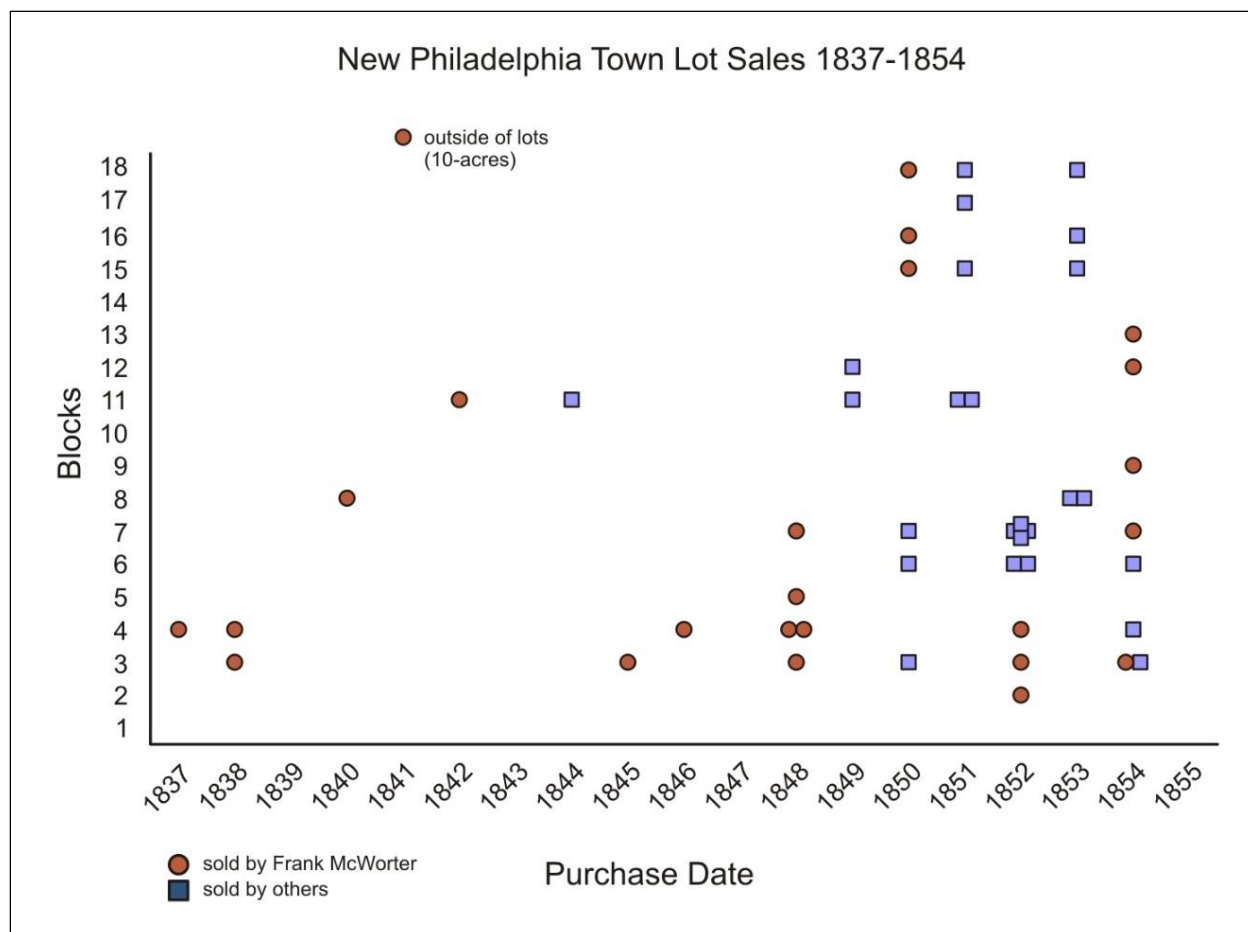


Figure 2.20. Graph Drawn from Juliet Walker's Deed Research Results.
 Source: Juliet Walker, *Free Frank*.

Throughout the 1840s and 1850s, New Philadelphia’s population continued to grow.

Unfortunately, census records for this period did not distinguish residents living within the boundaries of New Philadelphia; they simply recorded any residents on the same page for all Hadley Township. There is, however, a second set of documents that illustrate the commercial energy created by platting out a town. The Pike County Deed Record Books at the county seat in Pittsfield record sales of town lots. Table 2.2 shows that these records tracked 49 separate sales made between 1837 and 1854, but 25 of those transactions were ones in which the seller was not Frank McWorter. Figure 2.20 shows these “second generation” sales through time. It illustrates the point when which this land market likely became self-perpetuating.

Table 2.2. New Philadelphia Town Lots Sales 1837–1854 from Juliet Walker.

Date	Block:Lot	Grantor	Grantee	Date	Block:Lot	Grantor	Grantee
4/28/1837	4:6,8	F. McWorter	J. Ray	11/20/1851	17:1,2	A. Wilson	C. Luce
4/28/1838	3:4	F. McWorter	H. Brown	11/20/1851	18:1-8	A. Wilson	C. Luce
7/5/1838	4:4,5,7	F. McWorter	H. Brown	2/3/1852	7:3,4	B.D. Brown	J. Roberts
8/8/1840	8:1,2	F. McWorter	C. Luce	3/8/1852	7:1-4	J. Pottle	C. Luce
5/27/1841	*10 acres	F. McWorter	J. Robinson	3/10/1852	7:3,5,6	Sheriff of Pike Co.	F. McWorter
5/30/1842	11:1,2	F. McWorter	W. Bennet	3/18/1852	6:1,2	J. Pottle	C. Luce
7/5/1844	11:1,2	W. Bennet	E. Franklin	4/8/1852	6:S1/2 of 1,2,3,4	C. Luce	W. LaSalle
11/26/1845	3:6	F. McWorter	J. Bixler	9/8/1852	7:S1/2 of 1,2,3,4	C. Luce	W. LaSalle
5/16/1846	4:S1/2 of 1	F. McWorter	S. Burdick	9/15/1852	2:2	F. McWorter	?
2/1/1848	5:1,2,7,8	F. McWorter	J. Pottle	9/15/1852	3:2,3	F. McWorter	S. Burdick
2/1/1848	7:1-8	F. McWorter	J. Pottle	9/15/1852	4:4,6,7,8	F. McWorter	S. Burdick
8/13/1848	3:7,8	F. McWorter	A. Hadsell	1/7/1853	8:8	S. Hull	D. Green
9/4/1848	4:N1/2 of 1	F. McWorter	D. Kittle	3/24/1853	15:7,8	C. Luce	S. Clark
9/11/1848	4:N1/2 of 7,8	F. McWorter	S. Burdick	3/24/1853	16:1,6	C. Luce	S. Clark

Table 2.2. (cont'd)

Date	Block:Lot	Grantor	Grantee	Date	Block:Lot	Grantor	Grantee
3/29/1849	11:1,2	E. Thomas	E. Clark	3/24/1853	181-8	C. Luce	S. Clark
8/10/1849	12:1,2	A. Stone	I. Ware	3/24/1853	8:1,2	C. Luce	C. Arnold
3/27/1850	15:7,8	F. McWorter	A. Wilson	4/5/1854	3:3,5	D. Kittle	J. Taylor
3/27/1850	18:1-8	F. McWorter	A. Wilson	4/5/1854	4:N1/2 of 1	D. Kittle	J. Taylor
4/8/1850	6:N1/2 of 1,2	C. Luce	G.W. Berriam	9/6/1854	7:5-8	F. McWorter	S. McWorter
9/8/1850	7:1-4	C. Luce	G.W. Berriam	9/6/1854	9:5	F. McWorter	K. McWorter Clark
9/27/1850	16:1,2	F. McWorter	A. Wilson	9/6/1854	12:5	F. McWorter	S. McWorter
11/6/1850	3:1,2	N. Smith	S. Wesmith	9/6/1854	13:1-8	F. McWorter	S. McWorter
8/9/1851	11:1,2	J. Wilson	P. Hadsell	9/6/1854	3:4	F. McWorter	E. Clark
10/5/1851	11:2	E. Franklin	E. Thomas	11/20/1854	6:part of 6	S. Hall	J. Roberts
11/20/1851	15:7,8	A. Wilson	C. Luce				

*SW/NE of NE 1/4sec. 27 (10 acres)

Source: Pike County Deed Record Book, Town Lot Index, "Philadelphia," 46–61, 269–71, Pike County Courthouse, Pittsfield, Ill. Reproduced from Juliet Walker, *Free Frank*, tables 8–9.

From the mid-1850s the population of New Philadelphia continued to grow. Although no adequate description for the town exists, Juliet Walker combined data from U.S. and Illinois censuses and cross-referenced those names with ones listed as property owners in New Philadelphia. Walker estimated that as early as 1850, "there were at least eleven residences in New Philadelphia with a population of fifty-eight people." She also estimated that thirty-four white residents took up eight dwellings, and that "there were also three black families with twenty-two members. Two of these black families had one white person residing in the household."⁵⁸ The occupational diversity within the town was more important than the raw

population numbers for New Philadelphia. For townspeople Walker could identify as living within the town, Walker showed that while New Philadelphia was a typical service center based on the variety of occupations, it was atypical for the size of its population. Walker stated:

A comparison with the occupational distribution of other towns reveals that New Philadelphia had a greater occupational distribution than did the next three larger towns: Martinsburg, with one carpenter, one cooper, and one wheelwright; New Salem, with one carpenter, one cooper, one blacksmith, one wheelwright, and one clergyman; and New Bedford, a milltown, with four carpenters, one blacksmith, one merchant, one cabinet-maker, and five millwrights. New Philadelphia's occupational distribution, in fact, was comparable to that of Florence, which had a population of 99.⁵⁹

Table 2.3 shows the occupational distribution Walker located at New Philadelphia from cross referencing available document.

Table 2.3. Juliet Walker's Occupational Distribution at New Philadelphia, 1850.

Occupation	Name	Block: Lot
Shoemaker	S. Burdick	4:S1/2 of 1
Merchant	D.A. Kittle	4:N1/2 of 1
Cabinet-Maker	J. Pottle	6:1,2,7,8 & 7:1-8
Wheelwright	J. Rawlin	?
Baptist Teacher	C.S. Luce	8:1,2
Shoemaker	A. Taylor	?
Postmaster	C.S. Luce	8:1,2
Cabinet-maker	Solomon McWorter	? (prob. with Pottle)
Blacksmith	Alexander Clark	15:1,2
Postmaster	Calvin Arnold	8,1,2

Source: U.S., Bureau of the Census, "Population Schedules of the Seventh Census of the United States, 1850, Illinois Pike County," T4SR5W [Hadley township]; and Pike County Deed Record Book Town Lot Index, "Philadelphia," 46–61, 269–71, Pike County Courthouse, Pittsfield, Ill., reproduced from Juliet Walker, *Free Frank*, table 10.

In 1853, under a new Constitution, the Illinois Assembly passed black exclusion laws that forbid any African American from settling to the state. These laws not only prevented free blacks from settling at New Philadelphia, but also complicated McWorter's plan to free his children still in bondage. By Frank's death in 1854, he and his sons had freed nine members of their family. Once Solomon McWorter became executor of his father's estate, he sold as much property and town lots necessary to complete the manumission plan started by Frank. By 1857, sixteen members of the McWorter family were freed from slavery through the entrepreneurship of Free Frank (Table 2.4).

Table 2.4. Juliet Walker's Free Frank Members Purchased, 1817-1857.

Date Freed	Name	Relation to Free Frank	Price
1817	Lucy	Wife	\$800
1819	Free Frank		800
1829	Frank Jr.	Son	2,500 (est.)
1835	Solomon	Son	500
	Sally	Daughter	
1843	Juda	Daughter	950
	Commodore	Grandson	
	Permilia	Granddaughter	
	Louisa	Daughter-in-law	
1850	Calvin	Grandson	4,380 (est.)
	Calvin	Grandson	
	Robert	Grandson	
1856	Lucy Ann	Granddaughter	3,030
	Charlotte	Granddaughter	
	Child of Charlotte	Great Grandchild	
1857	Child of Charlotte	Great Grandchild	994

Source: Juliet Walker, *Free Frank*, table 14.

Abandonment of New Philadelphia

The 1860s was a period of racial and social strife for the United States as a whole. The full abolition of slavery allowed large numbers of former slaves to leave the South. As several black towns appeared throughout the US, New Philadelphia was an attractive location for this new wave of settlers. Charlotte King provides the best demographic analysis for New Philadelphia to date.⁶⁰ Her work combines available data from US and Illinois State censuses. Although neither census listed New Philadelphia as a separate entry, King cross referenced the names and developed the finest grained description available for the demographic complexion of the town. By 1865, the town's population peaked at 160 residents. But by the 1870 and 1880 censuses, the population was experiencing a steady decline. The construction of a northward loop by the Hannibal & Naples Railroad directly caused this rapid flight from the town. New Philadelphia was in the center of a direct east-west line between Griggsville and Barry. If the railroad followed an expected straight line, all three towns would have stops along the route. The loop, however, effectively bypassed New Philadelphia and placed its residents at a commercial disadvantage to others directly touching the railroad. As a result, the town could not keep enough residents to warrant being officially registered and so in 1885 paperwork was filed at the Pike County Courthouse to vacate the town. By this time, however, it appeared to have been just a formality since a vanity press publication in 1872 was already describing the demise of New Philadelphia.⁶¹

King's census analysis shows the striking decline of the town after the railroad bypass, but also shows an interesting correlation between the reversal of the racial makeup after the enactment of the Illinois Black Codes from 1848 to 1853. Table 2.5 shows a summarized version of King's population estimates for New Philadelphia. Figure 2.21 shows the population growth

from the national to county levels. Figure 2.22 shows population growth from state to town level and Figure 2.23 reveals the reversal of the racial makeup in the 1850s and the decline for the population in the 1870s.

Table 2.5. Summary of Charlotte King's demographic analysis results.

	White	Not white	Total	Households
1850	20	38	58	11
1855	63	18	81	15
1860	93	21	114	25
1865	112	48	160	29
1870	92	31	123	25
1880	70	14	84	17

Source: Charlotte King, "New Philadelphia Census Data," Center for Heritage Resource Studies, (College Park: University of Maryland), <http://www.heritage.umd.edu/CHRSWeb/New%20Philadelphia/New%20Philadelphia/censusfiles/CensusDataMenu.htm>. Last accessed Mar. 15, 2015.

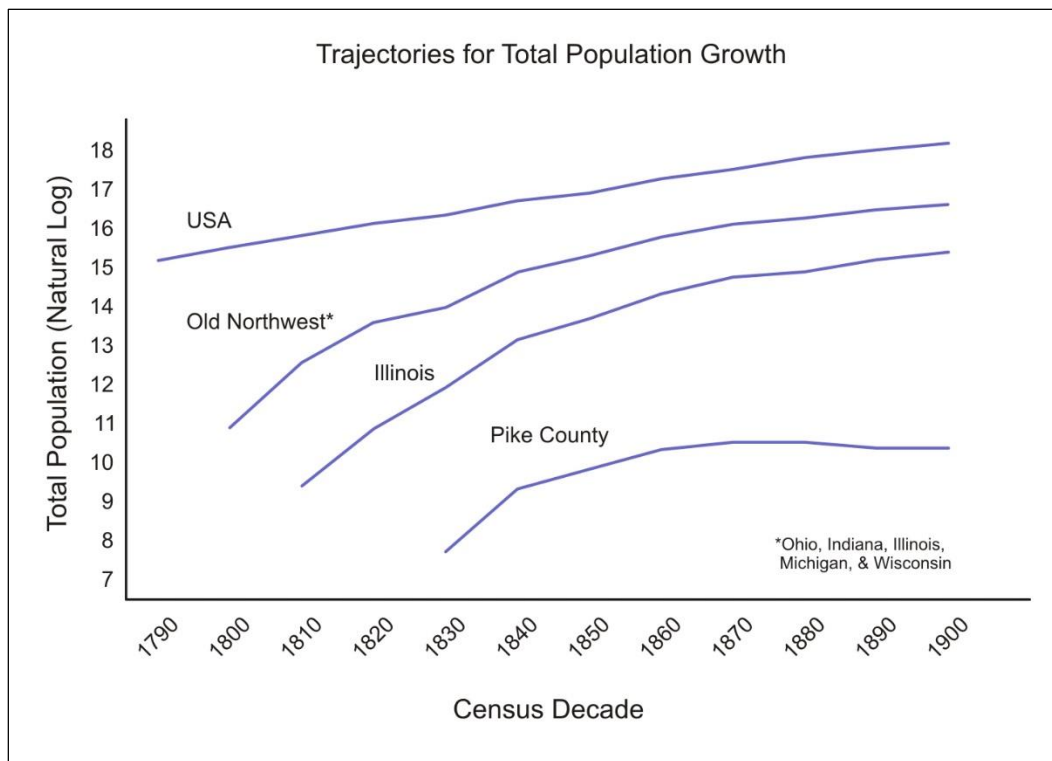


Figure 2.21. Population Graph from National to County Level.

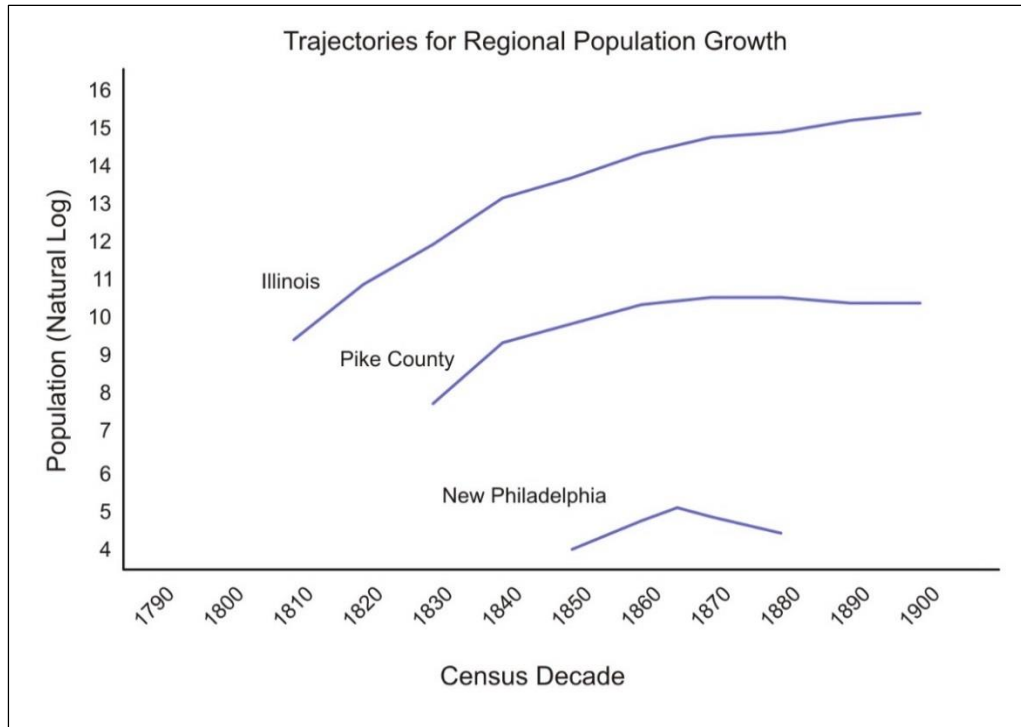


Figure 2.22. Population Graph from State to Town Levels. Source for New Philadelphia Charlotte King, "New Philadelphia Census Data."

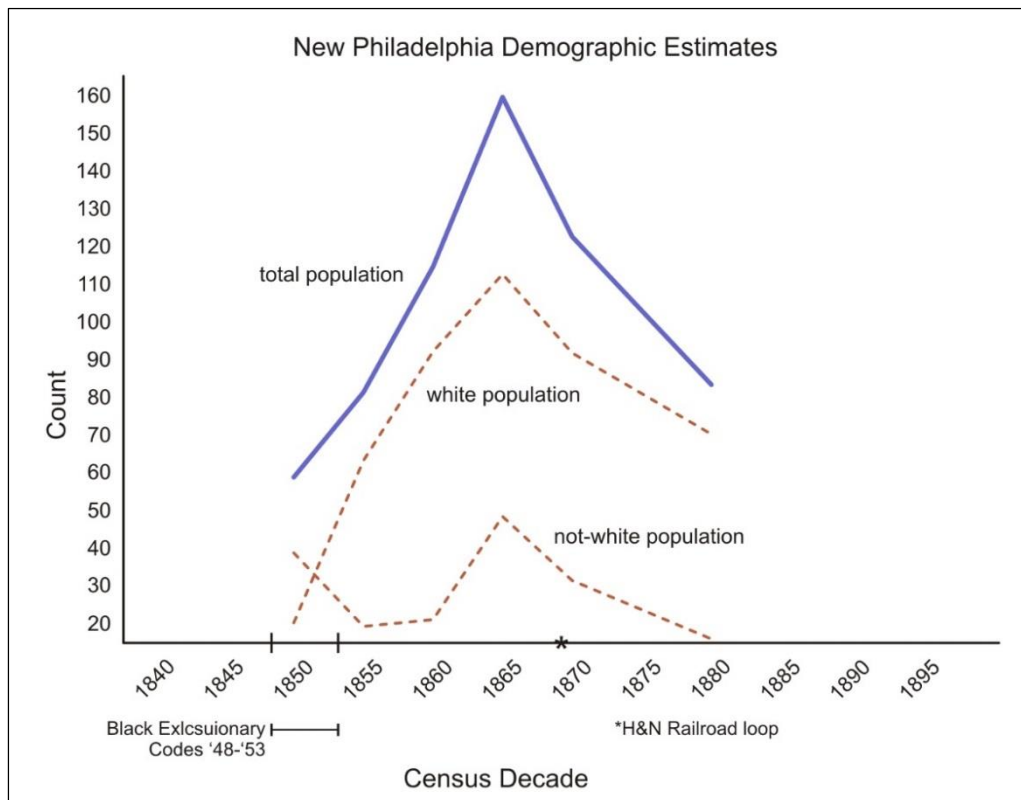


Figure 2.23. Population Graph for New Philadelphia. Source: Charlotte King, "New Philadelphia Census Data."

A second correlation shown from King's analysis is the reversal of northern and southern origins for residents who migrated to Illinois. Prior to 1870, northern immigrants outnumbered southerners. Table 2.6 and Figure 2.24 show that this trend reversed after the American Civil War and correlated with the transition of New Philadelphia town lots to agricultural use.

Although some commercial activities continued within the former town borders, many of the remaining residents opted to farm on land away from the town which they either owned or rented. At the turn of the 20th century, about eight households including a blacksmith shop existed in the town. Oral histories from the 1970's include a hand drawn map by Larry Burdick who depicted the town as he remembered it from the early 1900s. Figure 2.25 shows Burdick's map; the structure labeled "4" in the center south is the currently the only habitable structure remaining.⁶² But, a 1939 aerial photo (Figure 2.26 and Figure 2.27) shows that by this time nothing resembling a town remained.⁶³

New Philadelphia likely would exist today if not for the construction of the Hannibal & Naples Railroad just one mile north of New Philadelphia that pulled the area's population away from the site.

Table 2.6. New Philadelphia Population Origins from King's results.

	Illinois	Midwest	North	South	Foreign	total
1850	13	9	21	12	3	58
1860	50	17	26	19	2	114
1870	69	10	16	22	6	123
1880	53	15	3	10	3	84

Source: Source: Charlotte King, "New Philadelphia Census Data," Center for Heritage Resource Studies, (College Park: University of Maryland), web resource: <http://www.heritage.umd.edu/CHRSWeb/New%20Philadelphia/New%20Philadelphia/censusfiles/CensusDataMenu.htm>. Last accessed Mar. 15, 2015.

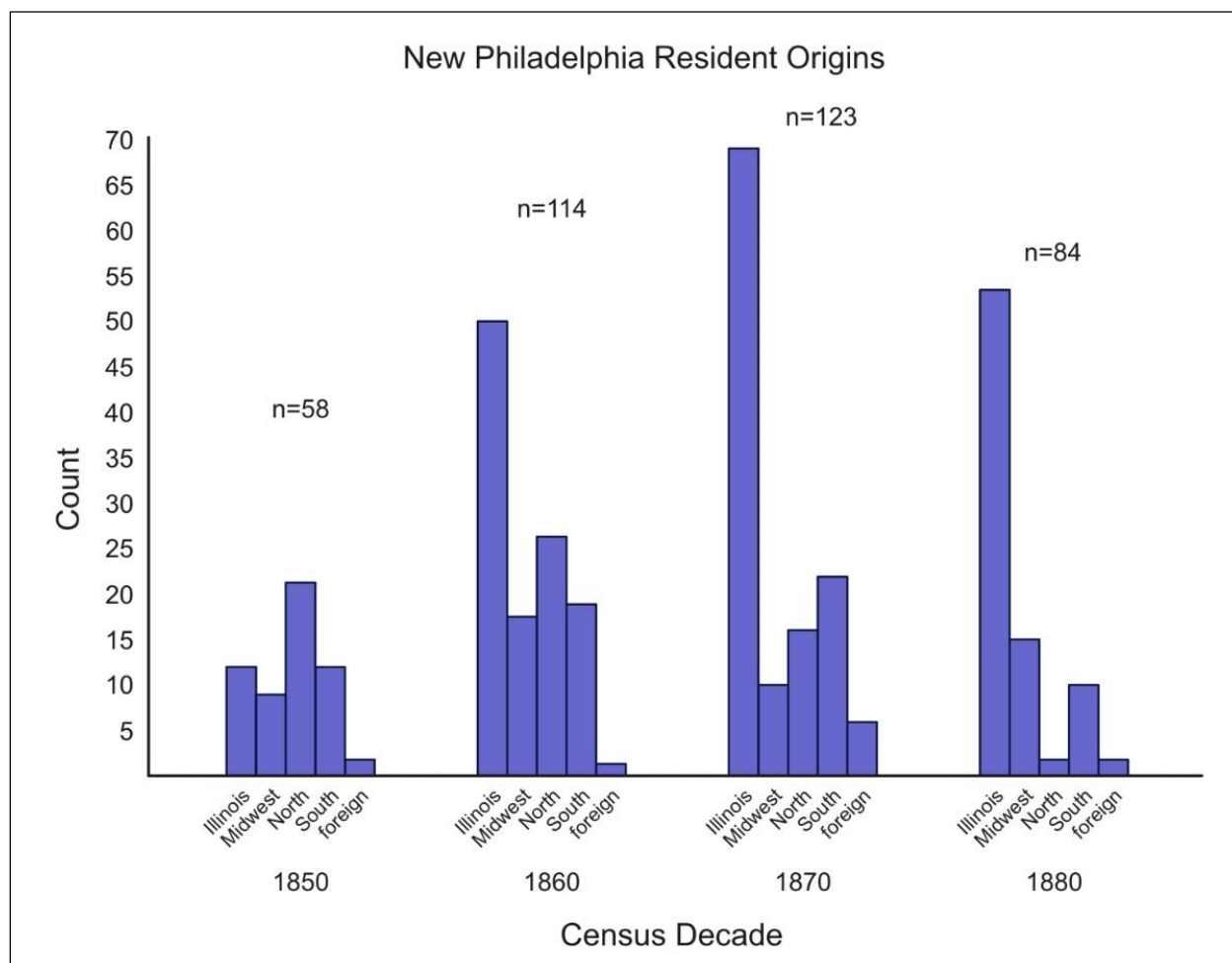


Figure 2.24. Graph of New Philadelphia Regional Origins. Source: Charlotte King, “New Philadelphia Census Data.”

The damaging effects of locating this railroad around New Philadelphia cannot be overestimated. From a demographic perspective alone, the railroad was directly responsible for the creation of three towns, Baylis, Cool Bank, and Arden, directly on the route just north of New Philadelphia (Figure 2.28). Christopher Fennell has given a through historical analysis for the rationale behind this conspicuous diversion around New Philadelphia. Unsurprisingly, Fennell stated that he had “not found any *direct, documentary* evidence of an overtly expressed decision to bypass New Philadelphia due to racial bias.”⁶⁴ It is not surprising that no clearly stated racial reasons were recorded because the process of rail construction was so costly and so well systematized to

produce the cheapest route between two locations that it is almost incomprehensible that any factor besides geography or basic customer service could account for an abrupt loop in an otherwise straight shot. Even though the railroad was constructed in 1869, it followed the original survey laid out in 1857 – a period of heightened racial anxiety within Illinois. Obviously, this fact alone cannot indicate a racial reason behind the loop. Fennell, however, methodically examined each typical reason looping railroads in other situations. He very pointedly rejected all geographic or business related rationales. Fennell rejected geographic rationales, as illogic of the loop's terrain. He stated:

Was there a significant topographic feature at or near New Philadelphia that promoted this bypass? The answer is “no.” ... In addition to significantly inflating the construction costs in linear feet of iron and roadbed, this elevation [of the loop] later required the companies operating freight trains on this route to maintain a helper locomotive near Hannibal [Mo] that would assist in pulling trains over the highpoint of Baylis.⁶⁵

In fact, the bypass was realigned in the 20th century by one-half mile southward so that trains could pass a more even grade.⁶⁶

Fennell rejected population or customer-service / freight-gathering rationales:

Did the railroad line detour to the north because other towns along that route lobbied the railroad to become depot stations and perhaps plied the company with funds to compensate for the construction expense? The answer is “no.” There were no towns in existence along that route when the railroad was built.⁶⁷

Fennell also rejected local lobbying efforts that were well known in other instances to divert railroad routes:

Was there a large-scale landowner who held land along that northern arc and lobbied the railroad to divert the route for his own profit? The answer, again, is “no.” That arc of railroad route traversed the land holdings of over a dozen smaller scale landowners, none of whom appear in the histories of this region to have operated as a local real-estate baron...⁶⁸

Without any other normal rationale for the railroad diversion, Fennell's methodical analysis leaves no other obvious rationale for diverting the railroad than racism:

after a thorough study of the corporate records of the railroad companies involved in building the railway that bypassed the town, and critical examination of numerous reports in regional newspapers concerning the railroad planning and construction, it is clear that New Philadelphia was bypassed because of the impacts of aversive racism. A large body of contextual evidence points to no rational business reason for the railroad company to have bypassed the town. In fact, the arc of the railroad route running to the north, around New Philadelphia, followed a path that was distinctly *not* optimal for rational business reasons.⁶⁹

Juliet Walker gave, perhaps, the most evocative effect the loop had over the business prospects for New Philadelphia when she pointed out that, in 1870, even Frank McWorter's grandson, Squire, decided to open his blacksmith shop in the nearby town of Hadley Station instead of New Philadelphia.⁷⁰ So even those who might be expected to maintain emotional ties to the land were apparently forced to engage the business market that had shifted away from New Philadelphia by the railroad.

In 1885, the town was unincorporated and the remaining households were considered residents of Hadley Township. By the twentieth century, all structures were razed so that the land could be used for agriculture. The only occupied structure was owned by Spaulding Burdick's descendants who still lived in a house located within the former boundaries of New Philadelphia until the 1990s.⁷¹ Burdick purchased his land from Frank McWorter in 1846 (see Table 2.2). Today the site is no longer in agriculture use (Figure 2.29 and Figure 2.30).

Recent Research of New Philadelphia

In 1976, New Philadelphia was briefly examined by professional archaeologists who were conducting a highway corridor survey. As a result the Illinois Archaeological Survey provided the Smithsonian site designation 11PK455. No cultural material was collected in 1976. The site number covers the extent of original 144 lots laid out Frank McWorter.

In 2000, the northern edge of the site was surveyed as part of a waterline project. This pedestrian survey recovered no cultural material.⁷² In 2002, the New Philadelphia Association,

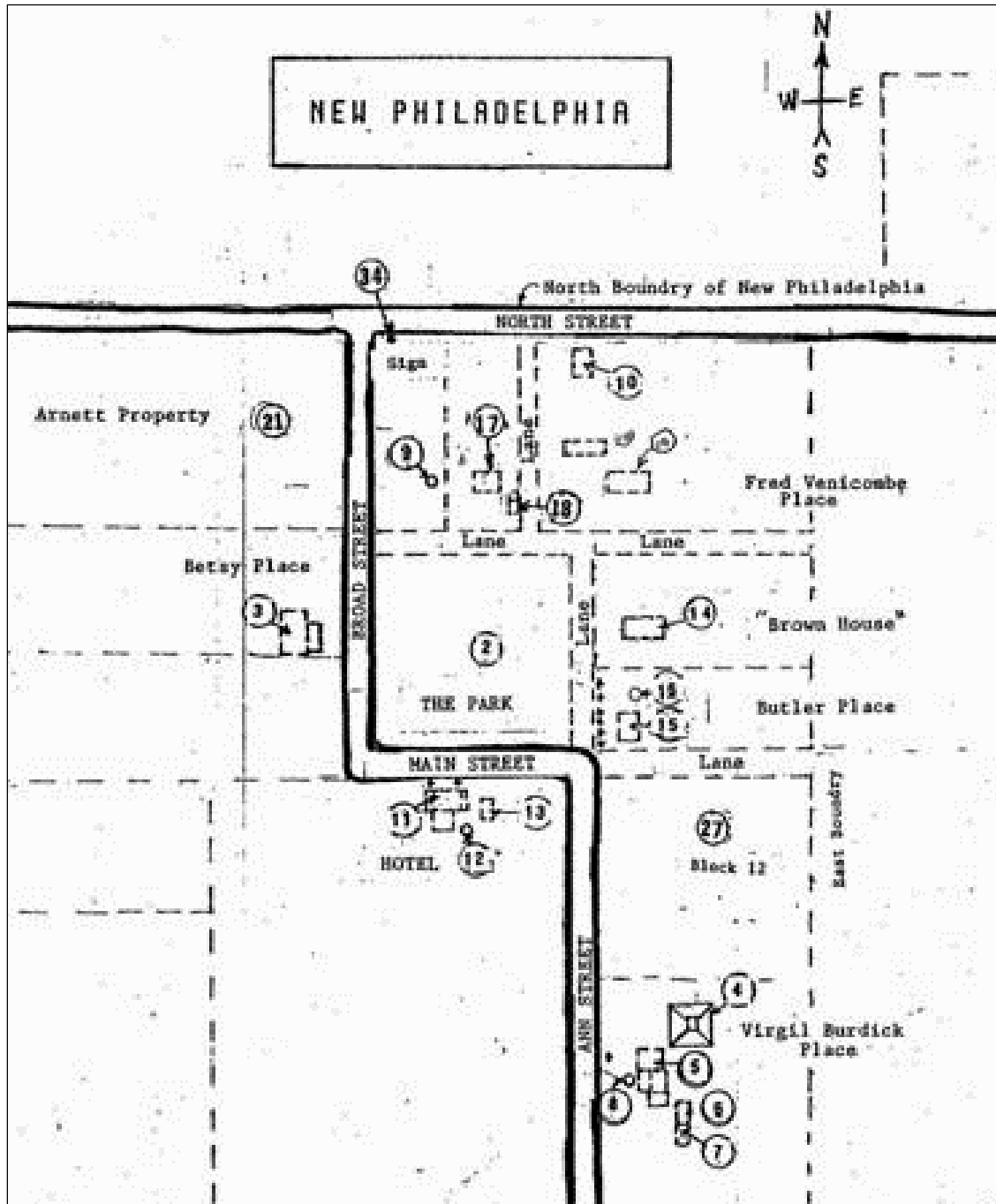


Figure 2.25. Detail of “New Philadelphia: Where I Lived,” Larry Burdick’s map of New Philadelphia ca. 1920, drawn from memory ca. 1970. On file at Pike County Historical Society, Illinois.

(NPA) formed by local residents, contacted historian Vibert White, professor of history at the University of Illinois–Springfield. The NPA and White conducted preliminary assessment of the

research potential for the site. They also arranged for Likes Land Surveyors to place metal stakes on several points over the original grid for the town. These points would be used later in the archaeological surveys. The initial inquiries by NPA quickly led to the partnership between the University of Maryland (Paul Shackle), the University of Illinois (Christopher Fennell), and the Illinois State Museum (Terrance Martin). The first systematic archaeological survey occurred in the fall of 2002 and the spring of 2003. The survey was a phase 1 pedestrian survey directed by Joy Beasley and Tom Gwaltney.⁷³ It succeeded in identifying a substantial amount of 19th-century cultural material. Its results are detailed in the next chapter.

The initial survey provided the base for proposing and awarding a National Science Foundation – Research Experience for Undergraduates Grant. This grant provided funds to conduct three field seasons of archaeological excavation (5 weeks) and laboratory analysis at the Illinois State Museum Research Facilities in Springfield (5 weeks). The project occurred during the summers of 2004 through 2006 and was directed by Paul Shackel with Christopher Fennell and Terrance Martin as co-directors. Charlotte King was laboratory supervisor. Michael Hargrave from the U.S. Army Engineer Research and Development Center, Construction Engineering Research Laboratory provided geophysical subsurface technology support.⁷⁴

At the start of each field season, Hargrave led a three-day geophysical survey using an electrical resistivity meter and a magnetometer to identify subsurface anomalies. This survey along with results from the pedestrian survey guided further excavations at the site. The three field seasons collected over 65,000 artifacts and sample approximately 1% of the site.⁷⁵ The field season had two broad objectives, 1. to assess the general state of archaeological preservation across the site, and 2. to identify depositional patterns between the households and determine whether those patterns could be linked to the variety of racial and ethnic groups known to have

lived at New Philadelphia. The research was extremely fruitful for both objectives. It led to the placement of the site on National Register of Historical Places under criteria D for potential to yield historical significance in 2005.⁷⁶ In 2008 the site was advanced to National Historical Landmark status.⁷⁷



Figure 2.26. Aerial View of New Philadelphia, 1939.
<http://www.anthro.uiuc.edu/faculty/cfennell/NP/mapindex.html>



Figure 2.27. Aerial View of New Philadelphia, 1936 with town lot overlay by Chris Fennell.
<http://www.anthro.uiuc.edu/faculty/cfennell/NP/mapindex.html>

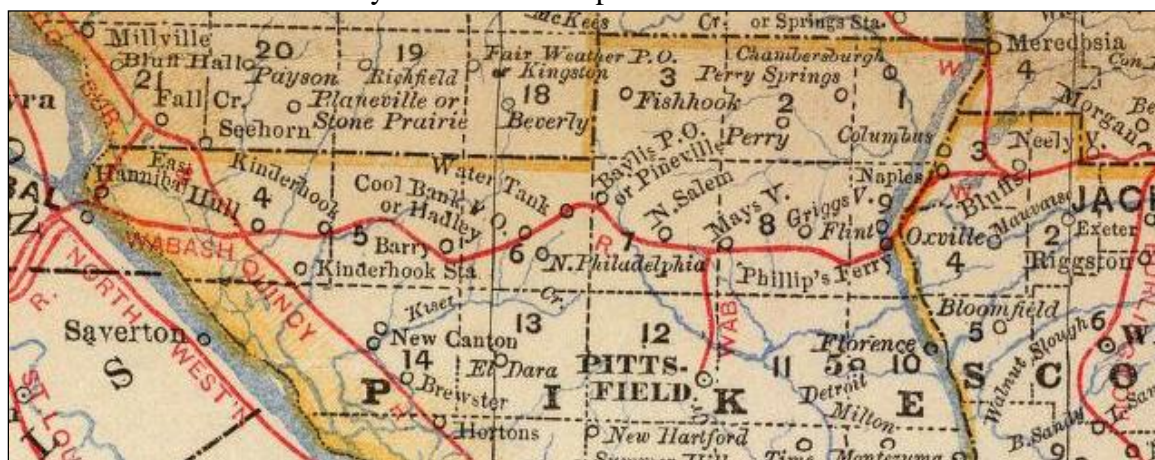


Figure 2.28. H&N Railroad Bypass around New Philadelphia, 1879.
<http://www.anthro.uiuc.edu/faculty/cfennell/NP/mapindex.html>



Figure 2.29. Aerial View of New Philadelphia, 2005.

<http://www.anthro.uiuc.edu/faculty/cfennell/NP/mapindex.html>

In addition, the site has yielded a number of archaeological analyses. Anthropological scholarship resulting from the archaeology fieldschools includes a special volume for the *Journal of Historical Archaeology* and full-length book published by Paul Shackel.⁷⁸ Emily Helton contributed to the journal volume with her analysis of archaeological and documentary data referring to the two schoolhouses within New Philadelphia and a later one built just outside the town boundaries.⁷⁹ Her analysis focused on the gender and racial aspects of 19th-century rural education. Carrie Christman contributed to the volume with her ethnographic work to collect contemporary oral history about New Philadelphia and local racial dynamics. Her work showed how New Philadelphia persisted in local memory as source of pride, but also with an unvarnished remembrance for the unfortunate moments of racial hostilities.⁸⁰ Christopher

Fennell described his historical research concerning the Hannibal & Naples Railroad routing around New Philadelphia.⁸¹ His work was summarized above. Charlotte King, in addition to the census research discussed above, also analyzed historic and archaeology material from two cemeteries holding the remains of people from New Philadelphia and the surrounding area.



Figure 2.30. Aerial View of New Philadelphia, 2005 with town lot overlay drawn by Chris Valvano. <http://www.anthro.uiuc.edu/faculty/cfennell/NP/mapindex.html>

These cemeteries were mostly segregated by race and contain the remains for most of the McWorter family. In 1988, the cemetery containing Frank McWorter's gravesite was placed on the National Register of Historic Places. Juliet Walk, Free Frank's great-great granddaughter, wrote the application.⁸² Claire Martin and Terrance Martin contributed two analyses that examined the presence of regional patterns for agricultural practices and for subsistence patterns.

They show how people surrounding New Philadelphia expressed their regional affiliations through the identification of three traditions: Upland South, Midland, and Northern/Yankee. Their work is discussed with more detail in the archaeological results section, but their overall conclusions are that “these regional differences did exist, and that they influenced the farmers who lived near the rural town of New Philadelphia.”⁸³

Thus far, the body of scholarship about New Philadelphia has placed primacy on the town’s racial dynamics. This focus is understandable given the rarity of bi-racial antebellum towns. In fact, if the racial aspects were not addressed from the very beginning, one could rightly accuse the researchers of committing a major disservice to understanding the site’s internal workings. But, if we seek to place New Philadelphia within the wider context of 19th-century American expansion, it is New Philadelphia’s singularity as a case study that ironically becomes an obstacle to further work. Considering that all of the scholarship so far also implies, if not directly states, that the racial conditions at New Philadelphia were intertwined with the commercial aspects of the town, we can confidently assert that the political-economic aspects of New Philadelphia are as equally influential (or at least hair’s breadth second) to the racial influences. So moving forward, it is entirely reasonable to measure New Philadelphia with a slightly different metric than has been used in prior work.

Conclusion

The next chapter argues that by placing primacy on the political-economic factors for New Philadelphia’s existence changes the continuum for which we place New Philadelphia and its founder Free Frank McWorter. This new continuum is more amenable to comparative studies that seek to understand what is unique about New Philadelphia in terms of the broad process of capitalist expansion. This is not to suggest one continuum is better than the other, but rather to

suggest that both are complementary precisely because they are appropriate at different scales of observation. For example, giving primacy to the racial dynamic places New Philadelphia and Free Frank along a continuum from slavery to freedom. This is absolutely necessary to understand the McWorter's careful actions when he entered business relationships. Only through a racial paradigm can we understand the necessity for Frank to follow precisely any convoluted bureaucratic routine for property ownership when at any time, the smallest legal challenge could exploit his "middling" status as somewhere between slave and white. But as a complement to this paradigm, if we place the political-economic aspects first, we then are confronted with the transformation of McWorter from a person absolutely lacking property ownership to a person fully owning both his property and labor. This continuum measures the relative amount of control over property and labor and is the type of large-scale phenomenon that political economic theory is capable of explaining. It is therefore the best metric for assessing why McWorter's economic relationships were so successful at this particular time and place in American history.

¹ Friedrich Engels, Letter to Florence Kelley Wischnewetsky, June 3, 1886, in Karl Marx and Friedrich Engels Correspondence 1846–1895: A Selection with Commentary and Notes, series *The Correspondence of Marx and Engels*, Marxist Library Works of Marxism–Leninism, vol. XXIX, New York: International Publishers, 1936, letter 201, pp. 448–9. Emphasis in original.

² [N.A.], *History of Pike County Illinois; Together with Sketches of its Cities, Villages and Townships, Educational, Religious, Civil, Military, and Political History: Portraits of Prominent Persons and Biographies of Representative Citizens*, Chicago: Chas. C. Chapman and Co., 1880, reprint by Pike County Historical Society, Mt. Vernon Indiana: Windmill Publications, 2000, 739.

³ Eric J. Hobsbawm, *The Age of Revolution, 1789-1848*, Cleveland: World Pub. Co, 1962; Gordon S. Wood, *The Creation of the American Republic, 1776-1787*, Chapel Hill: Published for the Institute of Early American History and Culture at Williamsburg, Va., by the University of North Carolina Press, 1969.

⁴ Eric J. Hobsbawm, *The Age of Capital, 1848-1875*, New York: Scribner, 1975.

⁵ Eric J. Hobsbawm, *The Age of Empire, 1875-1914*, New York: Pantheon Books, 1987.

⁶ Immanuel M. Wallerstein, *Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*, Berkeley: University of California Press, 2011.

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- ⁷ Immanuel M. Wallerstein, *Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*, Berkeley: University of California Press, 2011.
- ⁸ Immanuel M. Wallerstein, *Mercantilism and the Consolidation of the European World-Economy, 1600-1750*. Berkeley: University of California Press, 2011.
- ⁹ James E. Davis, *Frontier Illinois*, Bloomington: Indiana University Press, 1998
- ¹⁰ Immanuel M. Wallerstein, *The Modern World-System III*, Berkeley: University of California Press, 2011.
- ¹¹ Charles Sellers, *The Market Revolution: Jacksonian America, 1815-1846*, New York: Oxford University Press, 1991.
- ¹² Eric J. Hobsbawm, *The Age of Empire, 1875-1914*, New York: Pantheon Books, 1987; Immanuel M. Wallerstein, *The Modern World-System III*, Berkeley: University of California Press, 2011.
- ¹³ James E. Davis, *Frontier Illinois*.
- ¹⁴ George R. Taylor, *The Transportation Revolution, 1815-1860*. New York: Harper Torchbooks, 1968.
- ¹⁵ Charles Sellers, *The Market Revolution: Jacksonian America*.
- ¹⁶ Harry Sinclair Drago, *Roads to Empire; the Dramatic Conquest of the American West*. New York: Dodd, Mead, 1968.
- ¹⁷ William Cronon, *Nature's Metropolis: Chicago and the Great West*, New York: W.W. Norton, 1991.
- ¹⁸ Harlan H. Barrows, *Geography of the Middle Illinois Valley*, Bulletin No. 15, Urbana: Illinois State Geological Survey, 1910:124–5.
- ¹⁹ Barrows, *Geography of the Middle Illinois Valley*, 124–5. Barrows's list includes 11 points on the settlement of Illinois. His points are condensed here for relevancy and brevity.
- ²⁰ Ronald E. Nelson, “An Introduction to the Prairie States,” in *Illinois: Land and Life in the Prairie State*, ed. Ronald E. Nelson, Dubuque: Illinois Geographical Society, 1978:8.
- ²¹ James E. Davis, *Frontier Illinois*, Bloomington: Indiana University Press, 1998:94–96.
- ²² Whether Southern slavery and Northern capitalism were opposing modes of production is debatable. Certainly, Northern industrialists benefited as from cheap agricultural commodities coming out of the South as did plantation owners benefit from the bottomless appetite of mechanized factories. The sticking point, however, is best seen in the tensions over land use outside the former colonies. Both capitalism and slavery required geographic expansion to maintain their regimes, without it capitalism would lose its consumption base and slavery would lose arable land as well as outlets for excess the slave population. The compromises and internal contradictions baked into the policies of the young United States set in motion a fierce competition over control for the new land resources. It was the pace for how fast each mode could expand and the tremendous amount of available resources that give an impression for a period of compatibility. This, however, was akin to sticking a long a fuse in a bomb so to prove the possible harmony between a lit match and a terrible explosion.
- ²³ The verbal descriptions for each period are taken from Albert Larson and Siim Sööt, “Population and Social Geography,” in *Illinois: Land and Life in the Prairie State*, ed. Ronald E. Nelson, Dubuque: Illinois Geographical Society, 1978:140–9. The date range for each period is changed here to match the relevant political-economic events.
- ²⁴ Ronald E. Nelson, “An Introduction to the Prairie States,” in *Illinois: Land and Life in the Prairie State*, ed. Ronald E. Nelson, Dubuque: Illinois Geographical Society, 1978: table 1-2.

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- ²⁵ James E. Davis, *Frontier Illinois*.
- ²⁶ Between 1814 and 1834, \$630,400 were spent in the public land market. Between 1835 and 1836, \$669,100 were spent in the same market. Ronald E. Nelson, "An Introduction to the Prairie States," in *Illinois: Land and Life in the Prairie State*, ed. Ronald E. Nelson, Dubuque: Illinois Geographical Society, 1978: table 1-3.
- ²⁷ Between 1820 and 1834, approximately 2.2 million acres of public domain land were sold. Between 1835 and 1836, the sold acreage more than double to approximately 5.3 million. James E. Davis, *Frontier Illinois*: table 1.
- ²⁸ Town growth estimate from James Davis, *Frontier Illinois*, 210. Quote from New England Farmer and Gardener's Journal, vol. 17, no. 3, (July 25, 1838) 19, quoted from James Davis, *Frontier Illinois*, 210–11.
- ²⁹ Kenneth E. Lewis, *West to Far Michigan: Settling the Lower Peninsula, 1815-1860*, East Lansing: Michigan State University Press, 2002.
- ³⁰ Davis, *Frontier Illinois*, 171.
- ³¹ John F. Stover, History of the Illinois Central Railroad, series *Railroads of America*, ed. Thomas B. Brewer, New York: Macmillan, 1975, 5.
- ³² James Davis, *Frontier Illinois*, 359.
- ³³ Stover, History of the Illinois Central Railroad, 9.
- ³⁴ Stover, History of Illinois Central Railroad, chapter 6.
- ³⁵ James Davis, *Frontier Illinois*, 377.
- ³⁶ Ronald E. Nelson, "An Introduction to the Prairie States," in *Illinois: Land and Life in the Prairie State*, ed. Ronald E. Nelson, Dubuque: Illinois Geographical Society, 1978:12–4.
- ³⁷ Dalias A. Price, "Farms and Farming," in *Illinois: Land and Life in the Prairie State*, ed. Ronald E. Nelson, Dubuque: Illinois Geographical Society, 1978: 186–206.
- ³⁸ Illinois, General Assembly, *Laws ...Passed by the Tenth General Assembly, December, 1836*, p.175, "An Act to Change the Name of Free Frank," quoted from Juliet E.K. Walker, *Free Frank: A Black Pioneer on the Antebellum Frontier*, Lexington: University Press of Kentucky, 1983:107.
- ³⁹ Certificate of Good Character for Free Frank, Pittsfield, Ill, May 17, 1837, Free Frank Papers, quoted from Walker, *Free Frank*.
- ⁴⁰ Walker, *Free Frank*, 7.
- ⁴¹ Walker, *Free Frank*, 15.
- ⁴² Walker, *Free Frank*, 18–19. Walker states that the 1790 Census for Union County, South Carolina shows that half of the slave owning household listed four or fewer slaves in their possession. McWhorter likely was not struggling to scratch out a living on the South Carolina frontier.
- ⁴³ Walker, *Free Frank*, 20.
- ⁴⁴ Wilma A. Dunaway, *The First American Frontier: Transition to Capitalism in Southern Appalachia, 1700-1860*, Chapel Hill: University of North Carolina Press, 1996.
- ⁴⁵ Walker, *Free Frank*, Chapter 3.
- ⁴⁶ For McWhorter see Walker, *Free Frank*, for practice of Illinois migration see James Davis, *Frontier Illinois*, and for comparative migration in Michigan see Kenneth Lewis, *West to Far Michigan*.
- ⁴⁷ Walker *Free Frank*, 35, cites the actual per pound increase of saltpeter as \$0.17 in 1810 to \$1.00 in 1812.

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- ⁴⁸ Walker, *Free Frank*, chaps. 3 and 4.
- ⁴⁹ Deposition taken from Joseph Porter, Pulaski County, Ky., Mar. 14, 1856, for a Pike County (Ill.) Circuit Court case quoted in Walker, *Free Frank*, 65.
- ⁵⁰ Walker, *Free Frank*, 66–70.
- ⁵¹ Walker, *Free Frank*, 73.
- ⁵² Walker, *Free Frank*, 93–6, and table 6.
- ⁵³ Illinois, General Assembly, *Laws ...Passed by the Tenth General Assembly, December, 1836*, p.175, “An Act to Change the Name of Free Frank,” quoted from Walker, *Free Frank*, 107.
- ⁵⁴ Certificate of Good Character for Free Frank, Pittsfield, Ill, May 17, 1837, Free Frank Papers, quoted from Walker, *Free Frank*,
- ⁵⁵ For an insightful ethnographic analysis of this bureaucratic tendency see Michael Herzfeld, *The Social Production of Indifference: Exploring the Symbolic Roots of Western Bureaucracy*, New York: Berg, 1992.
- ⁵⁶ Walker, *Free Frank*, 121–4.
- ⁵⁷ Thompson, *Pike County History*, 151–52, quoted from Walker, *Free Frank*, 123.
- ⁵⁸ Walker, *Free Frank*, 131.
- ⁵⁹ Walker, *Free Frank*, 132.
- ⁶⁰ Charlotte King, “New Philadelphia Census Data,” Center for Heritage Resource Studies, (College Park: University of Maryland), web resource:
<http://www.heritage.umd.edu/CHRSWeb/New%20Philadelphia/New%20Philadelphia/censusfiles/CensusDataMenu.htm>. Last accessed Mar. 15, 2015.
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- ⁶² Paul A. Shackel, “New Philadelphia Archaeology: Race, Community, and the Illinois Frontier,” Report on the 2000–2006 excavations sponsored by: National Science Foundation Research Experiences for Undergraduates (Grant #0353550), University of Maryland, 18. Available online: <http://www.heritage.umd.edu/CHRSWeb/New%20Philadelphia/2006report/2006reportmenu.htm>. Last accessed Mar. 15, 2015.
- ⁶³ Paula A. Shackel, “Introduction: Remembering New Philadelphia,” *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 9–11.
- ⁶⁴ Christopher Fennell, “Combating Attempts of Elision: African American Accomplishments at New Philadelphia, Illinois,” in *Intangible Heritage Embodied*, D. Fairchild Ruggles and Helaine Silverman, eds., (New York: Springer, 2009), 154. Emphasis is in original.
- ⁶⁵ Fennell, “Combating Attempts of Elision,” 157.
- ⁶⁶ Paula A. Shackel, “Introduction: Remembering New Philadelphia,” *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 10.
- ⁶⁷ Fennell, “Combating Attempts of Elision,” 158.
- ⁶⁸ Fennell, “Combating Attempts of Elision,” 158.
- ⁶⁹ Fennell, “Combating Attempts of Elision,” 154. Emphasis is in original.
- ⁷⁰ Walker, *Free Frank*, 167.
- ⁷¹ Paula A. Shackel, “Introduction: Remembering New Philadelphia,” *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 7–19.
- ⁷² Michelle Huttes, “National Register of Historic Places Registration Form,” United States

Department of the Interior National Parks Service, Jun. 29, 2005. Online at <http://www.anthro.illinois.edu/faculty/cfennell/NP/nationalreg.html>

- ⁷³ Tom Gwaltney, "New Philadelphia Pedestrian Survey: Final Report and Catalogue, Phase I Archaeology at the Historic Town of New Philadelphia, Illinois," white paper by *arGIS Consultants, LLC* (Bethesda: arGIS Consultants, 2004); and Joy Beasley and Tom Gwaltney, "New Philadelphia Pedestrian Survey: Phase I Investigations at an Historic Town Site," *Historical Archaeology* 44(1), 2010: 20–42.
- ⁷⁴ Paula A. Shackel, "Introduction: Remembering New Philadelphia," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 7–19.
- ⁷⁵ Paula A. Shackel, "Introduction: Remembering New Philadelphia," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 15.
- ⁷⁶ Michelle Huttes, "National Register of Historic Places Registration Form," United States Department of the Interior National Parks Service, Jun. 29, 2005. Online at <http://www.anthro.illinois.edu/faculty/cfennell/NP/nationalreg.html>.
- ⁷⁷ Gwaltney, "New Philadelphia Pedestrian Survey."
- ⁷⁸ Paul A. Shackel, ed., "New Philadelphia: Racism, Community, and the Illinois Frontier," *Historical Archaeology* 44(1) 2010; and Paul A. Shackel, *New Philadelphia: An Archaeology of Race in the Heartland* (Berkeley: University of California Press), 2011.
- ⁷⁹ Emily G. Helton, "Education and Gender in New Philadelphia," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 112–24.
- ⁸⁰ Carrie A. Christman, "Voices of New Philadelphia: Memories and Stories of the People and Place," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 102–111.
- ⁸¹ Christopher C. Fennell, "Damaging Detours: Routes, Racism, and New Philadelphia," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 138–54.
- ⁸² Charlotte King, "Separated by Death and Color: The African American Cemetery of New Philadelphia, Illinois," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 125–37.
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CHAPTER 3: THEORETICAL CONTEXT AND DATASETS

Introduction

Racial dynamics were an undeniably important factor shaping the course of United States history. Chapter 2 showed that from the broadest scale of observation it was easier to isolate the influences political economics (i.e., capitalism) from the underlying effects of 19th-century structural racism. But, as the scale of observation grew narrower, (down to the minute scale of one American's life experience) it became more difficult (even unreasonable) to isolate race from political economics. Stepping back with this new insight, however, we learn that neither end of the scale can be adequately understood without reference to the other. And so the value here from moving between scales of observation, was not to prove whether either factor of race or economics had superior analytic value. The real value in this approach was to show both as interconnected and only masking each other at the observational scale's extremes.

But since the practical aspects of archaeology require us to ground ourselves in the smallest scale, we also have to align our use of theoretical abstraction in a way that is appropriate to our scalar approach for historical description. The following chapter does this by considering racial dynamics and political economy on a theoretical scale (referred to here as continuums). Just as scalar references change the apparent influences for race or economics, the use of theoretical continuums change the race or economics' apparent primacy. It is only an apparent change because both are actually dependent to each other. What really changes is not the process we are measuring, but ourselves, and the measurement units we place along our yardsticks.

Race and Political Economy

Historian Juliet Walker argues that the Free Frank's entrepreneurial success was as much a result of personal business acumen as it was relative racial tolerance created by the American frontier's

labor vacuum. In this environment, a sparse population demanded “an elastic labor supply and greater occupational diversity.”¹ These types of conditions on the frontier reduced economic competition that allowed “America’s frontiers to provide less restraint of economic activities than did life in established densely populated communities.”²

If McWorter was allowed greater access to commercial activities than his contemporaries he seems to have relished the opportunities. Accompanying his economic pursuits, McWorter was similarly highly involved in legal activities and land speculation. In other words, McWorter’s experience in Kentucky shows an individual willing to engage in the full field of play given him by the dominate population. As Walker notes: “the extent to which [Free Frank] participated in the commercial life of the developing communities where he lived was determined, not so much by his status as a slave or a freedman, as by the conditions of freedom allowed by the whites who shared the frontiers with him.”³

Conditions in Kentucky were, however, fated to expire as the frontier era passed and “racism set limits to Free Frank’s profitable pursuits, notwithstanding his ingenuity, resourcefulness, immeasurable determination, and subtle aggressiveness.”⁴ In Illinois, he would not be content to work within the circumscribed area of community life and added more room for maneuvering.

New Philadelphia was a vehicle for purchasing McWorter family members’ freedom. It would have been impossible without nationalized capitalist relations of production. The historical circumstances surrounding New Philadelphia allowed its owners the flexibility of using various kinds of production modes. But, the historical context conditioned the social relationships and actions available to the McWorter family. These historical conditions are a product of the patterning associated with the encroachment of capitalism into American society. Successfully navigating these circumstances left a record that is ostensibly the product of market

relationships but reflects a deeper cultural process for the struggle to control social relations of production. The encroachment of capitalism, then, should be understood in terms of aligning the relations of production to the demands of mercantile-market relationships and to the dialectical nature of power relationships in all state-level societies.

There are two obvious theoretical perspectives applicable to analyzing the historical circumstances of New Philadelphia's existence. One is employing theories that explain racial dynamics on the 19th-century US frontier. These theories would establish the complicated relationships between the power-holding white class and the powerless slave class. This relationship sets freedmen like Free Frank in the vacuous center where they confusingly experienced aspects familiar to both classes.

Every former slave got enormous psychological benefits from freedom; if we can accept anything based on our own intuitive understanding of humanity – this statement is it. There is simply no rational argument for the benefits of being another person's chattel. There is, however, a strong argument that freedmen did not always gain political benefit from their new status. The most striking example is Diane Sommerville's examination of legal cases involving rape in the 19th-century South. Here Sommerville examined numerous court cases for accusations of rape made by a white woman against a black man. In all instances, Sommerville found that most white southerners, when faced with a charge of black rape in their community, deferred to the judicial process, even when it apparently challenged racial hegemony."⁵ The strongest predictor for the trial's outcome was the disparity between participants' social status.

Cases in which poor white women accused a slave from a wealthy plantation were almost certain to favor the slave. As the social status of the accuser increased and the property holdings of the slave's owner decreased, the outcome almost certainly favored the accuser. In these

situations, theories of racial power explain how the evaluation of property can upend traditional relationships associated with white privilege and paternalism.

White community members did not always line up on the side of the white female accuser. Rather, communities often divided over whom to support during black-on-white rape trials. In fact, towns and neighborhoods were frequently racked with discord as black rape trials played out. Typically, these splits fell along class lines. In charging a slave with rape or attempted rape, a white female was, on some level, challenging the social hierarchy, impugning the mastery of the slave's owner, particularly his ability to control his slave. More importantly, a white women's charge that a slave raped her, a capital crime, exposed a slave to execution by the state. Thus a master whose slave stood accused of raping a white female risked personal, financial, and perhaps even emotional loss if the slave was convicted and executed.⁶

Here then the political benefits afforded to a slave are just a superficial manifestation of the greater political benefits received from being a prosperous slave-owning white. The slave is only a proxy for justifying the economic superstructure's supremacy over other ideational ones. Sommerville proves this point more convincingly by showing that when the accused was a freedman the outcome almost certainly favored black males who were known to have the support of wealthy whites. This was true even after the Civil War. What this highlights is the bizarre twisting and folding of a power dynamic that we would otherwise expect to be a straightforward linear continuum. It also shows dynamics of race and gender were often folded into the application of political power within a slave society.

Race mattered a great deal, but it was only one of a number of factors that shaped the responses of community members to a charge of black rape. ...among these factors class was central in shaping the outcome of black rape trials.⁷

This does not suggest that theories of racial dynamics are not instructive. To the contrary, their ability to show effective application of power in a seemingly illogical way only serves to point us toward the driving set of relations.

Especially for New Philadelphia, racial theoretical approaches have served well the historian Juliet Walker as well as the archaeologists who conducted the field surveys. For Walker in

particular, racial theory was used to great effect in her explanation for the tenuous position Free Frank negotiated as a free businessman in Kentucky. As Walker points, we can be certain that Frank's enslavement came with all the imaginable social horrors for a person with no rights to the condition of their own body, let alone their wife and children. And so, it is understandable that a person who had an icy awareness of the terror of being denied the most basic property rights would go the great length (once freed) to secure land rights through the arduous bureaucratic process. Again, Sommerville is instructive here by describing how freedom for former slaves could place them in vulnerable positions where they could re-assert traditional power relations.

In freedom, many black men cultivated patronage relationships with respected white men, some of whom came to view freed blacks as being in need of their continued guidance and protection. Paternalistic bonds linking planter class elites to black laborers were not entirely severed with the war's end. Nor were ideas about the depravity of poor white women immediately dislodged. White elites continued to display considerable contempt for wily women who would entrap unwitting black men in their web, thus revealing their own misogynistic identification with the plight of the accused black rapist throughout much of the postbellum era.⁸

Sommerville identified these instances as a potent way to maintain misogynistic gender relations, but we could easily anticipate similar scenarios in which powerful white elites pitted lower class whites against freedmen.

Property rights in a capitalist mode of production are validated through political paperwork, not through militarized vassals loyal to a local feudal baron or through reverence for ancient clan territories.. So we can expect any person of modest means and especially a person holding an awkward social identity to gain political property protection through the most direct political route as possible. On the American frontier the process of establishing one person's political rights to land was almost totally symbolic and required practically no physical construction on the land. Walker's description for this cumbersome process is worth quoting in full:

At the State Land Office a claimant followed several steps before title to the land was secured. First, the purchase price was paid to the treasurer. The receipt was then given to the auditor of public accounts, who provided a land certificate that stated the quantity of land to which the purchaser was entitled. The certificate once obtained had to be taken to the Land Office Register. The registrar issued a land warrant that specified the number of acres to be surveyed. He also provided the purchaser with a certificate that authorized the surveyor to survey the land. With the certificate, the land claimant then had to go to the county surveyor's office, where an application for the survey had to be made, and from this application the surveyor's office could authorize the survey. Once the survey was made, the surveyor would enter into his book the date the application for survey was made, the number of the warrant, the number of acres surveyed, and the name of the person or persons for whom the application was made.⁹

Because land claims made this way were frequently challenged, adding aspects of race explain the steps Free Frank took to add a sort of backstop for any potential questions against his property rights. Walker explains that when private transactions were made the original land warrant made by the Land Office was crucial to verifying any disputes potentially arising from sale. Any clerical error along the process could cascade throughout the transaction and place the contract in legal arbitration. So, ensuring the careful recordation for each step of the process was crucial to ensure an easy re-sale of the property and a return in investment. Even though Free Frank was illiterate and even though he entered into most land purchases with partners, he chose to be the initial patentee for six of the ten land deeds he held. This meant that Free Frank had to personally appear at the Surveyor's Office and verify the boundaries of the land claim. This act ensured that

Frank's basic legal interest in the title was affirmed by a county official legally certified by the state to perform these duties, an official whom Free Frank knew personally. The surveyor's patent, rather than a land claim in which the primary legal right was derived from a certificate with an "X" signature, thus served to validate his land claims.¹⁰

In another example, Walker explains how Frank was aware of how technicalities of the law could make enormous differences on the outcome of court arbitration. This awareness was shown in probate case in which the son of Lucy's former owner was attempting to collect a loan

made from William Denham to Lucy after her manumission. Denham's son claimed that his father loaned Free Frank a sum of money on Lucy's behalf. Although it is questionable if the loan was made, the court arbitration rested on the technical details of how it was presumed to have occurred. At the time, however, Frank was still legally held in bondage and thus barred by Kentucky from entering contracts with a white person. In some ways, Denham appeared to be in an untenable position. Either he could loan money directly to Frank and violate State law on entering contracts with enslaved persons or he could loan money directly to Lucy and violate state law of *femme couverture* which required he deal with Lucy's legal husband. The court then in validating the racial aspects for the invalid nature of the contract would then also be validating the marriage's traditional value even it meant for the first time recognizing slave marriage. As the court decision moved to the appeals court,

Obediah Denham lost his case against Lucy because the higher court ruled that with a slave, once emancipated, "the restraint which was imposed upon their will and action, by their bondage, is removed, and with that, their competency to contract marriage is restored." Free black married women were now subjects to the law of *femme couverture*, a civil obligation on which the court would not infringe. Lucy's case provided the court with another instance whereby the legal inferiority of women could be infringed. On the other hand, by this decision free blacks were given the legal right to marry in Kentucky, and the significance of this right cannot be underestimated.¹¹

Walker demonstrated the importance of applying racial theory to explanations for Free Frank's behavior and New Philadelphia's development. As Frank negotiated the unstable terrain between slavery and freedom, Walker alludes to the fact Frank was also in a parallel negotiation with the realities of 19th-century economic classes. She shows that Frank's owners allowed him to continue his profit making activities, knowing full well that he intended to purchase his own freedom, not because of any benevolence, but because they were reaping cash profits without any investment. This explains why they continually requested higher sums for his manumission but never insisted that he work on other non-cash generating activities that might ensure his

servitude forever. As Walker points out:

The evidence establishes unequivocally that his manumission was strictly an economic arrangement. The owners definitely profited from his labor and enterprise. That Free Frank manipulated the conditions of his servitude so that he too profited from his labor cannot be dismissed, rationalized, or explained as resulting from paternalism. Free Frank provides an example of a slave who shrewdly capitalized on the slaveowners' miscalculated allocation of their labor force.¹²

And so this leads to the second theoretical approach for developing a model of New Philadelphia from political-economic theory. From this perspective, we consider Free Frank's biography as movement out of a class with the least amount of control of their labor and into one that controlled basically all their labor. Racial dynamics are no less important, they just are not the primary continuum for our measurements.

For this approach, we can develop a series of hypotheses and expectations for the historic-archaeological record at New Philadelphia. Before discussing the hypotheses, the archaeological and historical documentary dataset are described below.

Archaeology Dataset

The archaeological dataset for this dissertation is a product of two phases of professional archeological survey conducted over the course of four field seasons. The first survey was restricted to phase 1 pedestrian-walkover survey conducted the fall 2002 and spring 2003.¹³ The second survey was extended to phase 2 and 3 excavations funded by a grant from the National Science Foundation – Research Experience for Undergraduate program. This program allowed for three 10-week field schools led by archaeologists from the University of Maryland, the University of Illinois, and the Illinois State Museum. The field schools occurred during the summers of 2004–2006.¹⁴ Results from the walkover survey and excavation are summarized below.

Walkover Survey

The goals for the walkover survey were “one, to demonstrate that archaeological resources exist at the New Philadelphia site, and two, to identify surface artifact concentrations that could be co-registered with the New Philadelphia plat.”¹⁵ The walkover survey began in 2002 over the weekends of October 11–14, November 8–10, and ended in 2003 over the weekend of March 14–16. This survey was a collaboration of professional archaeologists from arGIS Consultants, the University of Maryland, and the Illinois State Museum and made possible through volunteer labor. Prior to the survey, archaeologists arranged for the land to be plowed so as to gain maximum visibility. The pedestrian survey was then conducted by volunteers under the supervision of the professional archaeological team. The team collected identified artifacts, assigned basic field description, and recorded each location into a GIS databases with total station survey equipment (Figure 3.1).

Gwaltney reports three major biases in this survey. First, the amount of artifact material encountered at the site forces the survey team to return the following spring to cover the entire survey. The four month lag between the two collection seasons allowed for poorer visibility in the spring collection. Second, the reliance on volunteers as survey participants likely affected the overall collection amount. This was minimized somewhat, however, by assigning a professional archaeologist to each collection team and by instructing volunteers to flag any material whether it appeared cultural or natural. Third, some parts of the collection contain an extremely dense collection of artifacts so that it was not practical to collect and record each item. In these situations, the supervising archaeologists’ discretion was used to attain a representative sample.¹⁶

In total, 7,073 artifacts and faunal material were recovered. These were catalogued and curated at the Illinois State Museum research facilities in Springfield. The artifacts were further

catalogued according to NPS protocol and classification scheme. This classification provides descriptors for material and functional categories. These categories, along established manufacturing dates were incorporated into the spatial database from the field collection. The artifact collection consisted of 5,932 historic artifacts and faunal remains (2,084 of which were assigned dates). The remaining 1,141 prehistoric artifacts were catalogued and analyzed by Dr. Lynn Fisher of University of Illinois–Springfield.¹⁷

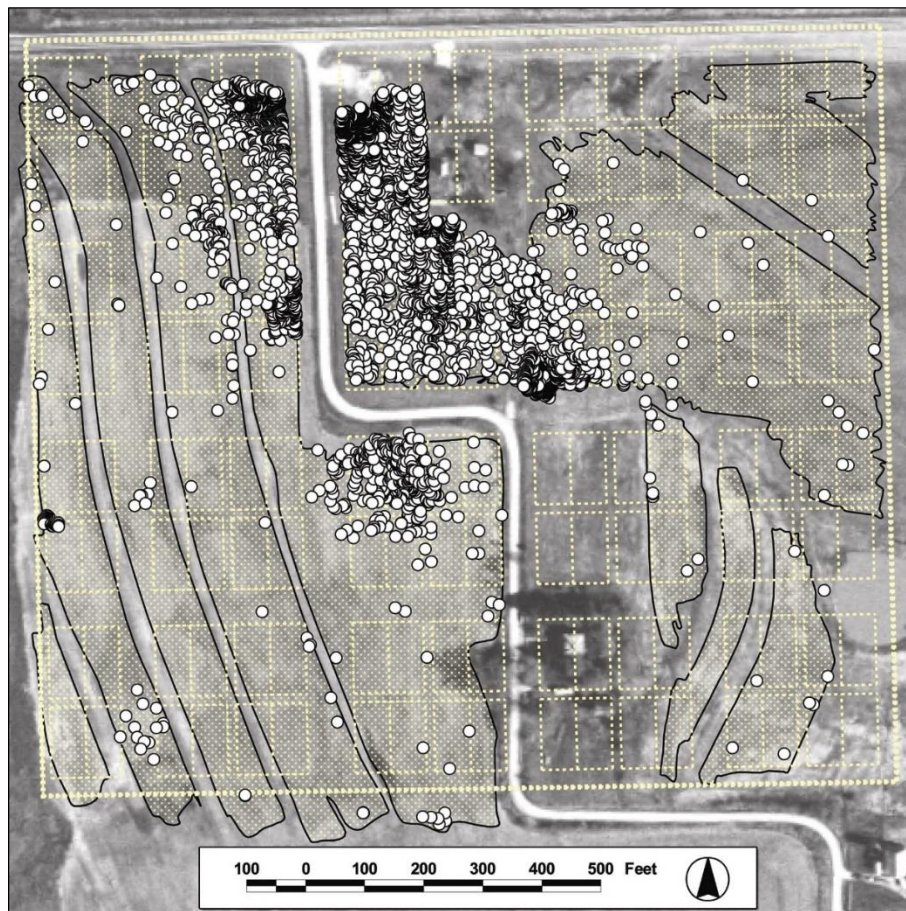


Figure 3.1. Pedestrian Survey Area. Shaded locations are the survey extent, dots are cultural artifacts recovered. From Gawaltney, 2006.

Walkover Survey Methods

Artifacts for the walkover survey were catalogued under the procedure set out in the National Parks Service's Museum Handbook, Part II (2000) and using the coding structure from the Automated National Cataloguing System (ANCS+).¹⁸ The historic material was classified under

four classes within this system. Class 1 designates the material as “Archaeology,” class 2 designates them as “Historic.” Class 3 describes the item as either “Animal,” “Mineral,” “Vegetal,” or “Unidentified Material.” Class 4 further described items as either “Bone” or “Shell,” “Ceramic,” “Glass,” “Metal,” “Other Mineral Materials,” or “Synthetic,” “Wood,” or “Unidentified.”¹⁹

Once the general classification for each item was assigned, further diagnostic coding was performed. The classification codes were divided into seven groups: “manufacturing technique, decorative technique, decorative design, decorative element, color, part, and material type.”²⁰ After these artifacts were assigned object name and manufacturing date range (if known). For dateable artifacts, the manufacturing date ranges were based on common references for historic archaeological materials. In instances with overlapping ranges, the shortest range was selected to produce tighter dating controls. In instances with open-ended date ranges representing material still in production (e.g., whiteware 1820+), an end date of 1940 was assigned to reflect the latest known occupation of the town. Artifacts were also assigned functional codes: “Architectural, Domestic, Kitchen, and Personal.”²¹ Each artifact was then coded for the spatial location within town; this was done by assigning the artifact a location corresponding to the original town plat. Artifacts designated this way are referred to as, for example, 04:1 referring to Block 1 Lot 4, or ST for street, or OU for a handful of artifacts recovered outside the town boundaries.²²

Walkover Survey Results

As expected, the material assemblage from first New Philadelphia survey consisted mainly of domestic and architectural debris. Domestic artifacts were mainly ceramic kitchen and tablewares. Architectural debris was mostly brick and iron nails.

Results from the walkover showed six major concentrations of historic artifacts. These

concentrations were located on Blocks 3, 4, 7, 8, 9, and 13. Of the total historical archaeological collection, just over 35% of the material was dateable. From the mean ceramic dates of the diagnostic material, a weighted mean for the collection was given at 1870. Gwaltney reports that this date is skewed toward a later date because of the high tally for open-ended dates being assigned to 1940. When Gwaltney removed these artifacts, the mean of the collection shifted to 1862.²³ This date better approximates the period of densest population.

Table 3.1 shows the chronological distribution of the collection for the town lots with dense concentrations of artifacts. Figure 3.2 graphs the MCDs to show a clustering after the mean date of 1862. Figure 3.3 shows the dates along the imaginary gridlines for better visual reference. The mean dates show early concentrations were found on Block 4 (mean date 1856). Three other blocks (3, 7, and 9) had concentrations with date earlier than 1860. The post-1860 concentrations were mainly restricted to Blocks 8 and 13.²⁴

The functional classification for ceramic materials were initially surprising. The ratio of utilitarian to tableware ceramics typically skewed towards a high amount of tableware ceramic (at times twice as much). The ratios became more balanced, however, once the whitewares were removed.

NSF-REU Excavations

The second part of the New Philadelphia archaeological dataset includes material collected during three field seasons (2004–2006) of archaeological excavations (Figure 3.4 and Figure 3.5). These were funded by a National Science Foundation – Research Experience for Undergraduates Grant (#0353550).²⁵ This grant provided funds to conduct archaeological excavations (5 weeks each season) and laboratory analysis at the Illinois State Museum Research Facilities in Springfield (5 weeks each season). The project occurred during the summers of 2004

Table 3.1. Gwaltney's Mean Ceramic Date Results.

Block:Lot	Datable Artifacts	Mean Date	Earliest MCD	Latest MCD
7:1	23	1854	1805	1873
7:8	5	1869	1863	1878
7: Alleys	8	1859	1805	1878
Block 7	36	1857		
Block:Lot	Datable Artifacts	Mean Date	Earliest MCD	Latest MCD
3:3	31	1864	1835	1870
3:4:	25	1850	1805	1870
3:5	31	1865	1845	1878
3:6	26	1861	1804	1874
3:7	3	1864	1863	1865
3: Alleys	60	1862	1805	1873
Block 3	176	1861		
Block:Lot	Datable Artifacts	Mean Date	Earliest MCD	Latest MCD
4:1	26	1859	1804	1870
4:2	43	1860	1808	1878
4:3	1	1870	1870	1870
4:4	4	1854	1810	1878
4:5	1	1878	1878	1878
4:6	1	1860	1860	1860
4:7	4	1862	1850	1870
4:8	23	1844	1800	1878
4: Alleys	17	1855	1804	1878
Block 4	120	1856		

Block:Lot	Datable Artifacts	Mean Date	Earliest MCD	Latest MCD
13:2	2	1862	1860	1863
13:3	12	1864	1863	1873
13:4	7	1864	1860	1870
13:7	2	1871	1863	1878
13: Alleys	1	1866	1866	1866
Block 13	23	1864		
Block:Lot	Datable Artifacts	Mean Date	Earliest MCD	Latest MCD
9:2	3	1844	1805	1878
9:4	2	1863	1863	1863
9:5	30	1859	1805	1878
9:6	6	1853	1805	1863
9:7	1	1870	1870	1870
9: Alleys	1	1863	1863	1863
Block 9	42	1858		
Block:Lot	Datable Artifacts	Mean Date	Earliest MCD	Latest MCD
8:1	7	1860	1835	1870
8:2	22	1863	1845	1873
8:3	7	1864	1863	1870
8:4	11	1865	1860	1878
8:5	2	1870	1870	1870
8:6	2	1868	1863	1873
8:7	6	1865	1863	1870
8:8	4	1864	1860	1870
8: Alleys	14	1864	1850	1873
Block 8	75	1864		

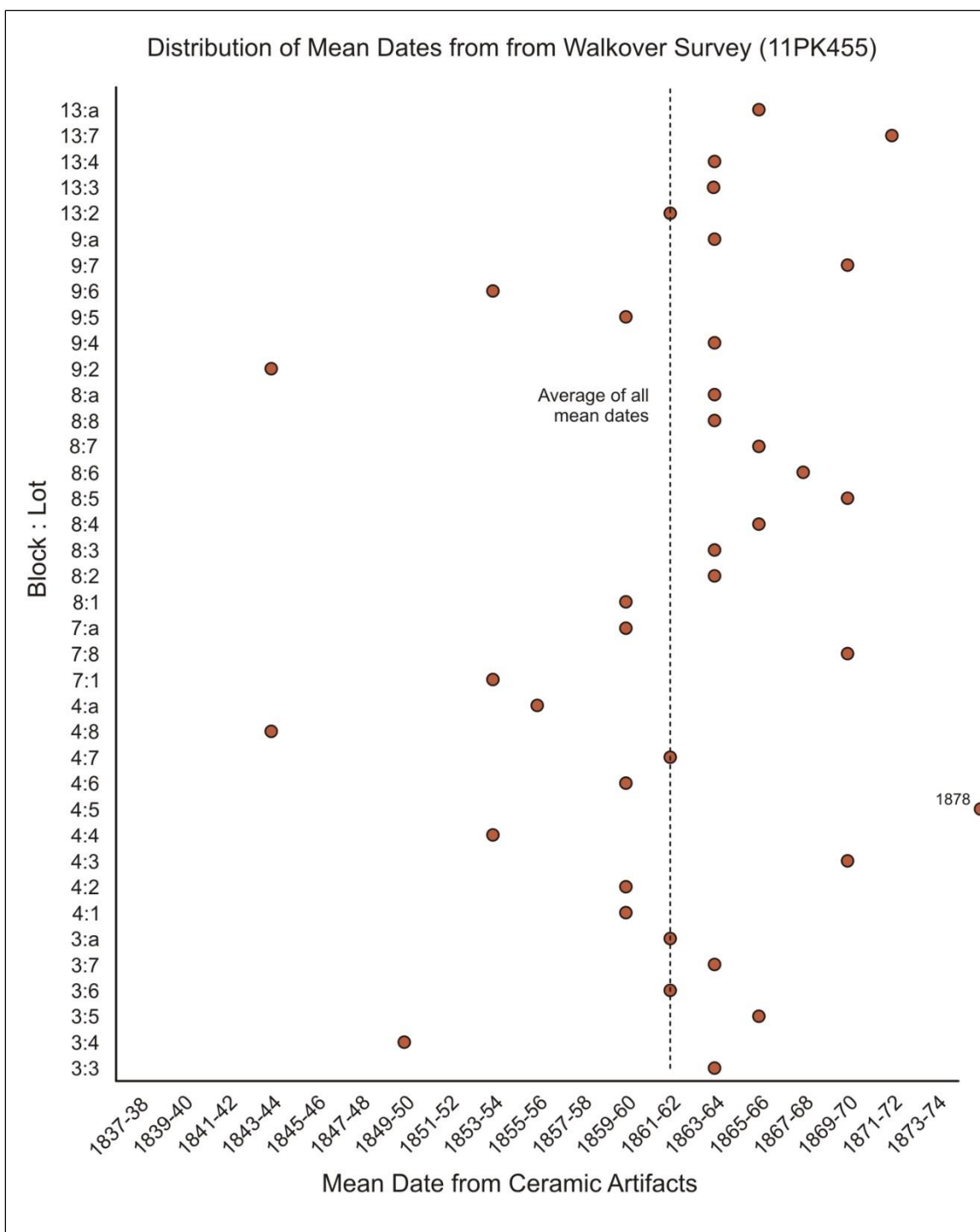


Figure 3.2. Graph of Mean Ceramic Dates from Pedestrian Survey. Drawn by Chris Valvano



Figure 3.3. Distribution of Mean Ceramic Dates from Pedestrian Survey onto Town Grid. Drawn by Chris Valvano

through 2006 and was directed by Paul Shackel with Christopher Fennell and Terrance Martin as co-directors. Charlotte King was laboratory supervisor. Michael Hargrave from the U.S. Army Engineer Research and Development Center Construction Engineering Research Laboratory provided geophysical subsurface technology support.²⁶ Christopher Valvano participated in the 2005 and 2006 field seasons as a crew chief and laboratory assistant.

The field season had four specific objectives:

1. to understand the town's founding and spatial development as a multi-racial town
2. to explore and contrast dietary patterns between different households of different ethnic and/or regional backgrounds by examining faunal and botanical remains
3. to understand the townscape and town lot uses of different households using botanical data

and archaeological landscape features

4. to elucidate the different consumer choices residents of different ethnic backgrounds made on a frontier situation and understand how household choices changed with the increased connection to distant market and changing perceptions of racism.

In total, the three field seasons collected just over 65,000 artifacts all of which were inventoried and curated in the manner as the pedestrian survey. The excavations also recorded twenty-one archaeological features of historic association and sampled approximately 1% of the site.²⁷ Of the identified archaeological features, seven are domestic structures while the remaining features are related to support structures such as wells and privies.

The research led to the site's placement on the National Register of Historical Places under criteria D for potential to yield historical significance in 2005.²⁸ In 2008 the site was advanced to National Historical Landmark status.²⁹ A second round of three field seasons began in 2008. Valvano participated in the first of these field seasons. Only collections from the first three seasons are used here.

Field Methods

The project was led by Paul A. Shackel (University of Maryland), Terrance J. Martin (Illinois State Museum), and Christopher Fennell (University of Illinois–Urbana). A selection of nine undergraduate students chosen from a nation-wide applicant pool served as the excavation team each season. These students were divided into three teams each led by an experienced supervisor. During the 2005 field season, 14 students from the University of Illinois participated in the excavation as part of their field school in archaeology. Those students were supervised by graduate students from the University of Illinois.

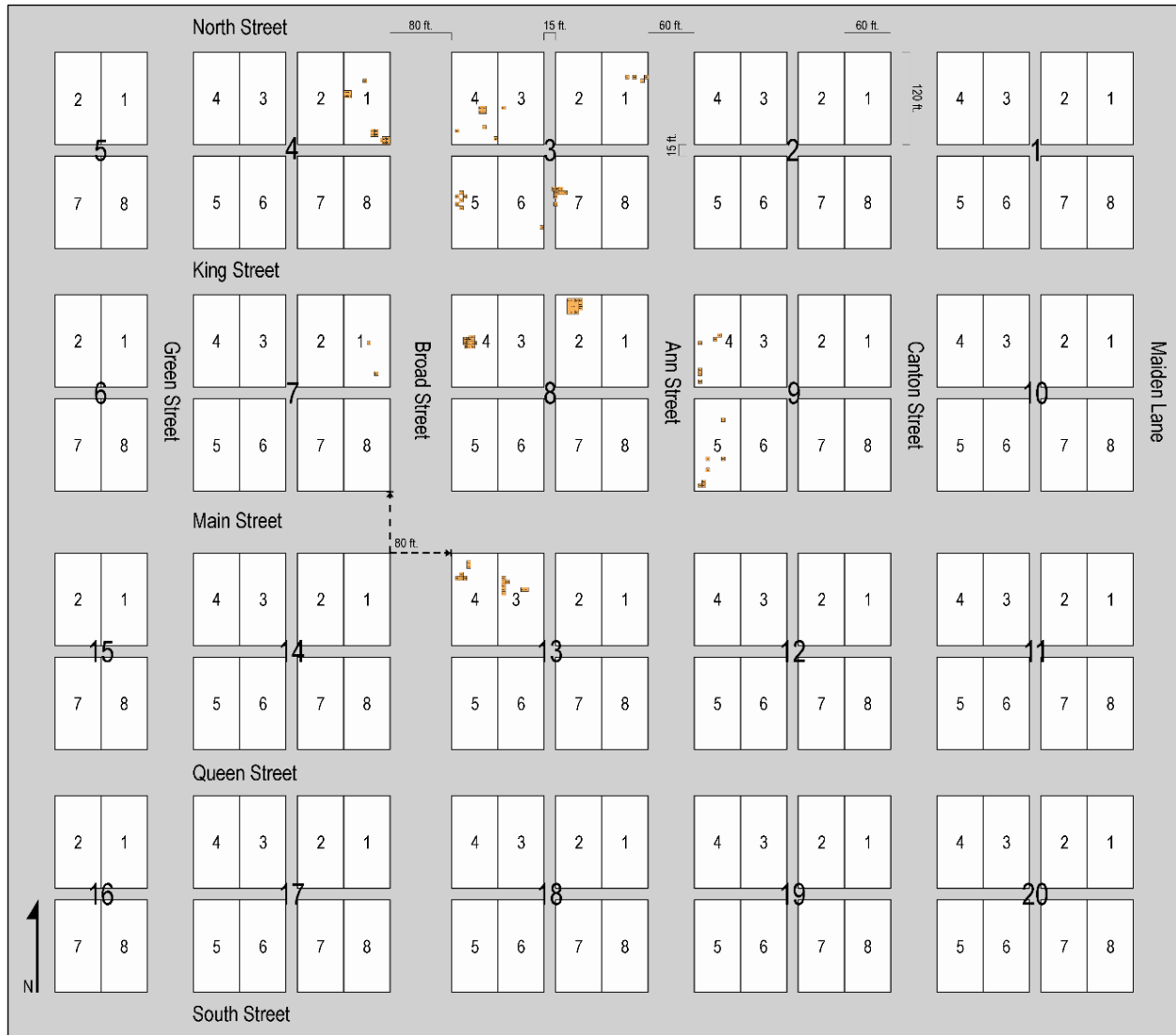


Figure 3.4. Excavation Units Placed during the 2004–2006 Survey. Drawn by Chris Valvano

At the start of each field season, Michael Hargrave (U.S. Army Engineer Research and Development Center Construction Engineering Research Laboratory, Champaign, IL) led a three-day geophysical survey using an electrical resistivity meter and a magnetometer to identify subsurface anomalies.³⁰ This survey along with results from the pedestrian survey guided the placement of excavation units.



Figure 3.5. Detail of Excavation Units Placed during the 2004–2006 Survey. Drawn by Chris Valvano

The archaeological team used 5x5 ft. (1.5x1.5 m) excavation units to sample the subsurface remains at New Philadelphia. These units were aligned to the original town grid with the use of a total station placed atop datum points driven by Like Land Surveyors. Archaeologists chose to place excavation units in areas with a high surface artifact density and in places with anomalous geophysical readings.

Excavators removed soil using 0.5ft. (0.15m) arbitrary levels or until they detected a natural soil change. The surface layer was routinely composed of a disturbed, plow-zone layer ranging in

depth from 1.0 ft. to 1.2 ft. (0.30 m to 0.37 m). Archaeological material was found throughout the plow-zone strata. Below this layer was an undisturbed subsurface that contains intact archaeological features.

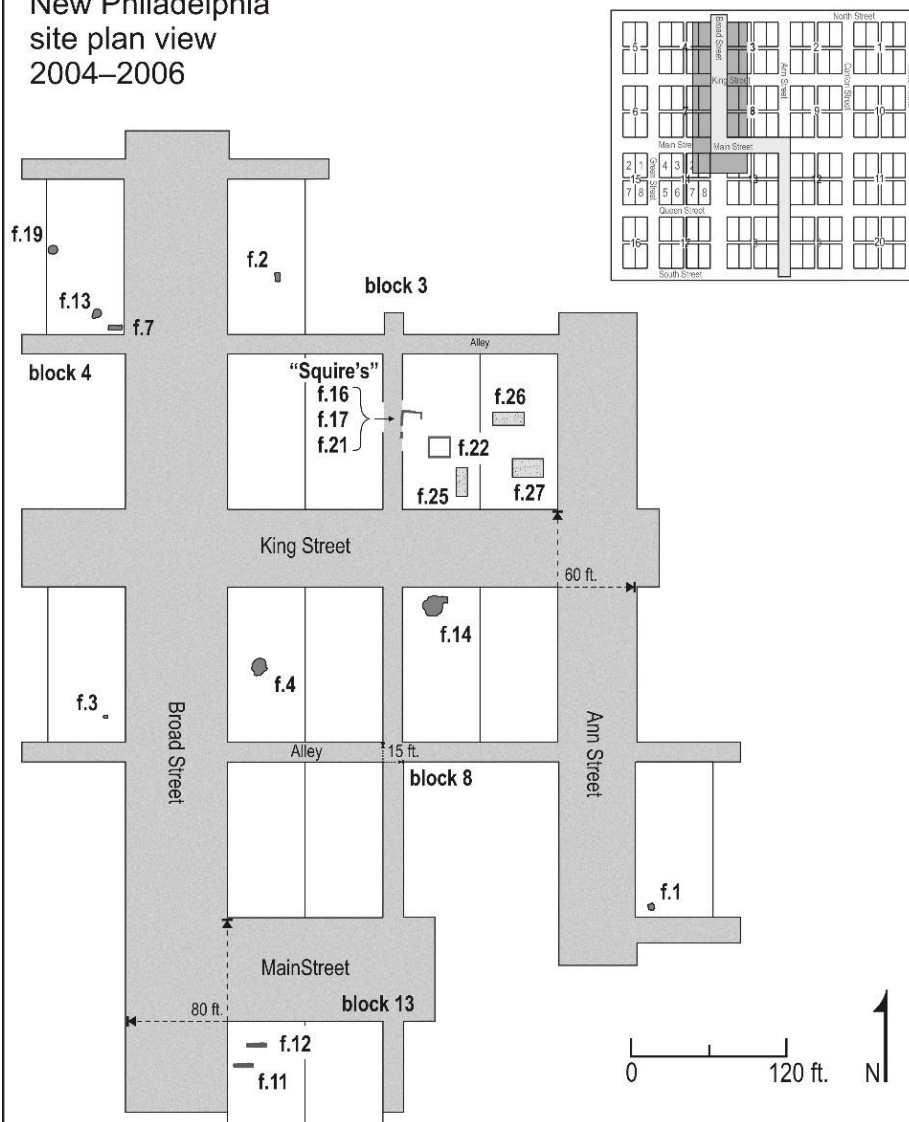
In total, 91 units were excavated; all cultural materials were recorded, bagged, and cleaned on site. They were later catalogued and analyzed at the Illinois State Museum Research Facilities in Springfield. Charlotte King supervised the laboratory activities for the project. Christopher Valvano was one of several crew chiefs for the 2005 and 2006 season. He also assisted King in the laboratory. The artifacts were catalogued as a continuous sequence from the pedestrian survey and the catalogue is maintained as a Microsoft Outlook database curated (along with the archaeology materials) by the Illinois State Museum. These can be made available to researchers upon request. Digital copies for the catalogue, excavation reports, and research materials are widely available online from the Center for Heritage Resource Studies at the University of Maryland; from the Digital Archaeological Record (tDAR); and from the University of Illinois webpages.³¹

Excavation Results

Excavations uncovered over 65,000 artifacts and 27 features associated with the historic occupation of the town. Six features (f1, f7, f13, f14, and f19) contained sufficient diagnostic material to warrant further published archaeological analysis. These features are also related to five distinct household (Figure 3.6).

Features used for archaeological analysis are summarized below. Archaeological maps, field photographs, and diagnostic artifact photographs are collected in Appendix A.

New Philadelphia
site plan view
2004–2006



Key for significant features

f.1. subfloor cellar pit	f.12. cellar wall foundation	f.21. fieldstone foundation (east)
f.2. lime slaking pit	f.13. well	f.22. fieldstone foundation
f.3. fieldstone foundation	f.14. subfloor cellar pit	f.25. concrete aggregate foundation
f.4. well	f.16. fieldstone foundation (north)	f.26. concrete aggregate foundation
f.7. subfloor cellar pit	f.17. fieldstone foundation (west)	f.27. concrete foundation
f.11. fieldstone foundation	f.19. subsurface storage/privy	

Figure 3.6. Features identified during 2004–2004 survey. Drawn by Chris Valvano

Feature 1

- a. Location – Block 9 Lot 5
- b. Historic Association – Casiah (Kezia) Clark, owned farmland, from Kentucky, not-white
- c. Functional Interpretation – shallow pit cellar
- d. Archeological Material – 1850s

Feature 7

- a. Location – Block 4 Lot 1
- b. Historic Association – Spaulding and Ann Burdick, shoemaker, arrived from New York, white
- c. Functional Interpretation – subfloor pit cellar
- d. Archeological Material – late 1840s

Feature 13

- a. Location – Block 4 Lot 1
- b. Historic Association – Spaulding and Ann Burdick, shoemaker, arrived from New York, white
- c. Functional Interpretation – well
- d. Archeological Material – late 1840s

Feature 19

- a. Location – Block 4 Lot 1
- b. Historic Association – David and Sophia Kittle, merchant, arrived from Ohio; and John and Augusta Sider, owners of lot from 1858 to 1868
- c. Functional Interpretation – cold storage pit or privy
- d. Archeological Material – ca. 1858 to 1869

Feature 14

- a. Location – Block Lot
- b. Historic Association – Sarah (Sallie) McWorter, from Kentucky, not-white, daughter to Frank and Lucy McWorter
- c. Functional Interpretation – large cellar
- d. Archeological Material – 1860s

Feature Squire and George McWorter Site (“Squire’s”)

- a. Location – Block 3 Lot 7
- b. Historic Association – Squire and George McWorter, from Illinois, grandsons to Frank and Lucy McWorter, not-white
- c. Functional Interpretation – fieldstone house foundation
- d. Archeological Material – 1880s–1890s

Additional Archeological Analysis Results

There are two significant archaeological analyses available that deal with cultural material from the New Philadelphia site. An analysis of subsistence patterns was published in *Historical Archaeology*. An analysis of consumer patterns was published in *Historical Archaeology* and in Paul Shackel’s *New Philadelphia: An Archaeology of Race in the Heartland*. Both sets of analyses deal with assemblages from historical features excavated during the 2004–2006 field seasons. They are summarized below.

Subsistence Patterns

Claire Martin and Terrance Martin explored the presence of three agricultural traditions identifiable in the historical and archaeological material from New Philadelphia. These traditions are common within Illinois historical archaeology literature. They are as follows:

1. Upland South – Southern states, Border states, and lower portion of Pennsylvania.

- a. Archaeological expression – higher ratio of swine than cattle bones, with relatively more wild species than the other traditions. Highest diversity of species overall.
- b. Ethnographic expression – often referred to as a frontier diet; mostly swine, corn, and wild game; reliance on crops native to America like squash, pumpkins, and beans; minimal amount of dairy nearly lacking of cheese.
- c. Agriculture – preference for cash crops especially corn, hogs, and cotton; rely on horses.

2. Midland – New Jersey, Pennsylvania, Ohio, Indiana, and Illinois

- a. Archaeological expression – difficult to identify because of the wide spread and high degree of migration; blends with Upland South.
- b. Ethnographic expression – Quaker diet of dumplings, puddings, and bread boiled in milk; preserved meat by drying; prefer swine but also rely on beef;
- c. Agriculture – most variable of the three, with preference for dairy cows, swine, sheep, and grains other than wheat.

3. Northern (or Yankee) –New England States

- a. Archaeological expression – lower ratio of swine than cattle bones, with relatively less wild species than the other traditions. Lowest diversity of species.
- b. Ethnographic expression – preferred not to eat wild game, preference for beef; chose wheat bread, boiled meat, salt pork, and salt beef; high degree of dairy products, chose wheat for human consumption and corn mostly for animal feed, relied on European crops like cabbage, turnips, and beets.
- c. Agriculture – mixed farming, mainly cattle and wheat with preference for dairy cows; rely on oxen.

Martin and Martin explain that none of these traditions are used as static criteria or as absolute indicators for assessing regional origins to an archaeological population, but that they are effective reference points for understanding how the process of migration affected the archaeological record's composition at New Philadelphia. They stated that:

In looking for evidence of regional traditions at New Philadelphia, evidence of cultural practices transplanted wholesale from Europe to America, and ultimately Illinois, are not expected. What is expected is evidence of influences and preferences that have been retained, adapted, or discarded through several generations and migrations.³²

Martin and Martin cross-referenced owners of Hadley Township farm property with corresponding names on mid-18th-century census schedules for population and agriculture. From this they were able to identify 107 farmers living in or near New Philadelphia and were able to assign each farmer to one of the geographic regions where each tradition originated. Their results are seen in Table 3.2.³³

The results from Martin and Martin's historical analysis showed that an individual farmer's origin corresponded to the type of agricultural activity they reported to census takers, so as farmers from New England states were predictably those with the highest amount of cattle and highest output of wheat. The reverse was true for those originating from Southern states. In fact, the only unexpected results were that Upland South farmers owned more oxen than their Northern counterparts. In short, the Hadley Township farmers' origins reliably correlated to the agriculture pattern they employed.³⁴

The most striking difference, however, was the property commercial values between the groups. This difference was most noticeable between farmers from Northern versus Southern origins. Those expressing a Northern agricultural pattern as a group owned more farmland of higher value and with more capital investment than those expressing a Southern agricultural pattern.³⁵

Martin and Martin also provided an analysis of faunal material relating to the dietary patterns for New Philadelphia residents.³⁶ The excavations yielded five features (and two subfeatures) with enough faunal material to warrant a formal analysis. The features were found on three different lots and represent assemblages from three distinct households. Martin and Martin's analysis show that the food remains, in a broad sense, could be linked to the regional origins for the individuals who likely deposited the material. Although the correlations were never perfect, faunal material and their representative dietary patterns are the strongest indicators for using the archaeological record to predict regional affiliations at New Philadelphia. Table 3.3 summarizes Martin and Martin's results and Figure 3.7 shows each feature's biomass composition.

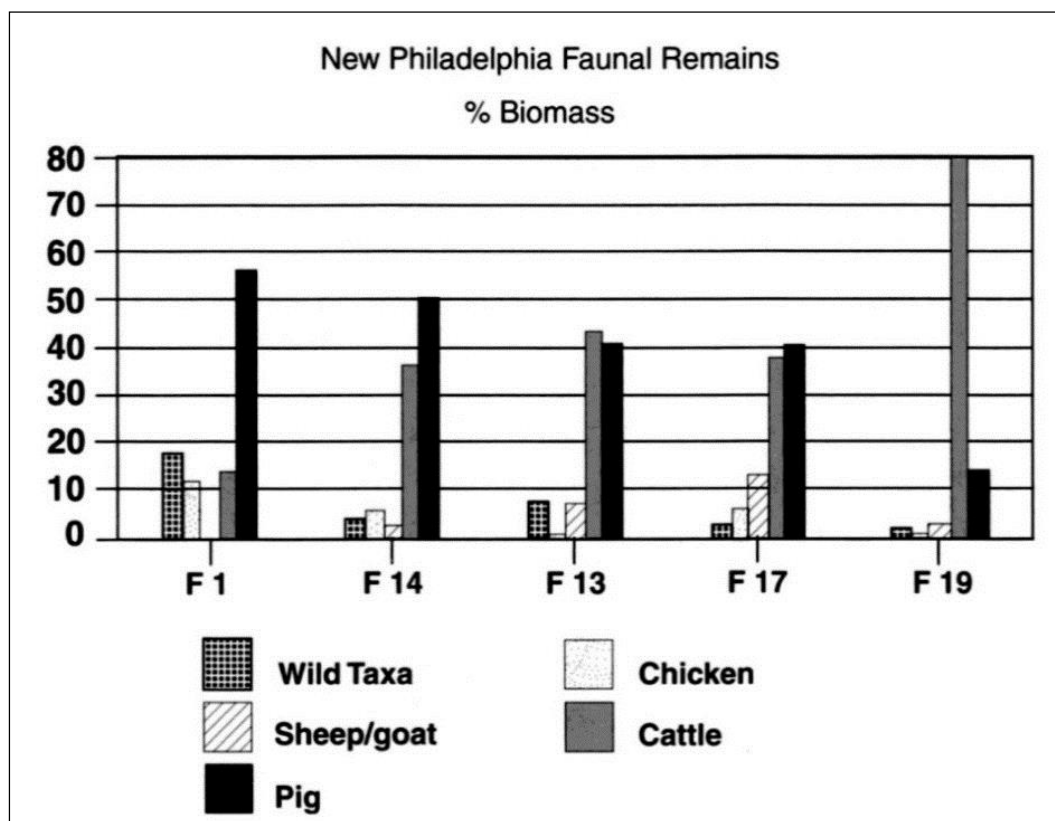


Figure 3.7. Dietary contributions of major animal taxa from five New Philadelphia features. Copied from Terrance J. Martin and Claire Fuller Martin, "Courtly, Careful, Thrifty: Subsistence and Regional Origin at New Philadelphia," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 99.

Table 3.2. Martin and Martin's Origins of Hadley Township Farmers 1840–1850.

	Upland South	Midland	North	foreign
Farmers	31	45	27	4
Total Acres	150.5	131.6	190.3	65
Improved Acres	47.10	63.51	65.78	33.75
Unimproved Acres	103.35	75.93	111.30	31.25
Farm Value (\$)	\$622	704	1,105	335
Farm Machinery Value (\$)	\$40.32	44.89	79.37	40.00

Claire Fuller Martin and Terrance J. Martin, “Agriculture and Regionalism at New Philadelphia,” *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 73.

Table 3.3. Martin and Martin's Faunal Analysis Results.

	Tradition	Household	Origin
Feature 1	Upland South	Kezia Clark	Kentucky
Subfeature (1a)	Upland South	Kezia Clark	Kentucky
Subfeature (1b)	Upland South	Kezia Clark	Kentucky
Feature 14	Northern tradition with high amount of wild species	Multiple candidates	Northern States
Feature 7	Northern tradition with high amount of wild species	Spaulding Burdick	RI/MA/NY
Feature 13	Northern tradition with high amount of wild species	Spaulding Burdick	RI/MA/NY
Feature 19	Northern or Midland	Multiple candidates	Multiple regions

Source: Terrance J. Martin and Claire Fuller Martin, “Courtly, Careful, Thrifty: Subsistence and Regional Origin at New Philadelphia,” *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 85–101.

Consumer Patterns

Paul Shackel described each of features' results from minimum vessel counts to analyze New Philadelphia residents' consumer patterns.

Table 3.4 summarizes the results for this analysis. The assemblages from these features show no strong differences between the vessels found in the features when compared against the regional origins of the historic owner(s). The nature of this particular sample coincidentally aligns to the owners' racial designations (i.e., all northerners were white and all southerners were black). The vessel assemblages did suggest a group-wide preference for current consumer goods but also a reluctance (or inability) for keeping matched sets of tablewares. This is the opposite pattern found at urban locations. In summarizing the content for the ceramic and glass assemblages, Shackel concluded that:

there is not a clear pattern of different uses of these artifact types when comparing African American and European American sites, however. There are also no clear differences when comparing households from northern states with those from the Upland South and Illinois. What is clear is that all of these households have access to the market place. They are all buying the most fashionable goods, although not necessarily adhering to all of the rules of the consumer society, such as buying and using matched sets of dishes and tea wares.³⁷

There is some detectable difference in the regional affiliations for the features, however, if the categories are collapsed to make them amenable to chi-square tables. Table 3.5 shows that when distinguishing the features presumed to be deposited by northern immigrants compared to those of southern ones, the distribution for their types of ceramic vessels are significantly different at the .01 level. This is not true for the glass assemblages, but the nature of the vessel counts require the assemblage to be collapsed into categories without any meaningful functional distinction.

Table 3.4. Shackel Ceramic and Glass Assemblage Results.

	Northeast			Upland South/Ill.		
	Fea.7	Fea.13	Fea.19	Fea.1	Fea.14	“Squire’s”
Tableware						
flatware	7	20	22	9	14	10
hollowware	4	4	7	1	10	2
Tea ware	-	3	1	7	8	4
Storage/prep.	3	9	2	8	9	9
Other/unid.	-	-	-	-	-	-
Whiskey	-	-	-	2	2	1
Beer	-	-	-	-	1	-
Other bottle	-	-	1	3	5	1
Food	-	-	1	-	6	4
Medicinal	1	-	7	5	11	8
Tumbler	1	-	1	1	3	1
Other	-	1	-	-	2	3

Ssource: Paul A. Shackel, “Identity and Collective Action in a Multiracial Community,” Historical Archaeology 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010).

Table 3.5. Ceramic and Glass Assemblage as Chi-Square pairings.

	flatware	hollowware	tea ware	storage
Northeast	49	15	4	14
Upland	33	13	19	25

The result is ***significant*** at $p < 0.01$.

The chi-square statistic is 15.8121. The P-Value is 0.001239.

	bottle	not-bottle
Northeast	10	3
Upland	49	10

The result is ***not significant*** at $p < 0.01$

The chi-square statistic is 0.2704. The P-Value is 0.603092.

Historic Datasets

There are four datasets used in this dissertation that are based on published primary documents.

All of these are available from online sources. The datasets are as follows:

1. The Historical United States County Boundary Files 1790–1999.³⁸ (HUSCO). These are

GIS shape files for county and state political boundaries drawn from each decadal census by

Carville Earle, John Heppen, and Samuel Otterstrom. Their description for the dataset is as

follows:

The Historical United States County Boundary Files 1790 - 1999 (or HUSCO 1790 - 1999) on CD-ROM contains ArcView shapefile format U.S. county boundary files for each decade from 1790 through 1990 (also 1999). Files include county and state names and FIPS identification numbers.

The Historical United States County Boundary Files 1790 - 1999 on CD-ROM contains revised and updated versions of two previously produced HUSCO volumes. The Historical United States Boundary Files, 1850-1970 (Volume I) consists of U.S. counties (excluding Alaska and Hawaii) for the decennial years between 1850 and 1970. The source for the HUSCO files (Volume I) is the series of county outline maps contained in The Historical U.S. County Map Collection (1840- 1970) (Baltimore: University of Maryland Baltimore County, Department of Geography, n.d.). The projection is Albers Equal Area, with two standard parallels (29.5 N and 45.5 N) and a central meridian at 94 W. Boundary resolution varies inversely with map scale: resolution is excellent at national scales, good at regional scales, and adequate at state and county scales. Maps overlay well from year to year except in the vicinity of Florida in 1830 and 1840, which are aberrations tied to the original digitizing process.

2. Historical, Demographic, Economic, and Social Data: The United States, 1790–1970.³⁹

These are transcriptions by the Inter-University Consortium for Political and Social Research

(ICPSR) for US Census enumerations. The ICPSR description is as follows:

Detailed county and state-level ecological or descriptive data for the United States for the years 1790 to 1970 are contained in this collection. These data files contain extensive information about the social and political character of the United States, including a breakdown of population by state, race, nationality, number of families, size of the family, births, deaths, marriages, occupation, religion, and general economic conditions. Though not complete over the full time span of this study, statistics are available on such diverse subjects as total numbers of newspapers and periodicals, total capital invested in manufacturing, total numbers of educational institutions, total number of churches, taxation by state, and land surface area in square miles.

The HUSCO and ICPSR datasets were combined by Christopher Valvano to create a single GIS database. The HUSCO files provide only basic information for the perimeter and area of each county or territory, but they also identify them by their Federal Information Processing Standards (FIPS) code. This code was created by the National Institute of Standards and Technology as a way to standardize county designations across various changes from 1790 to the present. The FIPS code has practical use because it eliminates many problems with melding historical datasets where counties changed either their name or resident state (like in the breakup of territories or the creation of West Virginia). Because the census database files from ICPSR are coded with the FIPS system, the melding of these two datasets was possible. The ICPSR data is a series of STATA files which were converted to Excel spreadsheets (.dbf).

These spread sheets list the enumeration data for each decadal census of the United States from 1790 to 2000. There is no personal information listed on the sheets, instead the counts for each census category are provided on the state, territory, and county level. Where available, enumerations for the census of agricultural and manufacturing are provided. These spreadsheets contain information on demography, industrial output, value of agricultural products, religious organizations, etc.

3. United States Congressional District Shapefiles.⁴⁰ These are shapefiles for every U.S.

Congressional District from 1789 to 2012. This dataset was drawn by Jeffery Lewis, Brandon DeVine, and Lincoln Pritcher. Their description for the online dataset is as follows:

This site provides digital boundary definitions for every U.S. Congressional District in use between 1789 and 2012. These were produced as part of NSF grant SBE-SES-0241647 between 2009 and 2013.

The current release of these data is experimental. We have had done a good deal of work to validate all of the shapes. However, it is quite likely that some irregularities remain. Please email jblewis@ucla.edu with questions or suggestions for improvement. We hope to have a

ticketing system for bugs and a versioning system up soon. The district definitions currently available should be considered an initial-release version.

Many districts were formed by aggregating complete county shapes obtained from the National Historical Geographic Information System (NHGIS) project and the Newberry Library's Atlas of Historical County Boundaries. Where Congressional district boundaries did not coincide with county boundaries, district shapes were constructed district-by-district using a wide variety of legal and cartographic resources. Detailed descriptions of how particular districts were constructed and the authorities upon which we relied are available (at the moment) by request and described below.

Every state districting plan can be viewed quickly at <https://github.com/JeffreyBLewis/congressional-district-boundaries> (clicking on any of the listed file names will create a map window that can be panned and zoomed). GeoJSON definitions of the districts can also be downloaded from the same URL. Congress-by-Congress district maps in ERSI Shapefile A format can be downloaded below. Though providing somewhat lower resolution than the shapefiles, the GeoJSON files contain additional information about the members who served in each district that the shapefiles do not (Congress member information may be useful for creating web applications with, for example, Google Maps or Leaflet).

4. Pike County Courthouse Record of Deeds.⁴¹ These are transcribed deed records from the Pike Courthouse that lists the town lot transactions for New Philadelphia. The dataset was collected and compiled by Robin Whitt. Charlotte King transcribed and formatted the dataset into MS Excel.

Historical-Archaeological data observations

In the previous chapter, we identified three types of expansion that characterized significant historical events at each scope (or scale) of inquiry. Each of those expansionary processes indicated a set of specific historical events that contributed to the patterning of the historical archeological record at New Philadelphia. Standing behind each of terms, however, is a set of theoretical assumptions that perform two important functions. First, theoretical assumptions provide the framework for turning the abstract and chaotic physical world into a specific and orderly set of definitions that become our critical units of analysis. Second, theory also explains how units of analysis relate to each other and were linked to the expansionary processes we are analyzing.

With that in mind, the following eight observations describe important relationships from the three expansionary processes from the perspective of their underlying theoretical framework of capitalist production. Capitalist production is here explained with historical-materialist theory developed by Karl Marx and Friedrich Engels. This theory uses dialectical methods to describe three varieties (or movements) of universal change that form the starting point for understanding cultural change at each scalar level. Each scalar level serves to explain the manifestation of a relationship central to one of the expansionary processes that contributed to the development of the middle class at New Philadelphia.

The first process, US political expansion, was the expansion of the capitalist relations of production. It was the process whereby two strangers could relate to each as citizens of the US and expect that their social contract with the government would supersede personal contracts and be the neutral arbiter of disputes. The second process, market expansion, was the expansion of the capitalist means of production. It was actuated by mercantile wealth's dominance and invested capital's transformative power. The third process, demographic expansion, was the intersection of the relations of production with the means of production. These were people whose migration was constrained by political relationships, whose motivations were mostly economic, and whose social value depended on their ability to produce and consume for mercantile markets.

New Philadelphia was a class of communities defined by how their founder related to the large context of capitalist markets. In this environment, communities provided a consistency of purpose that served as a sort of placeholder so that its members could remain anonymous, transitory, and replaceable in accord with fluctuations in the capitalist superstructure. Taking all these things together, the middle class found in prairie communities can be expected to have a

specific type of patterning that should be observable in the historic-archaeological record. Table 3.6 organizes these expectations into eight observations.

The next chapter describes the historical materialism that is a theoretical methodology created to explain the expansion of capitalism in modern society. The chapter presents the basic cultural processes of change identified by historical materialism, and then uses it to describe a general model of capitalism from which two hypotheses are created to bridge the material record at New Philadelphia with the overall process of US capitalist expansion. .

Table 3.6. Observations for the Historical-Archaeological Record at New Philadelphia.

General	United States	New Philadelphia
O1. When capitalism is the dominant mode of production, social relationships change according to dialectical processes.	The first century of US history is the process of capitalist expansion. The social organization of the country changed in tandem as capitalism matured.	The historical-archaeological record at New Philadelphia shows evidence of 3 types of US capitalist expansion (political, economic, and demographic)
O2. Capitalism is based on markets for human labor, but its expansion is most visible in commodities markets.	Every commodity market in the early US needed capital investment. Investment is the general measure for the spread of capitalists markets.	New Philadelphia was possible because of expanding real-estate markets and was founded to exploit local agriculture service markets.
O3. Expansion of the capitalist relations of production required cooperation between government and capitalists.	Political expansion was materialized through formal definitions of geographic boundaries.	New Philadelphia had standardized lots that were continually traded and it was planned to attract market activity.
O4. Expansion of the capitalist means of production required a speed faster than human capacity and required transportation networks not constrained by nature.	In urban areas, manufacturing technology increased the speed of labor. In rural areas, transportation infrastructure open new markets and new areas for settlement.	Because New Philadelphia was founded on the rural prairie it could only profit from synchronization with agricultural markets.
O5. Capitalist production is constantly accelerating which requires increasing availability for consumption.	Demographic migration patterns in the US favored groups who were most likely to produce commodities and consume finished goods.	New Philadelphia's residents arrived from two distinct migration routes.

Table 3.6. (cont'd)

General	United States	New Philadelphia
O6. Capitalism is different from past social systems because it organizes labor without accruing social obligations.	Town founding allowed for quick creation of communities organized to support the local markets in a way that any resident was interchangeable.	New Philadelphia's population could change quickly in response to market conditions.
O7. In areas of expansion, capitalism adapts to existing forms of social production (as well as their traditional hierarchies) but soon alters those labor relations to fit its market principles.	US capitalism persisted with two competing relations of production (one with free wage labor and one with bonded slave labor). Once it could no longer absorb the inconsistencies, wage labor became law.	New Philadelphia's founder could only gain political security by tapping the power relationships inherent with capitalist relations of production.
O8. Social systems take new forms only after dominant social institutions no longer perform their original functions. This is observable either as subordinate institutions take on the visage of traditional institutions, or as they apply traditional behaviors to subordinate institutions.	Traditional forms of religion and race were re-appropriated for mercantile logic and were broken down when they obstructed the working of mercantile markets.	Religion in the New Philadelphia was a vehicle for explaining progressive racial dynamics as conservative interpretation of Christianity.

¹ Juliet E.K. Walker, *Free Frank: A Black Pioneer on the Antebellum Frontier*, Lexington: University Press of Kentucky, 1983, 4.

² Walker, *Free Frank*, 3.

³ Walker, *Free Frank*, 4.

⁴ Walker, *Free Frank*, 4.

⁵ Diane Miller Sommerville, *Rape & Race in the Nineteenth-Century South*, Chapel Hill: University of North Carolina Press, 2004, 4.

⁶ Sommerville, *Rape & Race*, 4–5.

⁷ Sommerville, *Rape & Race*, 9.

⁸ Sommerville, *Rape & Race*, 10

⁹ Walker, *Free Frank*, 54–55.

¹⁰ Walker, *Free Frank*, 57.

¹¹ Walker, *Free Frank*, 52.

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- ¹² Walker, *Free Frank*, 45.
- ¹³ Tom Gwaltney, "New Philadelphia Pedestrian Survey: Final Report and Catalogue, Phase I Archaeology at the Historic Town of New Philadelphia, Illinois," white paper by *arGIS Consultants, LLC* (Bethesda: arGIS Consultants, 2004); and Joy Beasley and Tom Gwaltney, "New Philadelphia Pedestrian Survey: Phase I Investigations at an Historic Town Site," *Historical Archaeology* 44(1), 2010: 20–42.
- ¹⁴ Paul A. Shackel, et al., "New Philadelphia Archaeology: Race, Community, and the Illinois Frontier," Report on the 2004–2006 excavations sponsored by National Science Foundation Research Experiences for Undergraduates (Grant #0353550), University of Maryland. Online <http://www.heritage.umd.edu/CHRSWeb/New%20Philadelphia/2006report/1.pdf>.
- ¹⁵ Gwaltney, "New Philadelphia Pedestrian Survey," 1.
- ¹⁶ Gwaltney, "New Philadelphia Pedestrian Survey," 15.
- ¹⁷ Gwaltney, "New Philadelphia Pedestrian Survey," 1.
- ¹⁸ Gwaltney, "New Philadelphia Pedestrian Survey," 10.
- ¹⁹ Gwaltney, "New Philadelphia Pedestrian Survey," 10–11.
- ²⁰ Gwaltney, "New Philadelphia Pedestrian Survey," 11.
- ²¹ Gwaltney, "New Philadelphia Pedestrian Survey," 12.
- ²² Gwaltney, "New Philadelphia Pedestrian Survey," 12.
- ²³ Gwaltney, "New Philadelphia Pedestrian Survey," 22.
- ²⁴ Gwaltney, "New Philadelphia Pedestrian Survey," 33.
- ²⁵ Paul A. Shackel, et al., "New Philadelphia Archaeology: Race, Community, and the Illinois Frontier," Report on the 2004–2006 excavations sponsored by National Science Foundation Research Experiences for Undergraduates (Grant #0353550), University of Maryland. Online <http://www.heritage.umd.edu/CHRSWeb/New%20Philadelphia/2006report/1.pdf>.
- ²⁶ Paula A. Shackel, "Introduction: Remembering New Philadelphia," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 7–19.
- ²⁷ Paula A. Shackel, "Introduction: Remembering New Philadelphia," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 15.
- ²⁸ Michelle Huttes, "National Register of Historic Places Registration Form," United States Department of the Interior National Parks Service, Jun. 29, 2005. Online at <http://www.anthro.illinois.edu/faculty/cfennell/NP/nationalreg.html>.
- ²⁹ Gwaltney, "New Philadelphia Pedestrian Survey."
- ³⁰ Michael L. Hargrave, "Geophysical Investigations at the New Philadelphia Site, Pike County, Illinois, 2004–2006," U.S. Army Engineer Research and Development Center, Construction Engineering Research Laboratory, Champaign, IL 61826-9005. 2006 (tDAR ID: 4085) ; doi:10.6067/XCV8PN94Q4.
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CHAPTER 4: HYPOTHESES

Introduction

This chapter presents a model of capitalism as seen from the historical materialist perspective. This model then forms the basis for four general hypotheses about the broad cultural experience with capitalist expansion. These four hypotheses have the potential to link the historical-archaeological record at New Philadelphia with the broader process of capitalist expansion in the 19th-century US. Each hypothesis is addressed from the micro-scale level of the New Philadelphia town site and the meso-scale level of Illinois capitalist expansion. These four hypotheses are then broken down to two sub-hypotheses that become bridging arguments from which we can link the material record to the historical/theoretical context we have been building. In other words, they connect the local manifestation (that is the historical-archaeological record) to the wider process of capitalist expansion. These sub-hypotheses are then assessed with the historical-archaeological record from New Philadelphia. Each of these sub-hypotheses speak to the narrow personal experiences at New Philadelphia. Other scales of resolution linking the material record to the global, national, or regional level expressions for these processes are possible but are set aside for future work. All this finally leads to conclusions and suggestion for future work found in the final chapter.

The preceding chapters outlined the specific historical events contributing to the development of New Philadelphia. Those chapters showed that New Philadelphia would not have existed if not for the specific life experience of Free Frank McWorter. McWorter's life experience was in turn a product of the wider historical events of the early United States which was similarly a product of the wider historical process for the global expansion of the capitalist mode of production.

In chapters 2 and 3, then, the various levels of historical contexts were bound together in one phenomenon referred to as the capitalist mode of production. For our purposes, capitalism lends two practical qualities we must first consider before describing the character of 19th-century US prairie material culture. First, we saw that the prairie was undergoing a transition into a new mode of production. And we saw that a mode production is something that pulls together three major orbits of society: politics, markets, and demography. This synchronizing character means that discovering change should be fairly dramatic and it should be more noticeable than later changes in which capitalism was undergoing a sort of second-draft for improving the sweeping changes already made.

Second we saw that the transition to capitalism, as with any force of change, was a diachronic process – it occurred *through* time. This character means that when we look to the record we must set our observations along a temporal line so that we can see change as a force in motion. So, as we develop hypotheses for the historical-archaeological record at New Philadelphia., we need a methodology capable of building questions with these characteristics of capitalist expansion in mind. This methodology must be grounded in the nature of change in general, and also must be compatible to a social theory that explains the type of complex cultural phenomenon that created the local historical-archaeological record at New Philadelphia (i.e., capitalism).

The best pairing of social theory and diachronic methodology is the one developed by Karl Marx and Frederick Engels. This methodology is known as historical materialism. Because neither Marx nor Engels wrote a clear *modus operandi* for historical-materialist analyses, there is no universally accept strategy for applying it to new inquiries.¹ Understandably, there is much variability in formal applications of historical materialism and so stating this dissertation's intent

to use historical materialism would be confusing without first articulating a general model for how capitalism effects social change.

General model for how capitalism effects social organization

The following section outlines 12 characteristics that make a general model for the capitalist mode of production and that influenced the creation of the prairies middle class. This model is built from the above discussions for historical materialism's general processes of change and from Marx and Engel's historical/ethnographic description of the early period of capitalist expansion.

1. Capitalism is based on labor markets, but it expands via mercantile markets. Once enough people engage in capitalism it takes on a logarithmic geographic expansion. (This expansion is measurable and normalized when scaled to a "natural log" as shown by Appendix B.)
2. The "tip-of-the-spear" for capitalist expansion is mercantile markets (i.e., agreement to exchange goods for other goods or money). Because markets are an exchange relationship, there is always some type of synchronization; this is equal to that. The capitalist marketplace is composed of several kinds of markets. But, its foundation is always the labor market (i.e., agreements to alter the state of something for money). Because markets are social relationships, they are political in nature. Therefore the base of capitalism is inseparable from the governing political structure. If markets are a synchronizing demographic force, then they must also be a synchronizing political force. This synchronization of political structures is observable by showing a mirroring of political stability with market expansion. The political stability is measurable through the tracking of cohort groups within the constant re-alignment of US Congressional Districts

during the expansion of the capitalist mode of production. Appendix C measures US Congressional Districts as cohort groups. The cohorts represents districts that were created and abandoned at the same time.

3. The labor market is an asymmetrical power relationship. One participant has only one thing to offer and must sell something to survive. The seller of labor is always at a disadvantage and must synchronize their behaviors to the condition set by the powered side.
4. The power relations are at first protected by direct violence but soon are maintained by the threat of violence. The state is primarily responsible for these duties.
5. The historic consequences of basing social organization on labor-market principles is that initial capitalist expansion took on the appearance of traditional mercantile markets. This is because the foundational labor relationships require greater amounts of support services for food, raw materials, land, etc. So that the heart of capitalism is very different than from the outer support layers. This is why World Systems theory appears to offer an elegant explanation for the social patterning of the modern world; it is looking at just the outer edges and at the place where the balance of power is most lopsided and therefore the synchronization most dramatic.
6. Because the vanguard for capitalist expansion is mercantile markets and the relationships they contain, understanding the prevalent mercantile market for each historic context is the key to anticipating the social organization that will develop.
7. The manner of capitalist expansion changes social organization. The geographic expansion of capitalism has two social consequences: (1) it organizes, through exploitation, people who are not owners of commodities; and (2) it disorganizes, through competition, people

who are owners of commodities.

8. Behavior within capitalism becomes standardized to mercantile logic but a person's experience depends on labor-market logic. The integrating features of capitalism seem straightforward but the competition among the owners makes success a moving target. Non-owners have an almost intuitive understanding for what they should do to succeed (buy cheap, sell dear), but the competing forces change the location or considerations for success without useful prior warning.
9. Capitalism is different from past social systems because it organizes labor without accruing social obligations. Capitalism separated social coercion from social obligation so that the "baggage" of acquiring subservient labor partners could be diluted, shifted, and/or absorbed instead of bringing about leadership upheavals. This break from traditional social obligations favored groups depended on resources given by participating in capitalism. In other words, groups of people who were free to work for themselves (i.e., to make things for capitalist markets) but also who were consumers of the products of capitalist markets. These groups were small families who were both independent and mobile (i.e., who were not tied to producing on land own by feudal lords or plantation owners). They were also people who were dependent most on the products of capitalism precisely because they were mobile and not surrounded by traditional support structures. Their structural purpose, then, is as much about consumption as it is production.²
10. The shift to basing social organization on capitalism is observable through the increase of market territory and the increase of market types. The deepening of capitalism is the maturation of the labor market. So that capitalists become more than just the obvious factory owners but they are also people who alternate between buying other people's labor

and selling their own labor. The labor market matures as capitalism deepens because some laborers are required to buy finished products or commodities to turn their labor into something saleable as a commodity, service, or finished good. This appears disordered because it compresses the synchronization of labor and competition of owners into one group. But, ultimately one type of labor should prevail and this will be the basis for the region's social organization.

11. In areas of expansion, capitalism employs previous forms of social organization but soon aligns all labor to its market principles. In a historic context, where we see the penetration of capitalism and then see its maturation, we should also see first the dominance of a single mercantile market. The labor needed to supply this market can be any type of non-capitalist labor. But, the social organization in the area will quickly conform or synchronize to the needs of the foreign labor market.
12. As capitalism deepens, laborers themselves become quasi-capitalists. This increases the complexity of labor in that a laborer needs to buy the labor of others so that s/he can package their own labor into a saleable form. This has two social consequences: (1) people can employ labor without accruing social obligations from the seller, and (2) they can sell their labor without imploring social connections from the buyer. These consequences allow for greater freedom of movement and more opportunities for private land ownership. The price for this however is that they must also compete as do full-time capitalists so that they can ensure the type of labor they sell will be synchronous with changing market conditions. So success is measured by these people's ability to pull other people's labor into their orbit, either by encouraging supporting service sectors or by controlling the input of finished goods, commodities, or tools. And measured by their

ability to transform all that they buy into something with value to the higher capitalists.

Historical Materialism

The materialist conception of history starts from the principle that production, and with production the exchange of its products, is the basis of every social order; that in every society which has appeared in history the distribution of products, and with it the division of society into classes or estates, is determined by what is produced and how it is produced, and how the product is exchanged.³

Historical materialism is a science for understanding relationships of change. These kinds of relationships are ones in which two or more variables first become linked by an external stimulus and then are energized by an internal force, and finally are changed into something new. It is only the last two events, after the variables are linked, that historical materialism is proficient at describing. In other words, it is not an explanation for why variables became linked, but rather only for how they changed after the process began.

There are three basic processes of change described by historical materialism – transference, quantity-into-quality, and negation-of-the-negation.⁴ These processes belong to one family in which all members are driven by the kinetic force of tension. It is the differences between these three different tensions that define each process. This is because these differences are what determine the results of the interaction between the things we observe.

This is perhaps the better known aspect of Marx's historical materialism in that it describes the process of contradiction resolution. If any single statement about Marx's contribution to social theory is most agreed upon it is his positioning of class conflict as the arena for which social contradictions are fought. Here change occurs from a state's inability to resolve ongoing conflicts or to prevent new ones from developing as policies are enacted.

General Hypotheses for Broad Cultural Experience with Capitalist Expansion

The following hypotheses are based on the eight observations produced at the end of chapter 3,

on the dialectical processes of change, and on the general model of capitalism presented above. They are intended to link the overall model of capitalist expansion with the historical circumstances for development of New Philadelphia on the Midwest prairie. Not all the hypotheses have a material correlate within the historical-archaeological record. And, these hypotheses are not exhaustive, but rather represent an initial step towards generating meaningful questions that can be answered with the datasets presented at the end of the last chapter. From these four historical hypotheses, two sub-hypotheses are presented that do have material correlates and are useful as bridging arguments between the historical-archaeological record and the larger processes discussed above.

Hypothesis 1: Capitalism is a social-organizing force

- a. General statement.** Capitalism has the motivation and the means to determine how people reproduce the material conditions of their lives.

There are two sets of relationships related to hypothesis 1:

Relationship 1. The political economy of capitalism was the only factor determining the settlement of rural and urban populations.

b. Variables. (1) US urban population and (2) US rural population

c. Corresponding historic datasets: For (1) and (2) historic context of capitalist expansion in the United States as measured by US Census Enumerations for capital investment.

d. Corresponding archaeological datasets: For (1) and (2) archaeological survey urban and rural households.

f. Dialectical Process. Transference: The social categories for urban and dwellers still exist in capitalism, but the functional relationship between the two change. Where urban

centers were dependent on rural areas for agricultural products, rural areas in capitalism are now dependent on the urban manufacturing for machinery to aid small families in producing high farm yields. The energy of expanding markets forces the political system to create new relationships among citizens, these new relations can form new social classes that then force structural changes inside the political system.

g. Linking Metric for New Philadelphia. Because New Philadelphia was founded on the rural prairie it could only profit from synchronization with agricultural markets. In urban areas, manufacturing technology increased the speed of labor. In rural areas, transportation infrastructure open new markets and new areas for settlement. This new connection formed the backbone of the prairie middle class. Eventually even natural transportation links were secondary considerations for establishing capitalist networks.

h. Expectation. Once urban markets established a transportation link to an adjacent area from New Philadelphia, the town lots only productive use were for crop production. The historic record is the best link between New Philadelphia and this process. By itself, the material record would indicate a sudden abandonment of the site, but would not give any indication for the underlying reasons.

i. Test. Falsifying this hypotheses would require identifying a self-sustaining rural to urban networks within the US that was based on kin relations or foreign political alliances.

e. Implications. Capital is active in all economic settings and its production is guaranteed by political authority; this gives it the reason and ability to organize social structures to its benefit. Although the collusion between politics and economics vacillates from cooperative to antagonistic, it always has been mutually beneficial. In fact, separation between these institutions is the precise source for capitalism's endurance. Despite the

continuous string of predictable crises, these economic panics or political coups rarely co-occur in a manner that prevents one institution from saving the other. Their assured mutual destruction predicts an intertwining of their historic past development. Generally, then, social change should be patterned to political and market change.

Relationship 2. Demographic migration patterns in the US favored groups who were most likely to produce commodities and consume finished goods.

b. Variables. (1) not productive US families and (2) productive US families

c. Corresponding historic datasets: For (1) and (2) historic context of capitalist expansion in the United States. There should be a correspondence between the migration of productive U.S. families, the “migration” of capital markets, and the increasing stability of political boundaries.

d. Corresponding archaeological datasets: For (1) archaeological assemblages from families not engaged in the capitalist mode of production. For (2) assemblages from families that were engaged with capitalism.

e. Dialectical Process. Transference, Quantity into Quality, and Negation of the Negation.

f. Linking Metric for New Philadelphia. New Philadelphia’s residents arrived from two distinct migration routes. Internal comparison of families arriving to New Philadelphia from different parts of the US can answer questions about what kinds of behavior resisted the transition to commercial production for capitalist markets.

While the life experience of Free Frank McWorter can illustrate how traditional political relationships can become transformed when qualities between social classes are transferred. For example, prior to Free Frank’s petition to the Illinois legislature his status as a freedman provided identical control over his labor as any white man. The political

structure, however, restricted access to full property protections from his social category. McWorter's successful petition to the Illinois legislature for full legal rights, meant that ostensibly he still belonged to the disenfranchised black social group but when approaching the legal system as an individual he could enjoy legal privileges granted to the white social category. So, from a historical-materialist perspective, the Illinois legislature had caused a profound structural change by creating a new (albeit camouflaged) social category for a person who had white legal privileges but for whose racial category appeared unchanged.

In this subtle way, the Illinois Legislature created a potentially dangerous internal contradiction, that, if it ever was brought to bear on public scale, could have forced a resolution that would assuredly come with some type of social disruption. Structural changes like this, that never seem to become activated on noticeable scale, likely occur more frequently than current scholars have the tools or resources to adequately measure.

This explanation for structural change made by historical materialism also makes a prediction that any new category must also arise with its opposite form. The opposite structural form for Frank McWorter, therefore, would be a white person with the property protections of the white middle class, but imbued with racial equality to a freedman. In other word, the Legislature did not just created a black man who could sue in court; they also created white people who could lose in court to a black man. This realization comes from the dialectical anticipation that the Illinois legislature, in resolving one conflict over Free Frank's property rights, were also undermining their ability to resolve the potential conflict they unwittingly created. From a 19th-century white perspective the alternate social category created would certainly appear as a demotion in status, just as to modern

observers the petition of Free Frank appears as a promotion (even though his rights were only equalized).

The existence of this new white-social category could never be loudly acknowledged, and in fact we would expect that most Illinoisans, would never realize their structural transformation because only a handful of people appeared in court against McWorter or his family.⁵ For the ones who did, however, what to them would appear as a typical powerless black man would actually be an equally protected middle-class property owner.

As long as legal disputes like this placed only an insignificant number of whites into this new category, they would remain redundant outliers with no transformative capacity. If, however, a sufficient number of them arose, the size of the group, bound together by their communal feelings of tension as familiar racial categories were sheered apart, they could begin to function as a single class and force resolution of the contradiction. (The contradiction of racial equality applied unevenly.) If the quantity of this new group grew large enough to give them qualitatively new political power, then the energy from these two social processes of change could combine, and at this point we would predict that a resolution would have clear and dramatic historical effect (even though the underlying cause would be camouflaged). This is scenario encapsulates the basic characteristics of the “historical events” described earlier by William Sewell. And this would explain, hypothetically, why a seemingly banal dispute over a town lot in rural Illinois might erupted into racial riots throughout Illinois. Without understanding how the historic context had primed the scene for violence these hypothetical riots would seem completely erratic and unaccountable.⁶

Predicting the effects of dialectical processes is an important step towards developing

a science of cultural change that can gather other research projects into a shared insightful comparison. And to understand the present.⁷

g. Expectation. New Philadelphia's founder could only gain political security by tapping the power relationships inherent with capitalist relations of production. Town founding allowed for quick creation of communities organized to support the local markets in a way that any resident was interchangeable. It also allowed for Frank McWorter to profit from the activities of "traditional-looking" middle class Illinoisans.

i. Test. Falsifying this hypothesis could require identifying family-based production that is independent from capital production and existed alongside other family units who are engaged in capital production.

e. Implications. US capitalism persisted with two competing relations of production (one with free wage labor and one with bonded slave labor). Once it could no longer absorb the inconsistencies, wage labor became law. New Philadelphia's population could change quickly in response to market conditions. And this was clearly an historical location where structural changes to traditional social categories were occurring without necessarily reverberating up to change the higher levels of the social structure.

Hypothesis 2: Capitalism is an economic force

a. General statement. Capitalism's first priority is to produce a universal medium of exchange.

b. Variables. (1) Capital producers and (2) Capital consumers.

c. Corresponding historic datasets: For (1) indirectly measured by US Census Enumeration for capital investment. For (2) indirectly measured as a dependency estimate gleaned from US Census Enumerations.

d. Corresponding archaeological datasets: For (1) and (2) discrete features that were deposited by a single productive unit such as a household or factory. The identity of the feature's creators has to be identified from the historic record.

f. Dialectical Process. Quantity into quality: At a certain point the amount of capital invested in an area should transition from redundant accumulation to create a place with different kinds of relations to political authority and with obvious synchronization to regional market demand.

g. Linking Metric for New Philadelphia. There are two basic metrics for capital investment at New Philadelphia. First was the county tax assessments that were based on the improvements to a property. Juliet Walker used these in her analysis of Frank McWorter, but a great deal of work needs to be done with these documents to cross-reference a large list for town-lot owners versus residents and to distinguish the between all the various modifications that were counted as improvements. The key question would be determining at what point does more cash value for a lot make it a new class of productive property.

The second metric is the material record for items most related to market consumption. These can be classified based on assumptions for their past function.

h. Expectation. Items categorized as finished goods were generally not used for capital production. These goods, therefore, reflect the ability to consume market goods which should be an accurate measure of their ability to produce capital.

A unifying indicator for historic markets broadly should be capital investment.

Measuring capital input is a measure of places where people expected to generate profit.

i. Test. Falsifying this hypothesis requires mapping the spread of capital investment across

the US through the 19th century and showing ***no correlation*** between any investment hierarchy and a difference in either political relationships or social demographics.

In the material record testing this would require demonstrating no correlation between frequencies of artifacts of production/consumption with those of purely political or social demographic value. Correlation between political and demographic metrics would be irrelevant in this scenario if no correlation to economic metrics was identified.

e. Implications. Capital can be transformed into hard currency, into labor, or into commodities. Its universal quality allows it to engage with every part of an economy. The place where capital moves between physical and conceptual forms is the market. Although transactions take numerous physical forms, a capital market is one in which both exchange items start as capital and then end as more of it. This means that all individual cases of market relationships (if they endure) will synchronize to the broader trends of capitalism.

Hypothesis 3: Capitalism is a political force

- a. General statement.** Political authority defends the production chain from agriculture to manufacturing to consumption so that capital can be reproduced.
- b. Variables.** (1) US Government and (2) Property holders
- c. Corresponding historic datasets:** For (1) United State Congressional District Maps. For (2) Register of Deeds, Register of Wills.
- d. Corresponding archaeological datasets:** Practically nonexistent because it is expressed as the absence of archaeological features related to defense.
- f. Dialectical Process.** Negation of the negation: Claiming right over property is the only way to give them away in exchange for capital.

- g. Linking Metric for New Philadelphia.** The record of deed transaction shows the alignment of the land market with the acceptance for the government's role in validating the town-lot sales. New Philadelphia had standardized lots that were continually traded and it was planned to attract market activity. New Philadelphia, in turn, was successful because of expanding real-estate markets.
- h. Expectation.** Stable political borders should represent the effective containment of social tension (in this case over access to property). On the local scale, the use of property for economic reproduction should coincide with political access. Wherever market activity can be observed, there should not be endurance for any other type of institution that protects property rights.
- i. Test.** Falsifying this hypothesis would require demonstrating that *no correlation* between market activities and/or social organization at New Philadelphia.
- e. Implications.** Modern politics spends enormous energy to ensure the stable flow of global resources. Between governments, this mandate is expressed as trade partnerships, but between governments and citizens it is expressed as expectations to protect property rights. This social contract during the expansion of capitalism should co-occur with a growing consensus (forced or otherwise) for governmental authority. This consensus could be observed as stability in borders that are purely political and only reflect political relationships.

Hypotheses 4: Capitalism is a materialist ideology

- a. General statement.** Capitalism is a product of the human mind meant to be fulfilled in the physical world.
- b. Variables:** (1) US government, US/global investing class, US population; and (2) US

productive/consumptive actives

- c. Corresponding historic datasets:** For (1) United State Census Enumeration Sheets (HUSCO and ICPSR). For (2) ethnographic descriptions social units of production like households, factories, and unions.
- d. Corresponding archaeological datasets:** For (1) digital archaeological site inventory/database (nonexistent). For (2) archaeological surveys of households, town, urban neighborhoods.
- e. Dialectical Process.** Transference: State-level cultures have structural networks comprised of institutions that each perform a function. Change occurs when structures and/or functions are transferred.
- f. Linking Metric for New Philadelphia.** Life experience of Frank McWorter from his transition from zero control over his labor to a town founder who had enough capital to influence (but not completely determine) the organization of labor in his community. This metric would address the overall question of how to describe a specific way to ascend the labor hierarchy in capitalism, but it would more likely highlight a series of compatible questions to consider when moving beyond New Philadelphia for comparisons.
- g. Expectations.** Chart an arithmetic growth for producing market commodities looking for a measure in the difference between initial investment and market value. In other words, we should see an increase in McWorter's added surplus value. We should also chart cascading growth for consumption of manufacturing tools and commodities and then for finished goods. These two growth rates need to coincide with access to political authority for protecting property rights.
- h. Test.** Falsifying this hypothesis requires tracking material correlates of

production/consumption across several sites from South Carolina to Kentucky to Illinois and identifying instances in which traditional ways of organizing labor were *not* adapted to make commodities and/or to identify how commodities were *not* adapted to increase the market value for traditional products.

i. Implications: Because ideologies are abstract creations, they have no material features to measure. However, because capitalist ideology is an explanation for the best way to change the physical world (i.e., through commodity production and finished goods consumption), it is an idea meant to be expressed in the physical world and very amenable to positivistic methodology. Therefore, observing capitalism is possible by measuring variables pertaining to production/consumption that we can assume were influenced by the social/historical context of capitalism.

The nexus for capitalist ideology is the middle class. This class is a social grouping defined by political authority and is also most likely to supply capitalism with both the energy to produce commodities and the appetite to consume finished goods. This group formed the population base of small farms and speculative towns that grew into the middle class on the American prairie during the 19th century.

From the archaeological-site scale. The historical-archaeological record at New Philadelphia cannot show the full expression of the capitalism's ideology. It can, however, speak to how the middle class synchronized to capitalism once they arrived in the Midwest.

Sub-Hypotheses for bridging the historical-archaeological record at New Philadelphia

Capitalism is most readily bridged to the historical-archaeological record at New Philadelphia from its political-economic aspects. It was the **political access** granted to McWorter that

protected his property rights and it was the wider political relations of **market expansion** occurring throughout the Midwest that instructed how he could transform his identity to protect those rights. Each time a market transaction was recorded by a government agency, this was in effect a political activity whose rules were determined by the all the larger processes discussed earlier.

Taken as a whole, the historical-archaeological record has the ability to bridge the site-specific activities of New Philadelphia's residents to the political economy of the United States. It does so by using middle range theories. It can do so however only in limited way and in a dissimilar manner when the documentary record is held separate from the material record for unlocking the town's value as capital.

The historical context of capitalism instructs us to anticipate that all preceding commercial transactions had a binary nature as products of both a political and economic force. So when we look to the material record we expect politics and markets to coalesce around items we know were designed for a capitalist production network. The nature of the material record, however, can readily bridges *the economic aspect of capitalism with demographic expansion*. And it does so in an extremely limited fashion.

Fortunately, theories of capitalism predict that some artifacts should be stronger indicators for the effects of the capitalist mode of production precisely because they required more capitalist energy to produce. In other words, some material items required a more intense relationship with capitalism to find their way to New Philadelphia. These were items like ceramic tablewares that were typically produced from refined earthenware clay bodies that needed more physical labor to produce than their coarse-clay stoneware counterparts. In addition, these wares were manufactured farther afield from New Philadelphia than either stonewares or

unrefined earthenwares. And so their appearance at New Philadelphia reflects an intense labor relationship with capitalism as well as an intense relationship with the transportation networks connecting New Philadelphia to commercial markets.⁸

Two bridging arguments about the historical-archaeological record at New Philadelphia can be constructed to demonstrate how middle range theories allow for measuring cultural phenomena in the historic past. These two hypotheses are as follows:

Sub-H1 states that deed transactions were *political-economic activities* that occurred for local purposes but were governed by larger national standards.

The documentary record for Deed Transactions is the localized manifestation of the performance for US *politics and economics* at New Philadelphia. This is because these records were required by the Federal government, maintained by the local Pike County government, and arbitrated the commercial interactions between private citizens. All of this was to protect the sanctity of private property which was here materialized by the land market and in turn was essential requirement for the mobility of the prairie middle class.

Sub-H2 states that market consumption was a *demographic-economic activity* in which capitally produced items correlated with subsistence behavior.

Tablewares were the most capital-intensive items found in the artifact collection from New Philadelphia. These were used locally for personal consumption but were the terminus of a long global production line. These were items almost certainly not used in the production of commodities or commercial services. Although they have the strongest connection to the anonymous global production chain, they are linked to the most personal aspects of demography which are the inmate floodways people carried with them as they settled from different parts of the country.

Sub-Hypothesis #1

Statement. The documentary record of deed transactions shows a movement from the personal life experience of Frank McWorter to the energetic land market of the Midwest, and then a move to the post-civil war stagnate era in which New Philadelphia was abandoned as a commercial town. These data allow us to ask how the prairie middle class responded to shifts in the structure of capitalist networks that were beyond their local control.

Dataset. The deed transactions held by the Pike County Courthouse lists the buyers and sellers for town lots at New Philadelphia from 1837 to 1938. These entries were the unassailable proof of property ownership and were essential for the commercial activities of the prairie middle class. This is because the access to political rights was a condition of citizenship that was transported to any area of the country. This allowed the prairie middle class to move freely based on economic incentives without needing approval from local authorities. These data were transcribed into spread sheets as discussed in chapter 3.

Results. The entries are plotted in Figure 4.1. Each dot represents one deed sale. In total, there were 1,784 transaction recorded in the county books. Of these sales, 977 (55%) occurred before 1885 prior to the town being vacated and listed as agricultural property. The x-axis shows the year which the transaction occurred and the y-axis lists the block for which the deed indicated. The left side of the graph shows the initial sales of lots by Frank McWorter. Once sellers besides McWorter and his family began trading lots, the town became a self-sustaining land market. The graph shows the empty section after the town was vacated and an increase of activity again with the political-economic instability of the second and third decade of the twentieth century.

Figure 4.2 shows that not only was the commercial activities during the life of New

Philadelphia represented by a more energetic land market, but also that the way people sold land was of a different character than after the town was zoned for agricultural use. The x-axis for the graph shows again the date for the deed sales. The y-axis however represents each individual listed as the seller on the deed. This graph does not include McWorter and his family in order to remove any legacy land holdings they might have had.

For each person listed on the county records only the earliest and latest deed transaction is plotted with a dot. A line connects transactions when the earliest and latest dates were separated by more than a year. This graph shows that people were selling land with a frenzy during the commercial speculative years of the town. Once the town was vacated, they sold land at a much slower pace. This is the behavior one would expect from the prairie middle class whose economic activity was geared towards market production. When the commercial markets were connected to New Philadelphia by wagon roads, the pace of land sales occurred in rapid succession. But once the H&N Railroad shifted market activity from the town, the energy of the land market responded in tandem. This is local behavior responding to extra-local phenomena. Figure 4.3 and Figure 4.4 give a sense for the density of railroad construction during this period.

Sub-Hypothesis #2

Statement. The artifact assemblage of tablewares collected from New Philadelphia is a class of material with the best chance for showing distinctions in personal consumption behavior at New Philadelphia. The artifact collection as a whole was produced by the capitalist mode of production, and New Philadelphia was established to profit from the expansion of commercial activity into Pike County. Therefore, the total material record is a single homogenous response to capitalism. But, the homogenizing effects of capitalism in the creation of the prairie middle class required the migration into Illinois of two setter communities. This revealed a distinction within

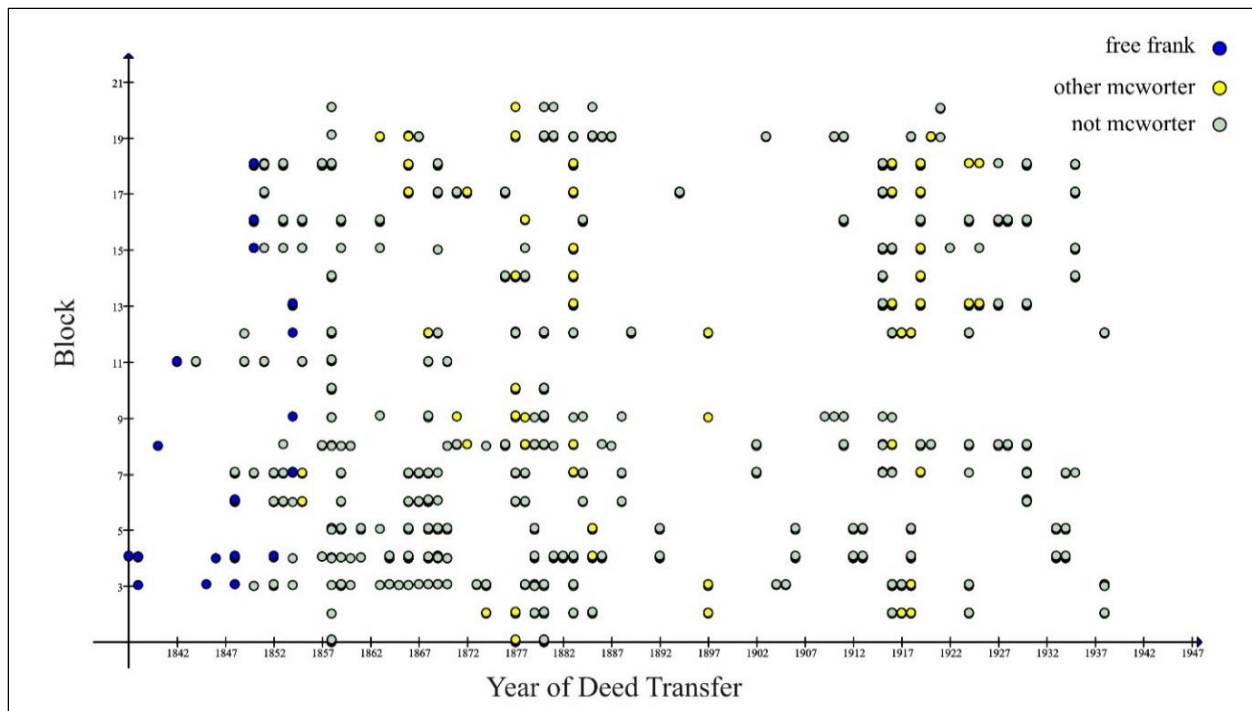


Figure 4.1. Location Graph for Historic Deed Transactions at New Philadelphia

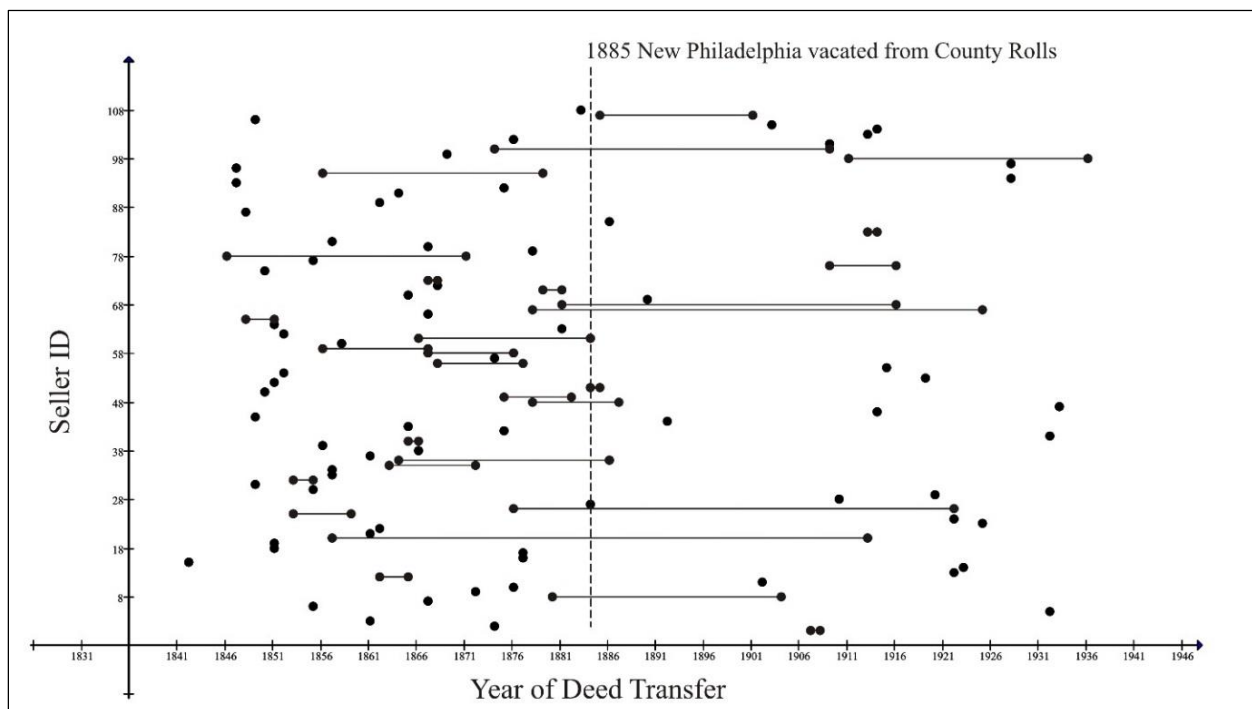


Figure 4.2. Sellers Graph for Historic Deed Transactions at New Philadelphia.

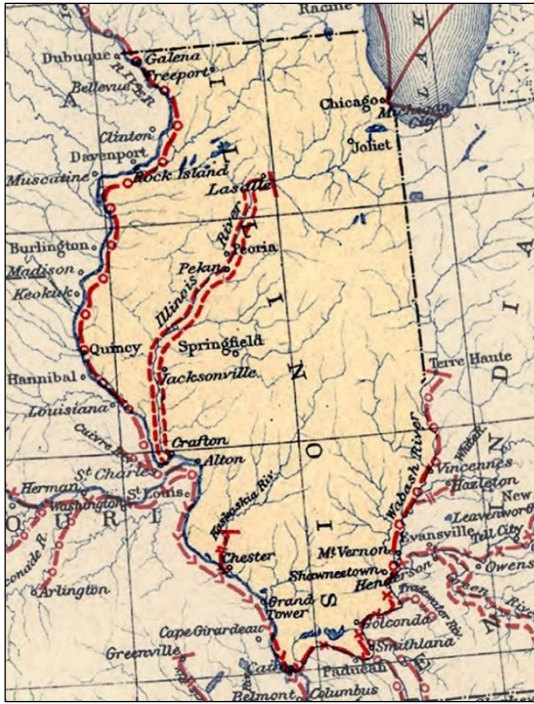


Figure 4.3. Navigable Rivers and Principal Transportation Routes on the Sea Coast and Great Lakes, 1890. From Statistical Atlas of the United States, 1898.

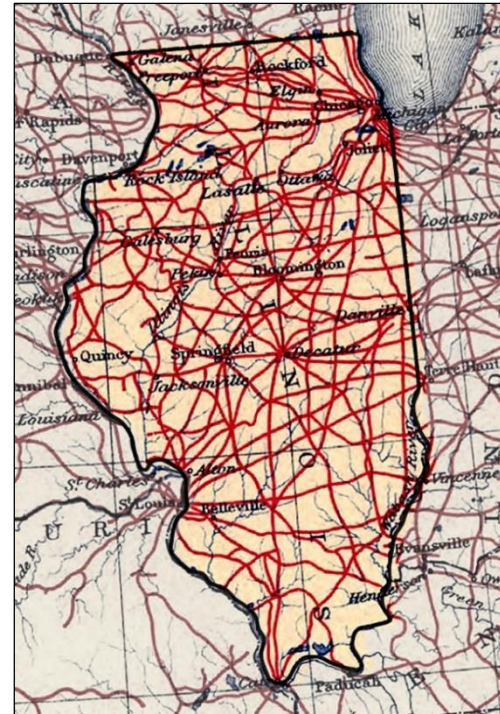


Figure 4.4. Railroad Systems of the United States, 1890. From Statistical Atlas of the United States, 1898.

the artifact collection for dietary consumption. One material correlate for dietary consumption is tablewares which are also the items with the most intensive imbedding of capitalist production. Therefore, these biological behaviors should be seen in cultural items that are intended for personal consumption as opposed to ones with the potential for commercial production. These data allow us to ask if any distributional patterns in cultural items at New Philadelphia mimic the distribution of biological items. This would bridge local commercial activity to large process of dietary sustenance.

Dataset. The data used here are the artifact collection from the pedestrian survey described in chapter 3. The artifact catalogue was linked to a GIS database and graphs for visual display were made in Canvas 11 (a GIS Illustrator program). The artifact catalogue contains entries for each artifact's material description and for its object name. These descriptions are a blend of

material and function classifications and were useful for constructing a custom classification used here.

This classification organizes the artifact collection into five functional categories based on each artifacts *most likely* market function (a sixth category is for unidentified material).

Definitions for the object names used to construct the six categories are shown at the end of Appendix E. Those six categories used here are as follows:

1. **Home Use:** These are items for household use that as a population were used in commercial production. These are items such toys and domestic fauna.⁹
2. **Improvements:** These are items that would that as a population would lead to the increase of property taxes on a lot and most likely structural remains. These are items like brick, mortar, nails, and stone.¹⁰
3. **Production:** These are items that as a population were most likely used for commercial production of goods or services. These are items like tools, large hardware, and agricultural implements.
4. **Storage:** These are items that as a population were designed for utilitarian storage and preparation of food. These are items like stoneware crocks and jugs, unrefined earthenware bowls, and glass bottles and jars.¹¹
5. **Tableware:** These are items that as a population were designed for aesthetic use in food consumption. These are items like refined earthenware teacups, metal cutlery, and glass tumblers.¹²
6. **Unidentified:** These are items that are of cultural origin but cannot be identified.

The artifact class with the most intense relationship to capitalism will show variability in its distribution across the site. This is because the nature of the distribution has thus far shown two

characteristics that bridge to the process of capitalism. First, the material record at New Philadelphia is a commercially homogenous assemblage of artifacts because it was produced within the single phenomenon of capitalism which is theorized to be a domineering force over other cultural phenomena. Second, because the only significant distinction found thus far in the material record was in dietary patterns, which are items reflecting non-commercial consumption, we can expect a binary relationship along two classes of artifacts. The first of these dialectical relationships would predict that if items with the *least* commercial intensity show distinctions in the artifact record, then items with the *most* commercial intensity should mark different groupings of artifact as well. These are items with the most commercial consumptive potential (i.e. tablewares that represent the end of the productive line). The second dialectical relationship would predict that the negation of personal consumption would require an increase in structures related to the disposal of household consumption. Structures fulfilling this purpose are represented by building materials like brick, mortar, and nails. With an increase in the population demands on the town there should be a correlated increase in subsurface soil volume devoted to refuse disposal. Only the first dialectical relationship is discussed below because it reflects a cultural process.

Results. The distribution of tablewares across the site was the most useful predictor for internal variation among the artifact collection at New Philadelphia. The following describes the procedure for identifying clusters of material within the artifact collection. The complete set of distribution maps, histograms, and tables are found in Appendix E.

Clusters from Pedestrian Survey

The pedestrian survey clusters were identified by concentrations of improvement artifacts because these artifacts as a population most likely reflect structures which are assumed to be the

focal point of productive activity. Figure 4.5 shows the distribution of all historic artifacts collected from the pedestrian survey with improvement artifacts highlighted in red and yellow. Figure 4.6 shows the boundaries for each cluster made by visual identification. These clusters were numbered according to their arbitrary spatial layout and the distribution for their artifact composition were set into a table. Table 4.1 lists each distribution category as a percent of the parent cluster and gives the raw count for each category. It also lists the youngest and oldest mean ceramic dates for the lots on which each cluster touches. These are dates given by Tom Gwaltney in his analysis of the pedestrian survey collection.¹³

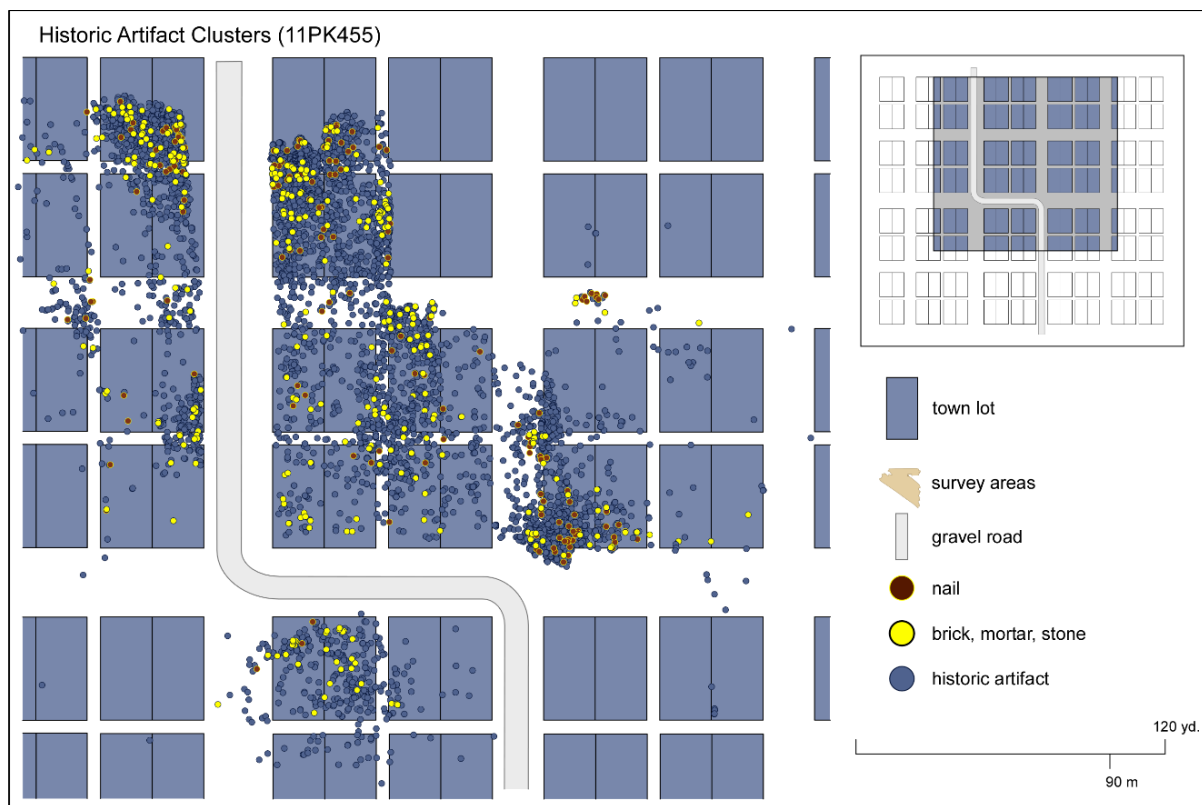


Figure 4.5. Concentrations of Improvement Artifacts within the Total Historic Artifact Collection.

The percentages for each artifact category were then graphed as a histogram to quickly identify obvious patterns. Figure 4.7 shows individual histograms for the 10 clusters. Each bar represents

one artifact category and the y axis represents the categories' percent of the parent cluster. The histogram bars represent the following categories – moving from left to right: 1) Home use, 2) Storage, 3) Tablewares, 4) Improvement, 5) Production, 6) Unidentified.

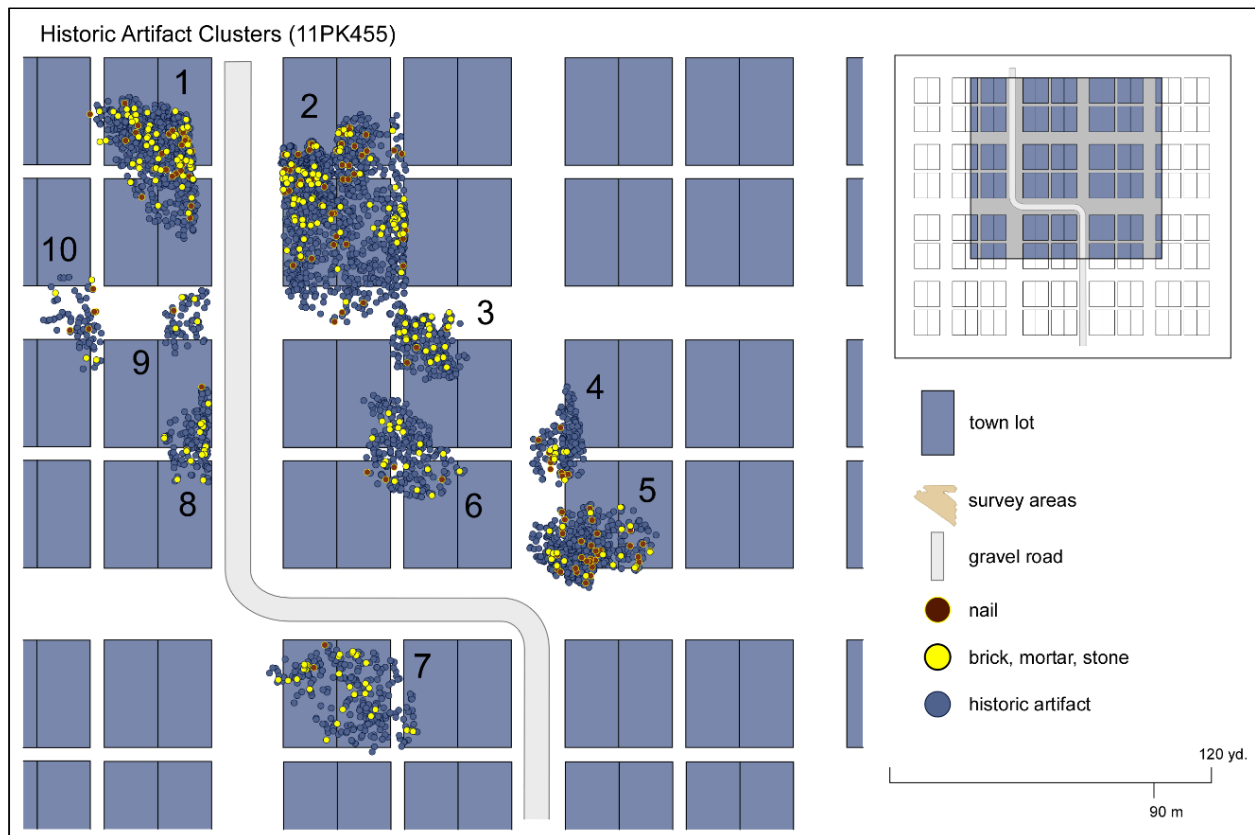


Figure 4.6. Identified Pedestrian Survey Clusters Numbered and Isolated.

The histograms indicate two potential patterns for grouping the clusters based on tablewares. Tablewares were selected as the primary artifact category because these are items most likely to represent an intensive relationship with the capitalist mode of production. They are the end result of large global production line and they most closely represent a household's ability to consume commercial goods.

Figure 4.7 shows the two group visually identified from the ratios of artifact categories for storage, tableware, and improvement. Group 1 (c.2, c.3, c.6, c.9) is shaded darkly and represents

clusters in which tablewares occur in *lower frequency* than either storage or improvement artifacts (or both). Group 2 (c.1, c.5, c.7, c.8, c.10) is shaded lightly and represents artifact clusters in which tablewares occur with *higher frequency* than either storage or improvement artifacts (or both). Cluster 4 was initially placed in group 1, but, as discussed below, was removed because it is shown to be a statistical outlier for the group. The reason for its anomalous distribution is not understood.

Table 4.1. Functional Composition for Pedestrian Survey Artifact Clusters 11PK455.

Cluster	Home Use	Storage	Tableware	Improvements	Production	Und.	total
c.1 1844-70	2% 15	33% 304	36% 335	28% 259	1% 10	1% 8	931
c.2 1850-65	2% 38	36% 647	26% 474	32% 575	3% 49	1% 19	1802
c.3 1860-64	1% 4	41% 119	17% 48	34% 98	6% 18	0% 1	288
c.4 1859-63	1% 2	30% 58	9% 17	56% 107	4% 7	1% 1	192
c.5 1853-59	3% 19	43% 318	26% 188	22% 159	4% 30	3% 23	737
c.6 1863-68	1% 4	33% 90	16% 43	45% 121	4% 11	0% 0	269
c.7 1862-64	2% 5	35% 100	35% 100	21% 60	4% 11	4% 12	288
c.8 1854-69	1% 1	40% 66	30% 50	27% 45	2% 3	1% 2	167
c.9 1854	3% 2	44% 29	12% 8	39% 26	2% 1	0% 0	66
c.10 18	1% 1	47% 39	29% 24	18% 15	5% 4	0% 0	83

Shaded rows are group 1. All others are group 2.

Figure 4.8 shows the cluster groups on the spatial layout of New Philadelphia. Figure 4.9 shows the outline for each group with the mean ceramic dates for each lot. Figure 4.10 shows the MCD for all lots. Appendix E holds the complete breakdown for the artifact collection discussed above.

The theoretical implications for sub-hypothesis 2 hold that if there is a distinction within the total artifact collection at New Philadelphia, then that distinction should be based on something endemic to the overall process of capitalism. The bridging argument between the large process of capitalism and the actual artifacts collected, implies that tablewares should be the artifact category most sensitive to the process of capitalism, generally, and so these artifacts should also be most sensitive, specifically, to past variations in the residents' capitalistic behaviors.

The visual assessment for the pedestrian survey materials indicated that the ratio of tableware, storage, and improvement artifacts did show a noteworthy variation within observable activity areas at New Philadelphia. But, before meaningful implications can be derived from the variation, two conditions need to be satisfied. First, the independence of each group needs to be measured by a neutral method. For this neutrality, the basic statistical technique of chi-square tables will suffice. Chi-square allows an independent judgement as to whether each group is part of one single population or whether each group belongs to separate parent population. If the groups are part of one parent sample, then we would interpret the material record at New Philadelphia as reflecting one single homogenous response to the expansion of capitalism by the prairie middle class. If there is variation, then we would interpret the material record as reflecting a heterogeneous response to the expansion of capitalism by the prairie middle class. In either case, we would then look to our theoretical model for capitalism to explain the chi-square results.

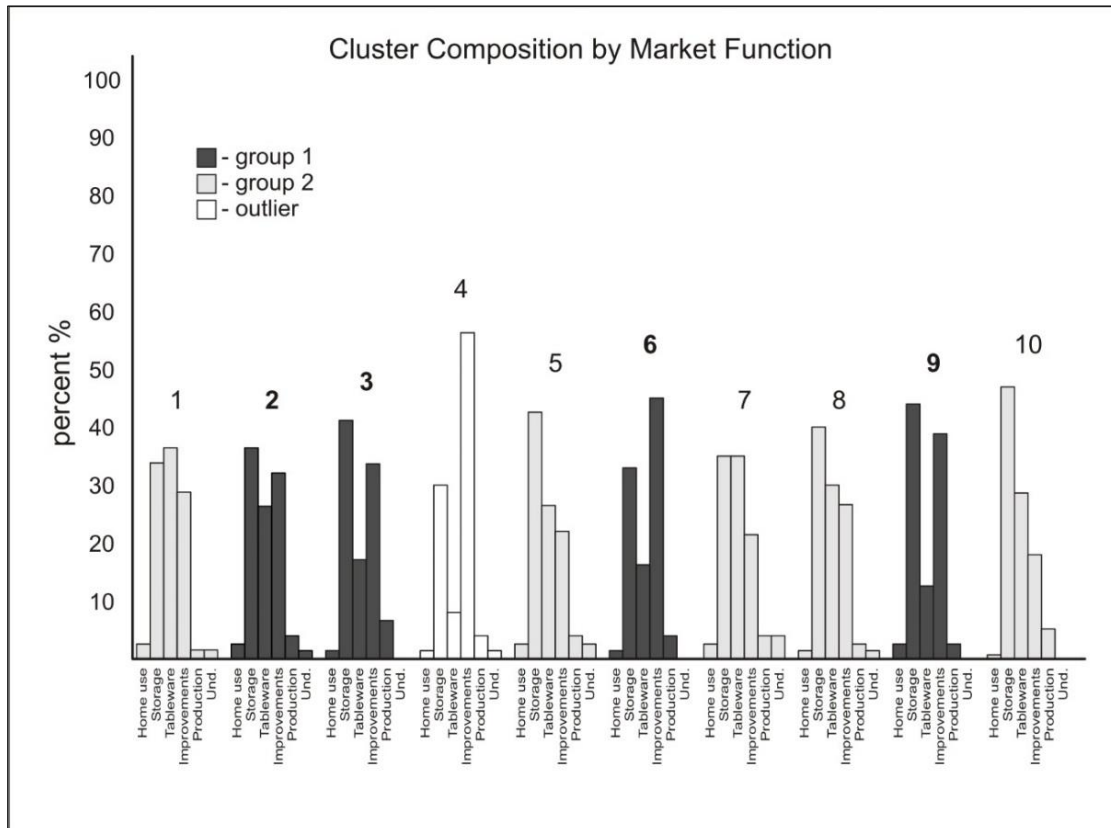


Figure 4.7. Cluster Composition by Market Function.

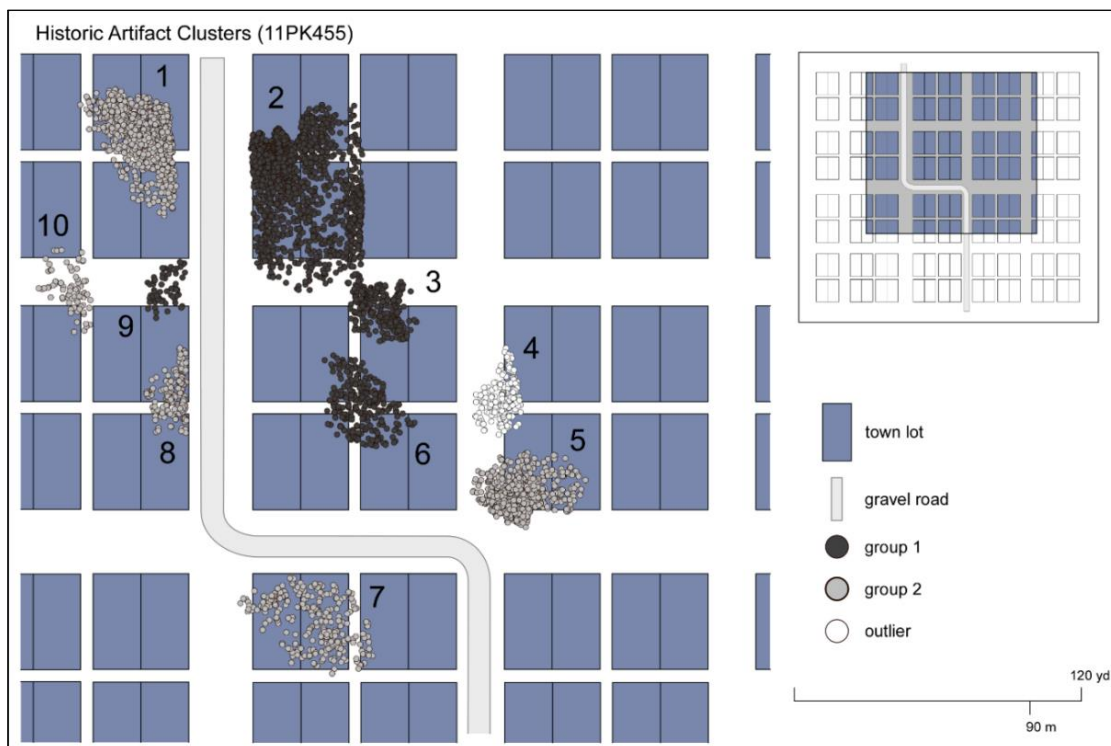


Figure 4.8. Spatial Distribution for Group 1 and Group 2.

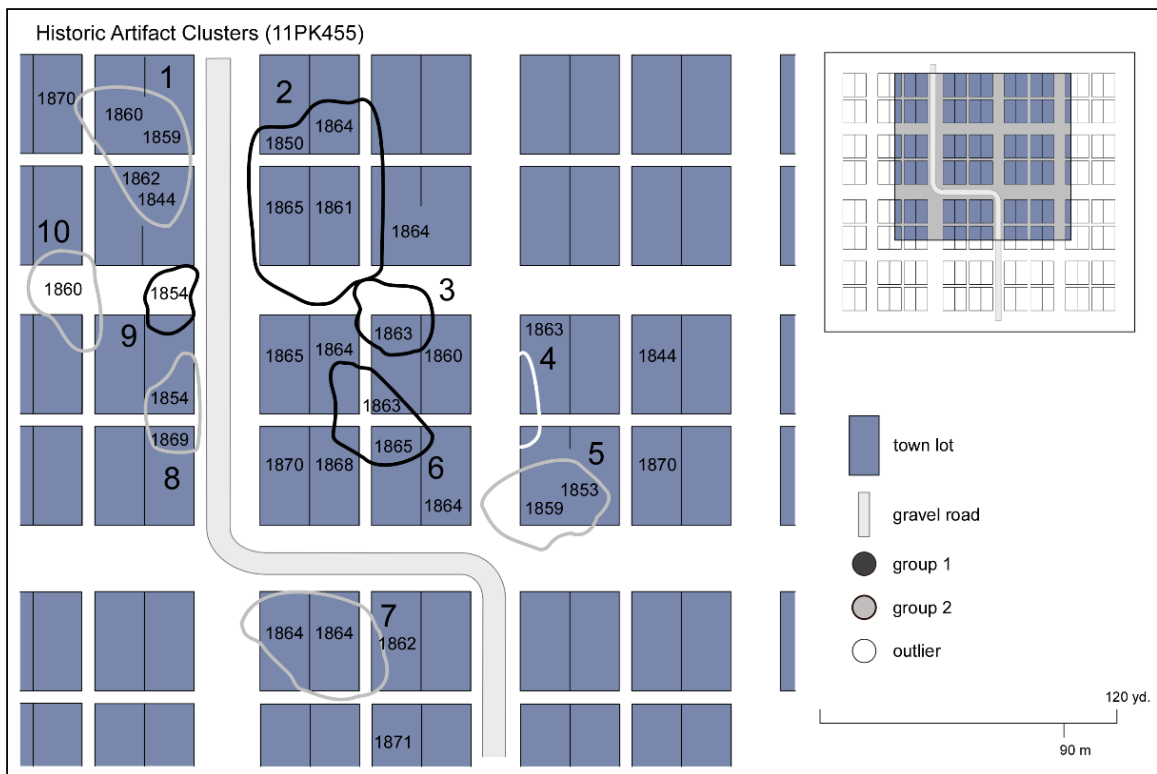


Figure 4.9. Pedestrian Survey Artifact Cluster Outlines with Mean Ceramic Date for Associated Town lots.

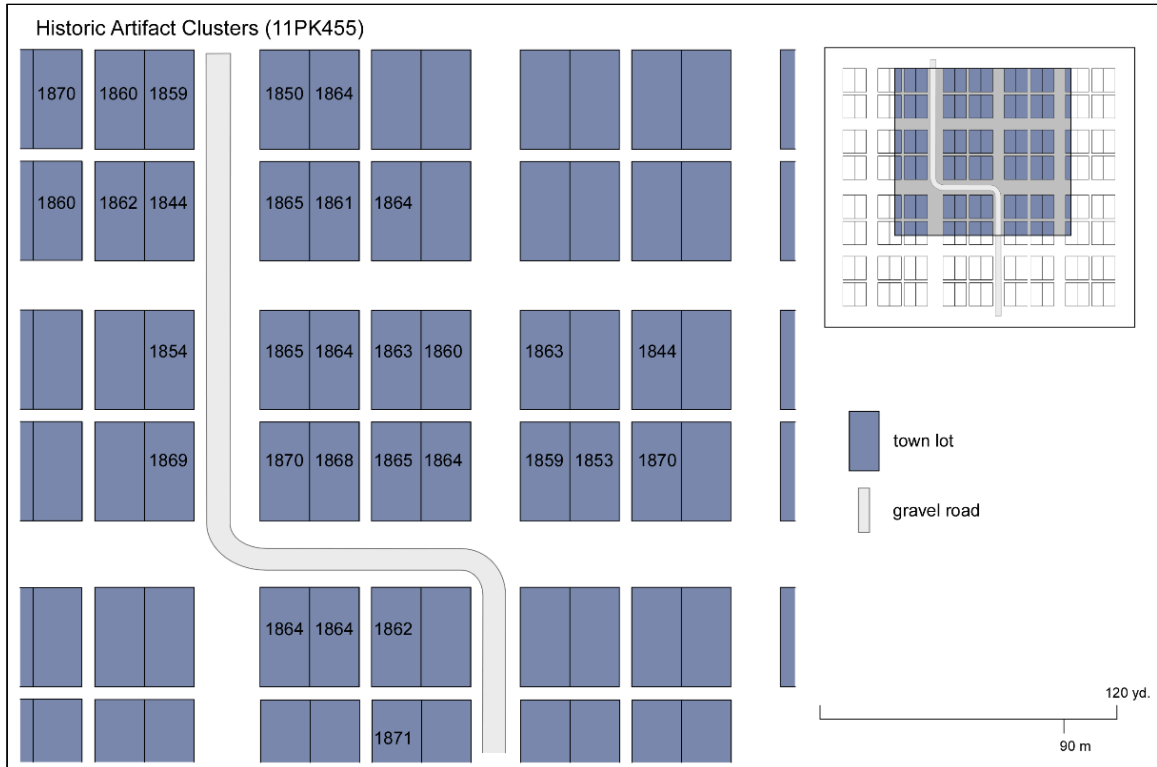


Figure 4.10. Mean Ceramic Dates Each Towns Lot Based on Pedestrian Survey Collection.

The second criteria is that the presence (or non-presence) of variation within the record must conform the historical materialist processes of change discussed earlier. These process are the methodology from which the overall process of capitalism was understood, and so they are here the source of meaning for fine grained analyses of the material record. The central link between each of the processes of change was that they all described a unique effect of tension through time. So, to stay consistent with historical materialist methodology, the variation found within the groups must also be shown to have an objectively measureable temporal distinction.

This link to changes through time can be made (in a coarse way) with the pedestrian survey materials. Earlier it was described that the survey materials had the sufficient diagnostic qualities to establish a basic chronology for the materials associated with each lot. This chronology was the mean ceramic date estimates made by Tom Gwaltney.¹⁴ So a basic arrangement for each artifact cluster through time is possible and is shown in Figure 4.11. This figure suggests that the locations for the earliest artifacts at New Philadelphia are also the locations with the longest duration of land use at New Philadelphia. This implies that the New Philadelphia assemblage (varied or not) can reasonably be assumed to encompass the full historical timeline for its residents capitalistic behaviors.

A chronological link can also made through comparison with the historical datasets. The deed record graphs gave an indication for the temporal changes occurring through the land-use history for New Philadelphia. Figure 4.12 places the pedestrian survey clusters on their associated locations in the deed transactions graph. This graph suggests that property owners at New Philadelphia frequently engaged the commercial land market without leaving any material correlates for archaeologist to identify. These areas are represented by the early deed transactions that do not coincide with any artifact clusters. Because the groups were built to incorporate

structures as well as capitalistic activities, they should align to areas where actual habitation and productive activities occurred. Lots with no associated artifact clusters reflect capitalism's ability to separate value from owners of physical labor. Profits were made from the land, even though no work was performed there and no physical markers were needed to protect people's ownership of the lots. This is commerce in its most ethereal form.

From the histograms shown in Figure 4.7, the pedestrian survey clusters were separated into two groups based on the ratio of tableware, storage, and improvement artifacts. Storage and Improvement artifacts were selected as the second artifact categories for two reasons. First, the statistical requirements for chi-square analyses do not allow for comparing categories in which one category is empty (or devoid of values). Clusters 3, 6, and 10 each have zero values for the "unidentified" category. The nature of unidentified means there is no acceptable way of collapsing this category into the others, so the "unidentified" category was removed.

Second, the artifact counts for the "home use" category and the "production" category fall well below the middle three categories so that minor variation in their counts could yield overstated difference in the distributions between clusters. As a result, "home use" and "production" were removed to ensure a robust sample size. They were not collapsed into other categories because it is anticipated that they will be useful for comparing other archaeological sites at which items of purely home use or purely productive use would be collected in numerically significant numbers.

Table 4.2 shows the ratios for storage, tableware, and improvement (STI) for each cluster contained in group 1. It also shows the results of the chi-square test for independent samples in which statistical significance can be assumed to indicate that samples are from two distinct parent populations (i.e., independent from each other). This was the group in which tablewares

occurred in lower frequencies than either or both storage or improvement artifacts. The distributions for this group are statistically assumed to be heterogeneous samples at the 95% confidence level ($p < 0.05$). Group 1, however, becomes statistically homogenous after removing Cluster 4. Figure 4.8 shows that this cluster is mostly located over the road to the west of lot. This location might indicate that cluster 4 is a sample composed of artifacts from several different lots. There may also may be unrecognized deposition phenomena contributing to the anomalous artifact distribution.

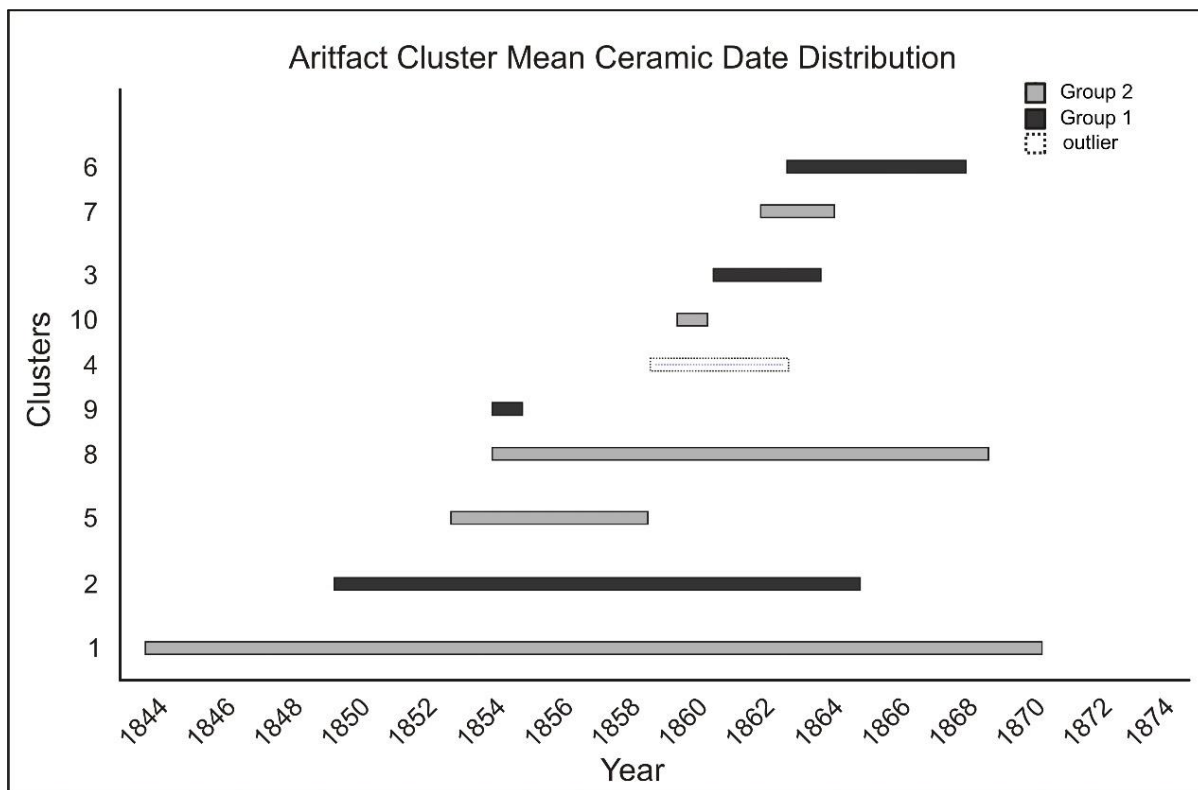


Figure 4.11. Pedestrian Survey Clusters Ordered by Mean Ceramic Dates.

Table 4.4 shows the STI ratios and for each cluster contained in group 2 and the chi-square results for independence. This was the group in which tablewares occurred in higher frequencies than either or both storage or improvement artifacts. The distributions for this group are statistically assumed to be homogeneous samples at the 95% confidence level ($p < 0.05$).

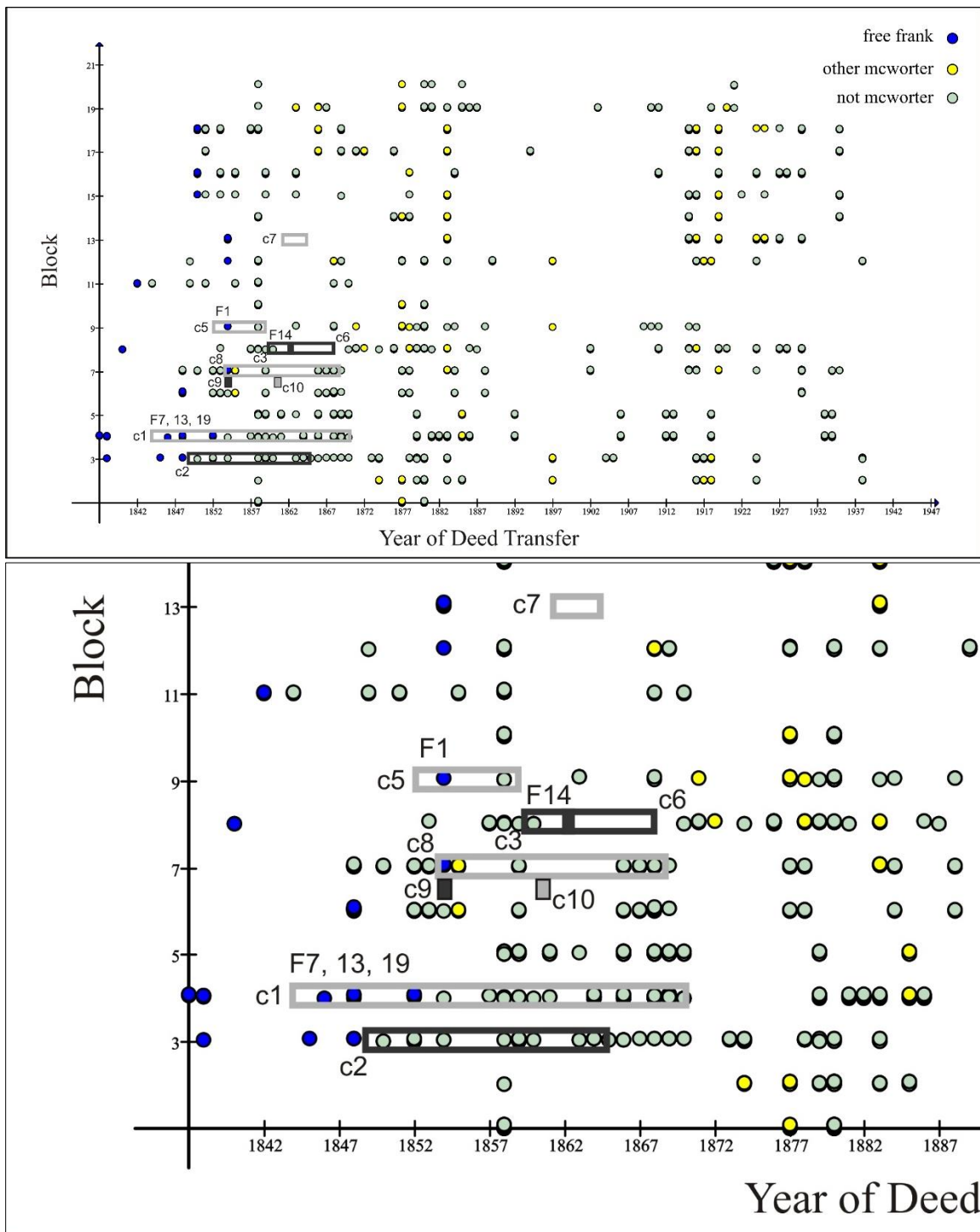


Figure 4.12. Deed Transactions Graph with Pedestrian Survey Artifact Groups. Top is the full graph, bottom is a detail of the area with clusters.

Table 4.5 shows the combined STI ratios for group 1 and group 2. These ratios were obtained by adding the counts for the six artifact categories and then recalculating the percentages for each category. The results for the chi-square test for independence show that the groups do not represent statistically distinct samples. In other words, tableware produced two groups whose members are apparently distinct, but who cannot be verifiably shown to be independent.

Clusters from Excavation 2004–2006

If the only available dataset was the pedestrian survey, this analysis might conclude that tablewares are not a viable indicator for variation within the New Philadelphia artifact collection. However, the results from the second phase of archaeological investigation allow for a fine-grained analysis of the material within clusters that were found to overlay significant archaeological features. Figure 4.13 shows the pedestrian survey cluster graph with labels for the corresponding features that Terrance Martin and Paul Shackel used in their analysis of the excavations from 2004–2006. These features were discussed in chapter 3. Figure 4.14 locates the plan views for major features identified during the 2004–2006 field seasons at New Philadelphia. Although only four pedestrian clusters contain significant archaeological features, the feature fills contain artifacts dating from the early 1840s to the late 1890s.¹⁵ So while the sample is small, it nicely reflects the major occupation history for New Philadelphia.

Table 4.2. Chi-square results for Group 1 with Cluster 4.

Cluster	Storage%	Tableware%	Improvements%	Total
2	36	26	32	94
3	41	17	34	92
4	30	9	56	95
6	33	16	45	94
9	44	12	39	95

The chi-square statistic is 22.873. The P-Value is 0.003531.
The result is **significant** at $p < 0.05$.

Table 4.3. Chi-square results for Group 1 without Cluster 4.

Cluster	Storage%	Tableware%	Improvements%	Total
2	36	26	32	94
3	41	17	34	92
6	33	16	45	94
9	44	12	39	95

The chi-square statistic is 10.3947. The P-Value is 0.108983.

The result is **not significant** at $p < 0.05$.

Table 4.4. Chi-square results for Group 2.

Cluster	Storage%	Tableware%	Improvements%	Total
1	33	36	28	97
5	43	26	22	91
7	35	35	21	91
8	40	30	27	97
10	47	29	18	94

The chi-square statistic is 8.2223. The P-Value is 0.412059.

The result is **not significant** at $p < 0.05$.

Table 4.5. Chi-square results showing that Group 1 and Group 2 are distinct distributions.

	Storage%	Tableware%	Improvements%	Total
Group 1	37%	32%	24%	93.00%
Group 2	36%	24%	34%	

The chi-square statistic is 2.9984. The P-Value is 0.223304.

The result is **not significant** at $p < 0.05$.

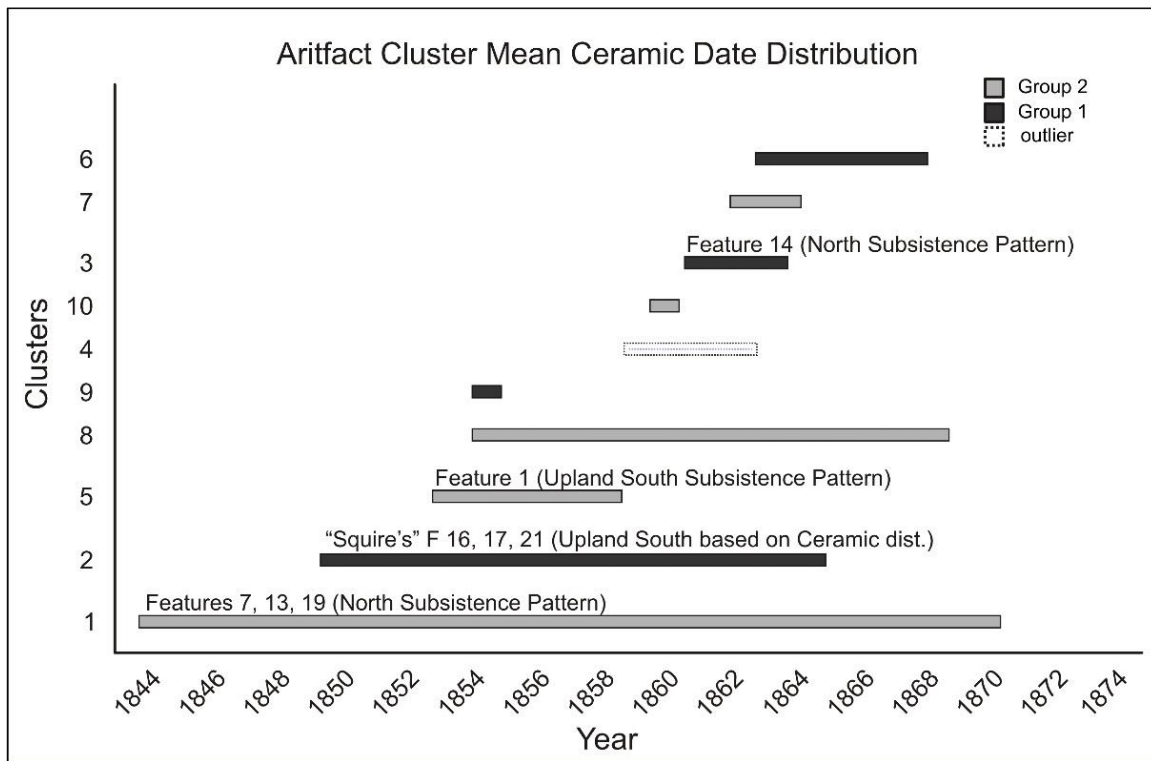


Figure 4.13. Pedestrian Survey Clusters Ordered by Mean Ceramic Dates with Labels for Significant Archaeological Features.

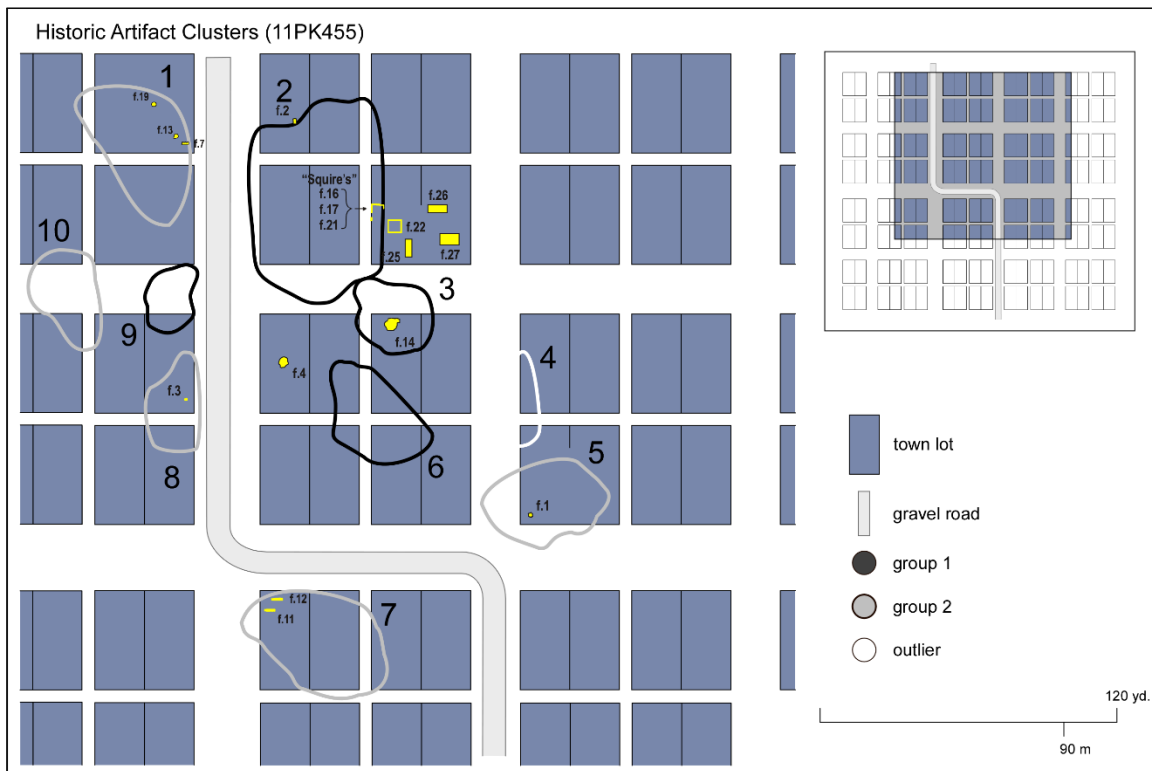


Figure 4.14. Pedestrian Survey Artifact Cluster Outlines with planviews for Significant Archaeological Features.

Table 4.6 summarizes Martin's and Shackel's interpretations of the significant archaeological features identified during the 2004–2006 field season.

Table 4.6. Martin's and Shackel's Interpretations of the Significant Archaeological Features Identified During the 2004–2006 Field Seasons.

Feature	Date (ca.)	Martin's faunal class	Shackel's ceramic class	Location	Exc. Unit	Ped. cluster	Artifact group
f.1	1850s	Southern	Southern	9: 5	u.1–3	c.5	2
f.7	1840s	Northern	Northern	4: 1	u.1,4,5,7,14	c.1	2
f.13	1840s	Northern	Northern	4: 1	u.2–3; u.6,8	c.1	2
f.14	1860s	Northern	Southern	8: 2	u.1–9	c.3	1
f.19	1858-1868	Northern	Northern	4: 1	u.10–13	c.1	2
Squire's (16,17,21)	1880s-1890s	na	Southern	3: 7	u.1–9	c.3	1

In order to refine the interpretation of the archaeological dataset the same procedure for categorizing the pedestrian survey was used to categorize the excavation collection. Table 4.7 shows the distribution for excavated material was first separated between soil layers representing plow-zone layers found above the features (a) from the features fill (b) resulting from the bisection of those feature. The overburden plow-zone layers are disturbed from decades of agricultural activity. These layers contain large numbers of artifacts that, in the past, were likely contained within the uppermost portions of the underlying feature. In order to determine whether these layers can be combined with the feature fill (thereby creating a larger and more confident sample size) chi-square tests for independence were conducted for each pair of overburden and feature fill. When the chi square test showed no statistical distinction between the STI ratios for the overburden to the feature fill, both soil layers were combined into a single sample. Once this process was complete, the combined layers were graphed as histograms to re-asses the visual presence of category groups. This showed that two groups once again became apparent.

Table 4.7. Distribution of Significant Features and overlaying Excavation Units located within Pedestrian Survey Clusters.

Cluster	level	Home use	Storage	Tableware	Improvements	Production	Unid.	total
1	7a	5%	30%	43%	11%	6%	4%	
		28	166	238	63	31	24	550
1	7b	11%	16%	22%	20%	10%	22%	
		9	13	18	16	8	18	82
1	13a	4%	29%	47%	9%	6%	4%	
		23	163	260	51	34	25	556
1	13b	13%	18%	36%	16%	3%	14%	
		32	44	87	38	8	35	244
1	19a	6%	43%	24%	10%	7%	11%	
		30	215	120	49	36	53	503
1	19b	10%	33%	25%	12%	4%	16%	
		26	86	65	30	10	40	257
2	21a	8%	42%	15%	18%	7%	11%	
		86	456	162	192	78	119	1093
2	21b	6%	47%	12%	18%	6%	12%	
		27	217	54	85	27	56	466
3	14a	8%	36%	22%	15%	3%	15%	
		51	218	137	94	20	89	609
3	14b(1)	14%	29%	22%	10%	7%	18%	
		29	59	45	20	15	38	206
3	14b(2)	20%	28%	25%	8%	4%	15%	
		52	73	66	22	11	38	262
5	1a	10%	37%	17%	13%	6%	17%	
		62	221	98	76	36	99	592
5	1b	24%	11%	16%	18%	3%	27%	
		28	13	18	21	4	31	115

Tables for chi-square tests to determine if overburden distributions are identical to feature fill distribution. Distributions that are identical will be combined to increase sample size. Figure 4.15 shows the histograms for the feature overburden. Figure 4.16 shows the histograms for the feature fill. The results for the tests to determine how to combine the two layers are as follows:

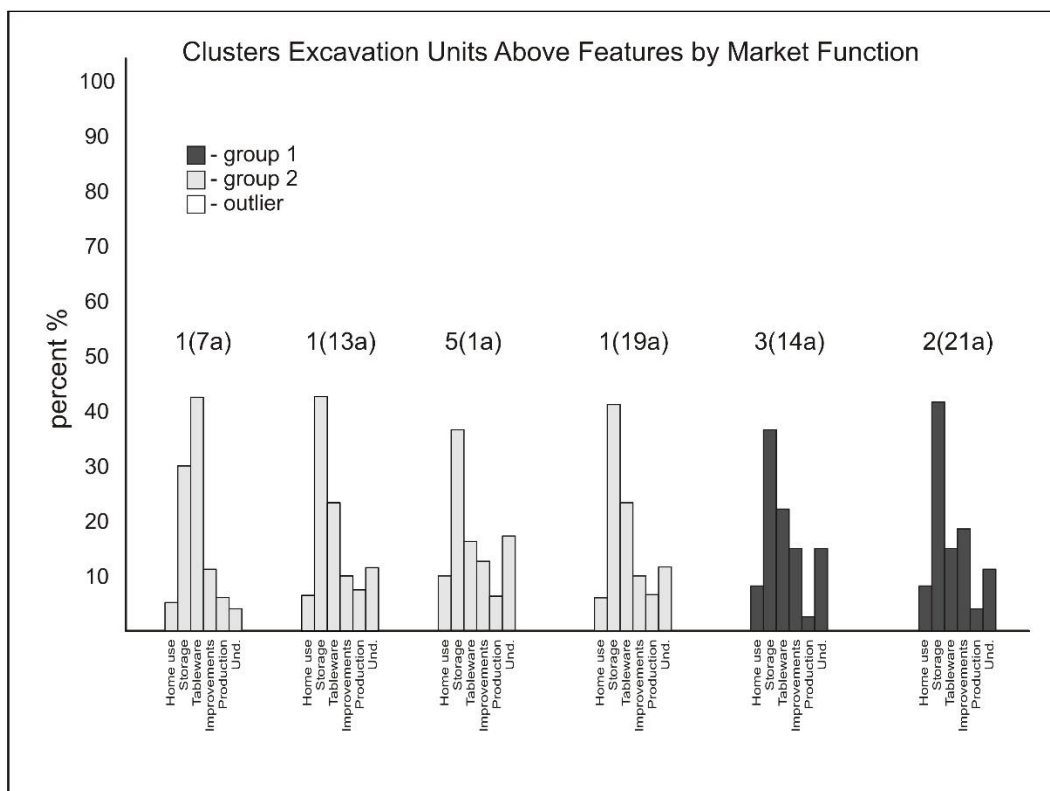


Figure 4.15. Graph of Feature Overburden Artifact Category.

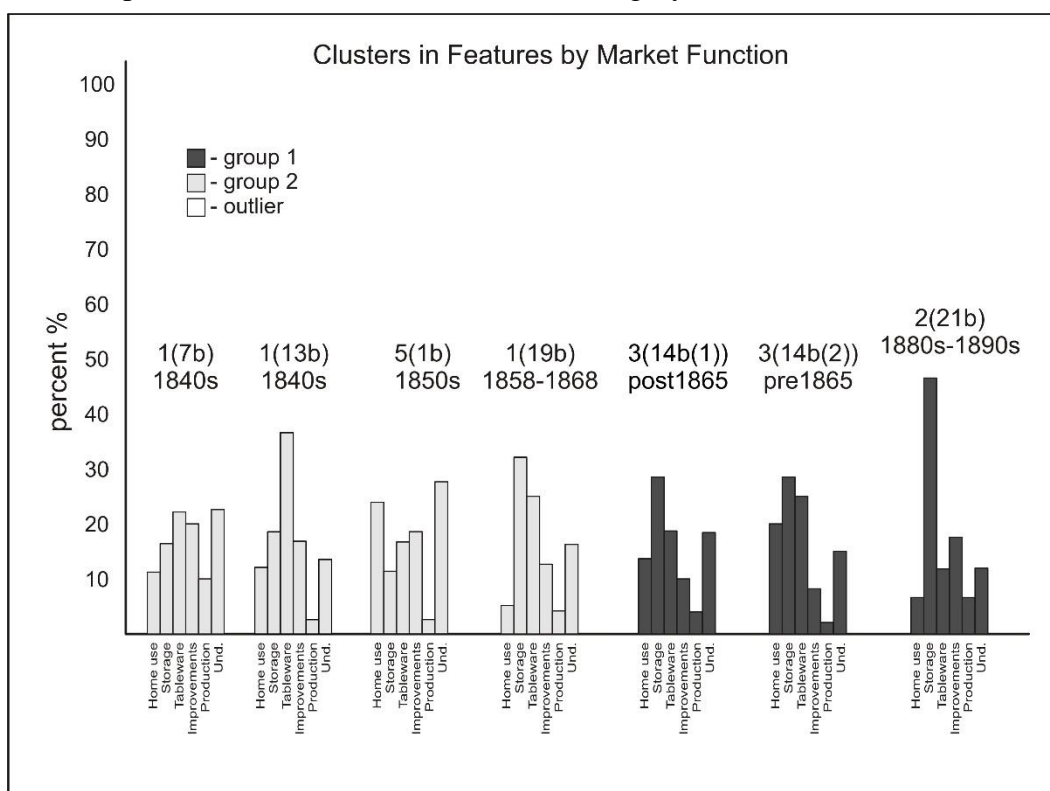


Figure 4.16. Graph of Feature Overburden Artifact Category.

Feature 1 overburden and fill **cannot** be combined.

Table 4.8. Chi-square Distribution for **Feature 1**: overburden vs feature fill.

Feature	Storage%	Tableware%	Improvements%	Total
1a	37%	17%	13%	
1b	11%	16%	18%	

The chi-square statistic is 11.024. The P-Value is 0.004038.

The result **is significant** at $p < 0.05$

Feature 7 overburden and fill **cannot** be combined.

Table 4.9. Chi-square Distribution for **Feature 7**: overburden vs feature fill.

Feature	Storage%	Tableware%	Improvements%	Total
7a	30%	43%	11%	
7b	16%	22%	20%	

The chi-square statistic is 9.2065. The P-Value is 0.010019.

The result **is significant** at $p < 0.05$.

Feature 13 overburden and fill **can** be combined.

Table 4.10. Chi-square Distribution for **Feature 13**: overburden vs feature fill.

Feature	Storage%	Tableware%	Improvements%	Total
13a	29%	47%	9%	
13b	18%	36%	16%	

The chi-square statistic is 4.5836. The P-Value is 0.101084.

The result **is not significant** at $p < 0.05$.

Feature 14 overburden and fill **can** be combined. The feature fill was separated because minimum vessel counts ostensibly suggested two separate distribution. They are not different.

Table 4.11. Chi-square Distribution for **Feature 14:** overburden vs feature fill.

Feature	Storage%	Tableware%	Improvements%	Total
14a	36%	22%	15%	
14b(1)	29%	22%	10%	61%
14b(2)	28%	25%	8%	61%

The chi-square statistic is 2.2978. The P-Value is 0.681164.

The result *is not significant* at $p < 0.05$.

Feature 19 overburden and fill **can** be combined.

Table 4.12. Chi-square Distribution for **Feature 19:** overburden vs feature fill.

	Storage%	Tableware%	Improvements%	Total
19a	43%	24%	10%	
19b	33%	25%	12%	

The chi-square statistic is 1.1874. The P-Value is 0.552287.

The result *is not significant* at $p < 0.05$.

Feature 21 overburden and fill **can** be combined.

Table 4.13. Chi-square Distribution for **Feature 21:** overburden vs feature fill.

	Storage%	Tableware%	Improvements%	Total
21a	42%	15%	18%	
21b	47%	12%	18%	

The chi-square statistic is 0.588. The P-Value is 0.74527.

The result *is not significant* at $p < 0.05$.

Features 7, 13, and 19 are located within Cluster 1. These tables determine how to combine the burden and fill.

Features 7, 13, 19 overburden **cannot** be combined.

Table 4.14. Chi-square Distribution for **Features 7, 13, 19**: overburden vs overburden.

	Storage%	Tableware%	Improvements%	Total
7a	30%	43%	11%	
13a	29%	47%	9%	
19a	43%	24%	10%	

The chi-square statistic is 11.6131. The P-Value is 0.020473.

The result ***is significant*** at $p < 0.05$.

Features 7, 13, 19 fill **cannot** be combined.

Table 4.15. Chi-square Distribution for **Features 7, 13, 19**: feature fill vs feature fill.

	Storage%	Tableware%	Improvements%	Total
7b	16%	22%	20%	
13b	18%	36%	16%	
19b	33%	25%	12%	

The chi-square statistic is 12.0898. The P-Value is 0.016696.

The result ***is significant*** at $p < 0.05$.

Feature 7 overburden **can** be combined with **Feature 13** overburden and fill.

Table 4.16. Chi-square Distribution for **Features 7, 13**: 7 overburden vs 13 overburden & fill.

	Storage%	Tableware%	Improvements%	Total
7a	30%	43%	11%	
13a	29%	47%	9%	
13b	18%	36%	16%	

The chi-square statistic is 5.6682. The P-Value is 0.225336.

The result ***is not significant*** at $p < 0.05$.

Feature 7 fill **cannot** be combined with **Feature 13** overburden and fill.

Table 4.17. Chi-square Distribution for **Features 7, 13**: 7 fil vs 13 overburden & fill.

	Storage%	Tableware%	Improvements%	Total
7b	16%	22%	20%	
13a	29%	47%	9%	
13b	18%	36%	16%	

The chi-square statistic is 12.6927. The P-Value is 0.012879.

The result ***is significant*** at $p < 0.05$.

Feature 7 overburden **can** be combined with **Feature 19** overburden and fill.

Table 4.18. Chi-square Distribution for **Features 7, 19**: 7 overburden vs 19 overburden & fill.

	Storage%	Tableware%	Improvements%	Total
7a	30%	43%	11%	
19a	43%	24%	10%	
19b	33%	25%	12%	

The chi-square statistic is 8.6264. The P-Value is 0.071146.

The result ***is not significant*** at $p < 0.05$.

Feature 7 fill **cannot** be combined with **Feature 19** overburden and fill.

Table 4.19. Chi-square Distribution for **Features 7, 19**: 7 fill vs 19 overburden & fill.

	Storage%	Tableware%	Improvements%	Total
7b	16%	22%	20%	
19a	43%	24%	10%	
19b	33%	25%	12%	

The chi-square statistic is 14.5217. The P-Value is 0.005803.

The result ***is significant*** at $p < 0.05$.

Feature 13 combined **cannot** be combined with **Feature 19** combined.

Table 4.20. Chi-square Distribution for **Features 13, 19:** combined vs combined.

	Storage%	Tableware%	Improvements%	Total
13ab	26%	43%	11%	
19ab	40%	24%	10%	

The chi-square statistic is 8.184. The P-Value is 0.016706.

The result **is significant** at $p < 0.05$.

Feature 7 overburden **can** be combined with **Feature 13** combined.

Table 4.21. Chi-square Distribution for **Features 7, 13:** 7 overburden vs 13 combined.

	Storage%	Tableware%	Improvements%	Total
7a	30%	43%	11%	
13ab	26%	43%	11%	

The chi-square statistic is 0.1883. The P-Value is 0.910162.

The result **is not significant** at $p < 0.05$.

Feature 7 fill **cannot** be combined with **Feature 13** combined.

Table 4.22. Chi-square Distribution for **Features 7, 13:** 7 fill vs 13 combined.

	Storage%	Tableware%	Improvements%	Total
7b	16%	22%	20%	
13ab	26%	43%	11%	

The chi-square statistic is 8.4869. The P-Value is 0.014358.

The result **is significant** at $p < 0.05$.

Feature 7 overburden **cannot** be combined with **Feature 19** combined.

Table 4.23. Chi-square Distribution for **Features 7, 19:** 7 overburden vs 19 combined.

	Storage%	Tableware%	Improvements%	Total
7a	30%	43%	11%	
19ab	40%	24%	10%	

Table 4.23. continued

The chi-square statistic is 6.2564. The P-Value is 0.043797.
The result ***is significant*** at $p < 0.05$.

Feature 7 fill **cannot** be combined with **Feature 19** combined.

Table 4.24. Chi-square Distribution for **Features 7, 19**: 7 fill vs 19 combined.

	Storage%	Tableware%	Improvements%	Total
7b	16%	22%	20%	
19ab	40%	24%	10%	

The chi-square statistic is 11.9421. The P-Value is 0.002552.
The result ***is significant*** at $p < 0.05$.

Feature 7 fill is a statistical aberration likely due the low number of artifacts recovered within it.
Feature 7overburden can be combined with feature 13. This combination agrees with
archaeological interpretation that Feature7 represents the structure from which Feature 13 was
filled.

Feature 7a-13ab combined **cannot** be combined with **Feature 19** combined.

Table 4.25. Chi-square Distribution for **Features 7-13, 19**: 7-13 combined vs 19 combined.

	Storage%	Tableware%	Improvements%	Total
7a-13ab	28%	43%	11%	
19ab	40%	24%	10%	

The chi-square statistic is 7.1619. The P-Value is 0.027849.
The result ***is significant*** at $p < 0.05$.

Pedestrian Survey Cluster 1 is separated between Features 7&13. Features 19, Feature 21 and 14 are combined. Feature 1 is rejected because discrepancies between its two distributions cannot be resolved.

Table 4.26. Distribution of Features and Excavation Units with same distributions for Storage, Tablewares, Improvement Artifacts Located within Pedestrian Survey Clusters

Cluster	level	Home use	Storage	Tableware	Improvements	Production	Unid.	total
1	7a-13ab	6%	28%	43%	11%	5%	6%	
		83	373	585	152	73	84	1350
1	19ab	7%	40%	24%	10%	6%	12%	
		56	301	185	79	46	93	760
2	21ab	7%	43%	14%	18%	7%	11%	
		113	673	216	277	105	175	1559
3	14ab	12%	32%	23%	13%	4%	15%	
		132	350	248	136	46	165	1077

The following tables determine if the combination overburden and feature fill represent different distributions between each other for the ratio of Storage, Tableware, and Improvement Artifacts.

All features, as a set, represent a **heterogeneous** distribution.

Table 4.27. Chi-square Distribution for **Features 7-13, 19, 21, 14:** combined vs combined.

	Storage%	Tableware%	Improvements%	Total
7a-13ab	28%	43%	11%	
19ab	40%	24%	10%	
21ab	43%	14%	18%	
14ab	32%	23%	13%	

The chi-square statistic is 21.7052. The P-Value is 0.001369.
The result ***is significant*** at $p < 0.05$.

Figure 4.17 shows that the histograms for these features suggest that Features 19, 21, and 14 could be from identical distributions.

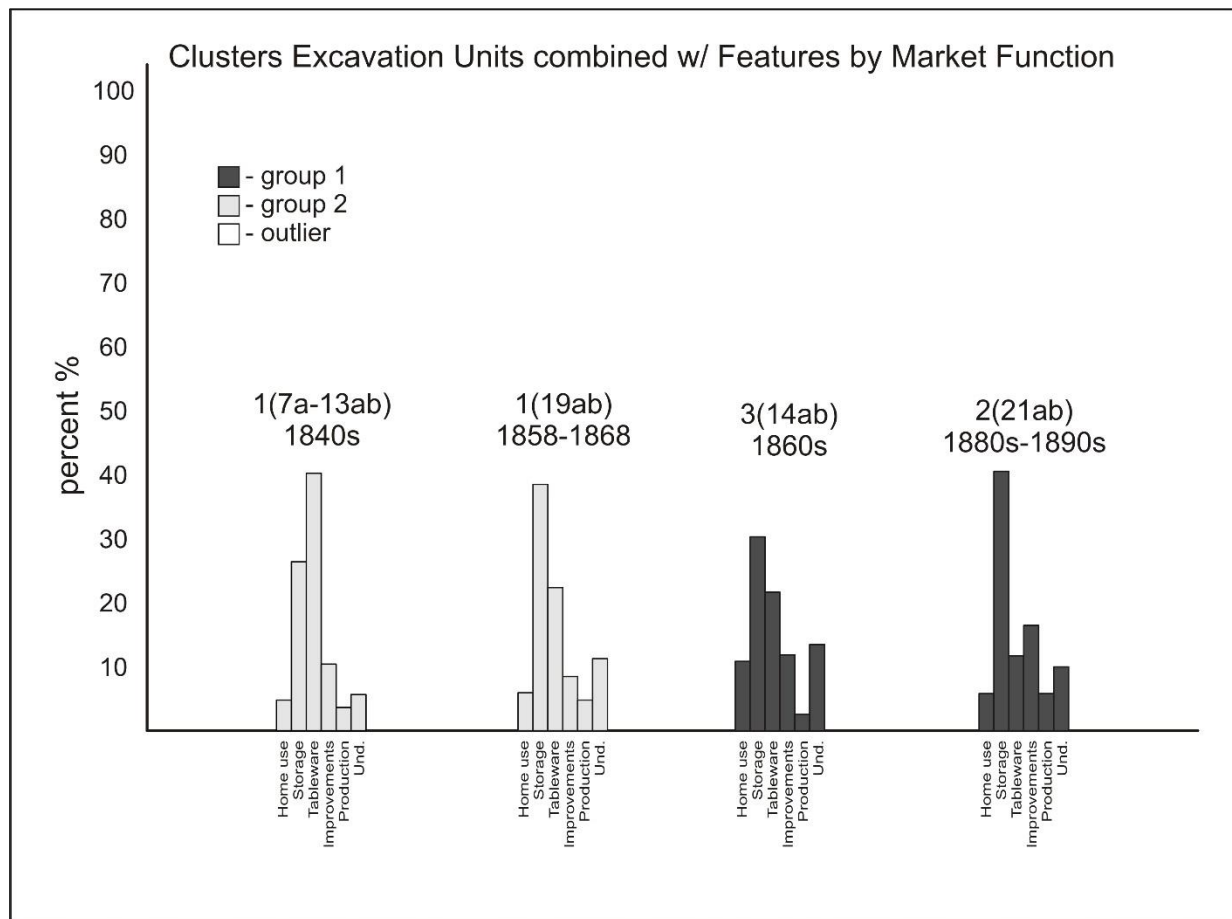


Figure 4.17. Graph of Distributions for Combined Overburden and Feature Fill.

Figure 4.18 shows the re-grouping of the feature distributions based on the visual distinctions of the histogram graphs. And Table 4.28 shows that features 19, 14, and 21 are statistically likely to belong to the same parent populations. They were, therefore combined and shown to statistically independent from the combination of feature 7 and feature 13. Figure 4.19 shows the histograms distributions for the new groups based on the STI ratios.

Features 19, 21, and 14 can be combined.

Table 4.28. Chi-square Distribution for **Features 19, 21, 14:** combined vs combined.

	Storage%	Tableware%	Improvements%	Total
19ab	40%	24%	10%	
21ab	43%	14%	18%	
14ab	32%	23%	13%	

The chi-square statistic is 6.5655. The P-Value is 0.160711.

The result ***is not significant*** at $p < 0.05$.

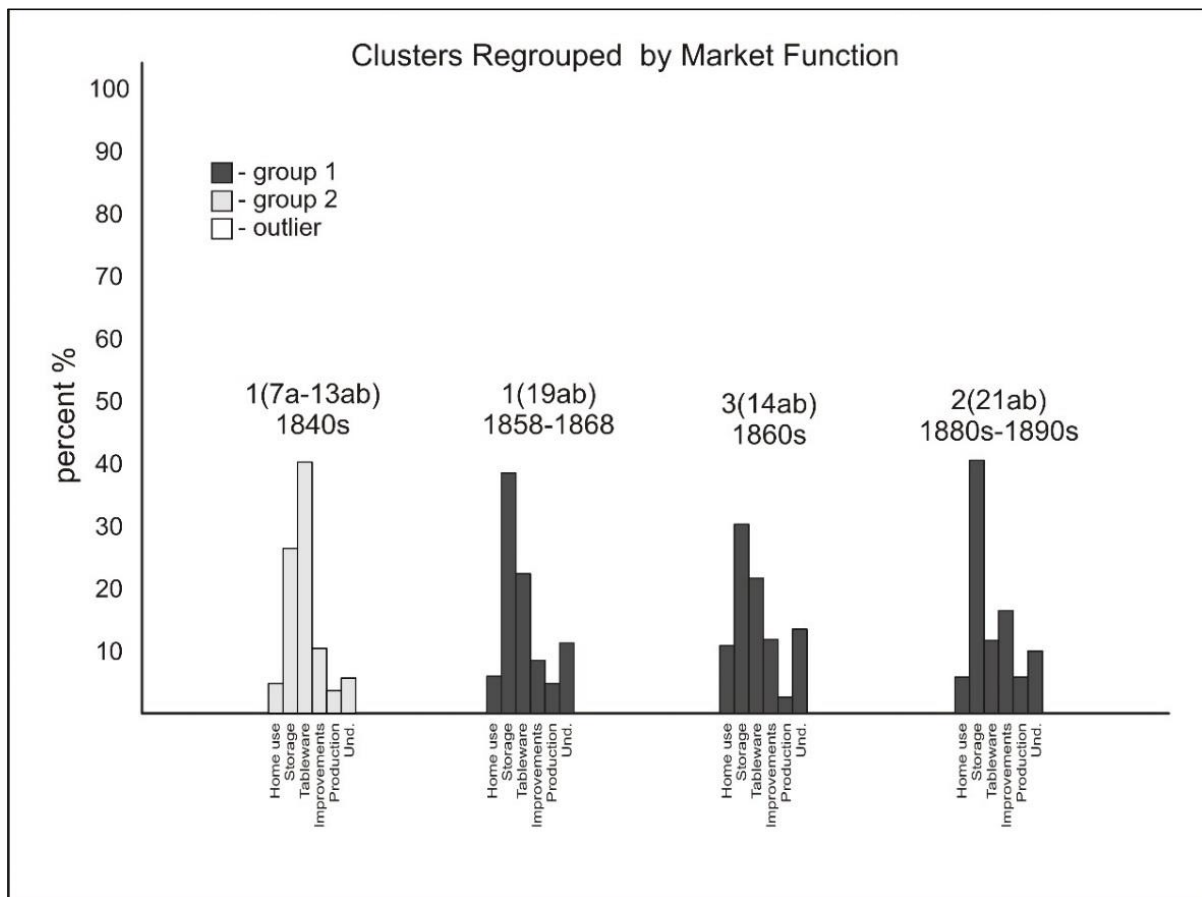


Figure 4.18. Combined Units and Features Regrouped by Ratio of Storage : Tableware : Improvement Artifacts

Feature 7a-13ab combined **is not** from the same population as Features 19ab, 21ab, 14ab combined.

Table 4.29. Chi-square Distribution for **Features 7-13, 19-21-14:** combined vs combined.

	Storage%	Tableware%	Improvements%	Total
7a-13ab	28%	43%	11%	
19ab, 21ab,14ab	39%	19%	14%	

The chi-square statistic is 10.8527. The P-Value is 0.004399.
The result **is significant** at $p < 0.05$.

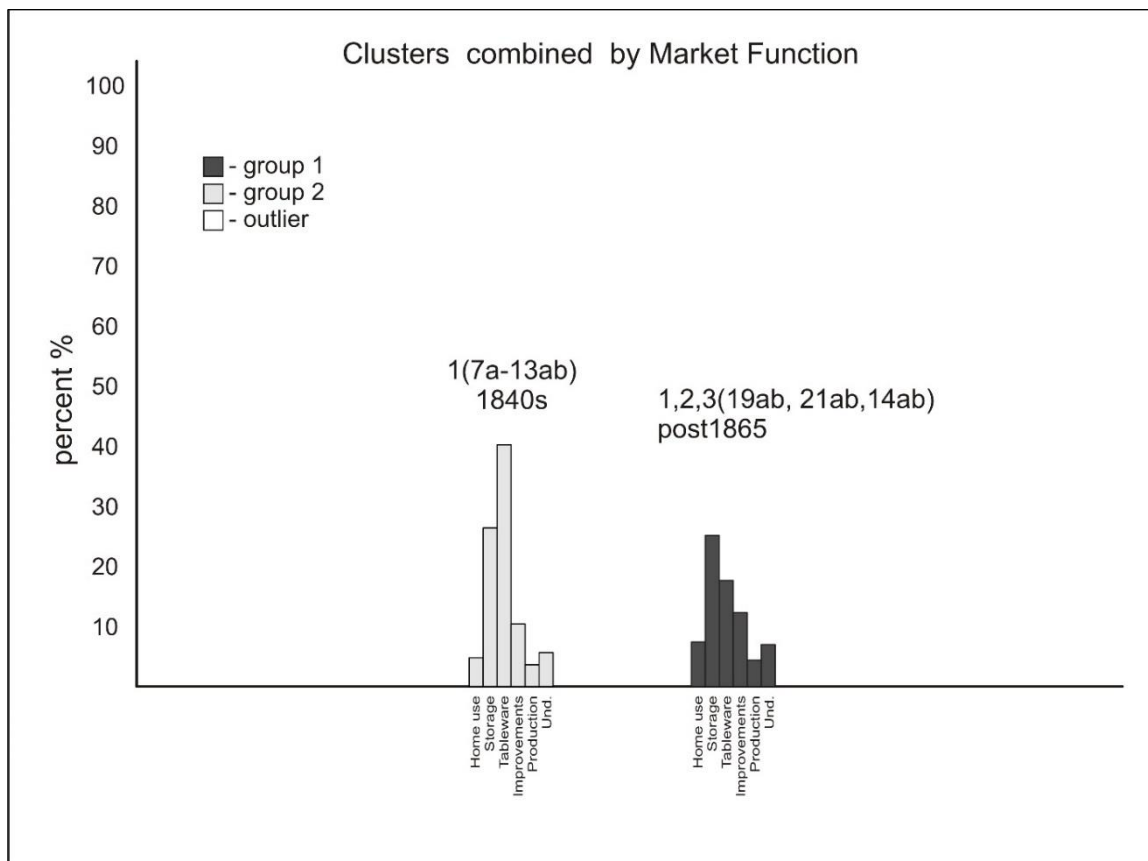


Figure 4.19. Combined Feature Groups with Same STI Ratio Distributions.

The first group contains feature fill of artifacts predating 1865. The second group contains feature fill post-dating 1865. The distributions are independent samples and the dominance of

tablewares created two different group of artifact categories that vary through time.

Conclusion

Chi-square tests performed on the distributions for these new groups showed that the distribution for both feature groups do represent statistically distinct samples. These distinctions are based on the dominance of tableware over storage, and improvement artifact. The use of table ware was indicated as a likely source of variation only after a model for the expansion of the capitalist mode of production was bridged to the physical record created by the historic residents at New Philadelphia.

The STI ratios further imply a temporal distinction for features dating before the 1860s to those dating after that decade. Even though the post-Civil War period was marked by a dramatic increase for the availability of foreign tablewares and for the beginning of US tableware production, the antebellum features are the grouping with the highest frequency of tablewares compared to storage and improvement artifacts. This is the opposite pattern than would be expected if not for the model for capitalist expansion suggests that this is an effect of the dependence that the prairie middle class had on commercial markets. Although tablewares had to be brought to New Philadelphia from foreign markets, the early residents seem to have relied on these market relations over others that might have supplied locally produced stonewares.

The analysis of Martin and Shackel also suggest that the distinctions in faunal remains and consumer items reflects the demographic origins for New Philadelphia's settlers and the dietary patterns associated with northern or southern dietary traditions. The historical materialist processes of negation of the negation anticipated that if items reflecting the least intensive capitalist relationships (i.e., faunal remains of dietary patterns) were already shown to have measured variation in the archaeological; then their opposite items (those with the most intensive

relationship with capitalism) might also show some complimentary variation in the record. The dominant artifact group was selected, however, not from the archaeological record, but from the model of capitalist expansion and the general theory for the nature of relationships inherent within capitalism. This combination of theory and analytical methodology pointed to tablewares as the best sources for measuring the effect of commercial markets on the material record at New Philadelphia. Creating artifact groups based on the dominance of tablewares, then produced variation that does not mimic the variation already found. The groups, however, point to a second manifestation of variation that compliments the process of migration by the prairie middle class. Instead of reflecting settlement origin, this variation seems to reflect a temporal transition for the use of tablewares.

The capitalist model, along with the historical materialist methodology, predicts that the settlement of prairie middle class members created a shared reliance on foreign markets. These market relations allowed for maximum expression of family productive capacity and allowed for smooth transition to engaging with regional supply chains. It is possible that familiar relationships between consumers and local merchants were no longer a relationship between local customers, the middle-person retailer, and local craftspersons. The expansion of capitalism may well have transferred new qualities to traditional merchant relationships. Whereas older customer to retailer relationship likely were source for creating and transmitting regional social networks. The new role of merchants may have been to foster a connection between consumers broader sense of group identity based on their position in the national labor hierarchy. This was possible because a person could buy commercial products that were known to be identical to ones purchased by people across the country with identical purchasing power. Instead of relying on a retailer to find the best local examples for regional production, a retailer could now supply

the prairie middle class with the means to fulfill their consumptive structural role and to acknowledge their identity to a wider group (something we can expect to have high value in a mobile population). The transition away from this early pattern might reflect either the abandonment away from New Philadelphia, or it might reflect the maturation of the prairie middle class as the economic and political turmoil of the mid-1860s created more incentives to consume regional products as a way to retreat to more personal connection with neighbors.

These questions are answerable through comparative studies built on the sesame procedures discussed above. They are also possible only at sites with a similar research design that Paul Shackel et. al constructed. This research design allowed for the initial collection a large amounts of surface artifacts from the pedestrian survey. Without this collection, the general temporal layout of the artifact collection would not have been properly understood. The initial assessment for the layout of the mean ceramic dates allowed the excavators to target areas with the widest possible temporal array. This allowed for more fine-grain analysis to be performed here that linked the overburden layers to bisected features in a way that explained the temporal development for the commercial behavior at New Philadelphia. The nest chapter address the implications this analysis has created.

¹ Frederick Engels, *Herr Eugen Dühring's Revolution in Science (Anti-Dühring)*, 3rd ed., trans. Emile Burns (1878; New York: International Publishers Co., 1939) Citations refer to 1939 edition; Bertell Ollman, *Dance of the Dialectic: Steps in Marx's Method*, Urbana: University of Illinois Press, 2003; Ted Grant and Alan Woods, *Reason in Revolt: Dialectical Philosophy and Modern Science*, New York: Algora Pub., 2002; Bruce G. Trigger, *A History of Archaeological Thought*, 2003; 12th repr., Cambridgeshire: Cambridge University Press, 1989).

² The synchronization for dependent social groups with capitalist markets is measurable. Appendix D shows the movement of people based on estimates for the European Marriage Pattern gleaned from US Census Enumerations. The European marriage pattern estimated here pairs white men and women aged between 20 and 40 years with the ratio of white children under the age of 14. The higher the number of children to adults is anticipated to create social groups who are less mobile and with less available energy for commodity production. Their

lack of mobility afford them more sources of traditional support structures outside those gained from market products. Groups with low ratios of children to adults have the energy for mobility and production, but also they have the greatest need to receive resources through the support structure of capitalism (i.e., they are consumers of market products and services). Appendix D shows how the expansion pattern for the most capitalist dependent group mirrors the expansion of capitalist markets. The distribution maps are scaled to natural log to reflect the identical logarithmic expansion shown for capitalist markets.

The best definition for the European marriage pattern comes from Tracy Dennison and Sheilagh Ogilvie, “Does the European Marriage Pattern Explain Economic Growth,” *The Journal of Economic History* 74(3): 651–93. They define the pattern as: “European Marriage Pattern (henceforth EMP), a demographic system involving late marriage for women (above 23–24 years), high proportions never marrying (above c. 10–15 percent), and predominantly nuclear families (above c. 80 percent). The EMP was originally put forward by John Hajnal (1965, 1982, 1983) not as a cause of economic success, but as an empirical regularity—a demographic pattern that could be observed across Europe west of an imaginary line from St. Petersburg to Trieste. The use of the EMP is loosely based on the above definition.

³ Engels, *Anti-Dühring*, 292.

⁴ Each abstraction in Marxist historical materialism has three types of processes that each serve as a catalyst for change. These processes are as follows:

1. transference
2. quantity into quality
3. negation of the negation

These are all dialectical relationships encompassing the three processes of change. The first is a metamorphosis of change where the transfer of a thing’s quality (or defining features) comes to embody the form of another thing. The second is the historical process of how increasing quantities of disparate (or redundant) things eventually creates a new single unity between those things. The third is the negation (or destruction) of something in order to make more of the same thing; this appears as a contradiction or paradox.

Transference. This process is one in which the qualities conditioning the functioning of one phenomena are passed into the form of another so that the new form not only functions as the old but often resembles it in appearance. The best example of this is Marx’s analysis of money into capital the quality of money as something that completes a transaction is transferred to capital which incorporates money’s quality to allow it to finalize transactions between employers and laborers thereby dissolving the historic social relations between an individual and the results of their labor. What is important is that no single phenomena or movement is new, only the patterning of what form those phenomena and processes are interacting.

Quantity into quality. This is the movement from one condition to another after a critical mass of redundant cases accumulates to a sufficiently high degree to create a new totality. Marx’s best example is the creation of a new wage laboring class composed of individual workers who each had mutually exclusive conditions of the separation of ownership of their labor. Although past historical periods contain individuals with this ability, it was only within

this capitalist mode of production that a sufficient number of people existed to operate a single whole laboring class needed to satisfy the demands of factory production. This movement is also best expressed in common metaphors like “the straw that broke the camel’s back.” And can be used to explain why there is nothing necessarily special about that final straw other than the historical context of all the preceding straws. From our geologic example, this would predict the existence of one particular year in the history of Mount Everest that marked an important dividing line. At some point in the past, there was one year of growth that transformed Everest from the largest possible hill to the smallest possible mountain. It is only in hindsight, and in the context of its total life history, that this single centimeter of growth matters.

Negation of the negation. This is the process in which the only means for reproduction of the form is the destruction of that form. It is the contradiction inherent in all living things and best seen in the phenomena of seeds planted in the soil that are destroyed to create seed-making plants.

See Frederick Engels, *Herr Eugen Dühring’s Revolution in Science (Anti-Dühring)*, 3rd ed., trans. Emile Burns (1878; New York: International Publishers Co., 1939) Citations refer to 1939 edition; Bertell Ollman, *Dance of the Dialectic*.

⁵ See Juliette Walker, *Free Frank*. There are numerous probate records in the Pike County Courthouse detailing the long legal process of liquidating Frank McWorter’s estate. His death set off a series of court disputes between his sons and those who owed debts to the estate.

⁶ Again see William H. Sewell, “Historical Events as Transformations of Structures,” for a brilliant analysis of these kind of events in 18th-century France.

⁷ For a recent example see news media coverage for The Arab Spring (or Arab Awakening). These events brought about revolutions in Tunisia, Libya, Egypt, and possibly Syrai. They were set in motion after the tragic self-immolation of Mohammed Bouazizi in 2010. His death was a desperate attempt to protest rampant police corruption against his social class of disaffected youth.

⁸ For ceramics see: Edwin Atlee Barber, *Marks of American Potters* Reprint of 1904 edition, (Philadelphia: Patterson and White, 1968); Elisabeth Cameron, *Encyclopedia of Pottery & Porcelain: 1800-1960* (New York: Facts on File Publications, 1986); William C. Gates and Dana E. Ormerod, “East Liverpool, Ohio, Pottery District: Identification of Manufacturers and Marks,” *Historical Archaeology* 16(1-2), 1982:1–358; Geoffrey A. Godden, *Encyclopedia of British Pottery and Porcelain Marks*, (New York: Bonanza Books, 1964); Geoffrey A. Godden, *Godden’s Guide to Ironstone: Stone & Granite Wares*, (Suffolk, Antique Collectors’ Club Woodbridge, 1999); Georgiana Greer, *American Stonewares: The Art and Craft of Utilitarian Potters*. (Exton, PA: Schiffer Publishing, 1981); Robert R. Hunter Jr., and George L. Miller *English Shell-Edged Earthenware*. *The Magazine Antiques* CXLV(3) 1994:432–43. William C. Ketchum, *Pottery and Porcelain* (New York: Alfred A. Knopf, 1983); William C. Ketchum, *American Country Pottery: Yellowware and Spongeware* (New York: New York, 1987); Ralph M. Kovel and Terry H. Kovel, *Kovel’s New Dictionary of Marks* (New York: Crown Publishers 1986); Lois Lehner, *Lehner’s Encyclopedia of U.S. Marks on Pottery, Porcelain & Clay* (Paducah, KY: Collector Books, 1988); George L. Miller, “Classification and Economic Scaling of the 19th Century Ceramics,” *Historical Archaeology* 14 (1980): 1-40; George L.

Miller, "Origins of Josiah Wedgwood's Pearlware," *Northeast Historical Archaeology* 16 (1987): 80–92. George L. Miller, "A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880," *Historical Archaeology* 25 (1991): 1–25; Stanley South, *The Leeds Pottery*, (London: Cory, Adams and Mackay, 1963); Donald Towner, *Creamware* (London: Faber and Faber, 1978); H.A.B. Turner, *A Collector's Guide to Staffordshire Pottery Figures* (London: MacGibbon and Kee, 1971); Jean Wetherbee, *A Second Look at White Ironstone*, (Des Moines, IA: Wallace-Homestead Book Co., 1985); Lenville J. Steele, (webmaster), "An Archaeological Guide to Historic Artifacts of the Upper Sangamon Basin (Champaign, IL Parkland College)," online at <http://virtual.parkland.edu/1stelle1/len/archguide/documents/arcguide.htm>.

⁹ For toys see: Paul Baumann, *Collecting Antique Marbles*, (PA: Wallace-Homestead Book Co. 1991); Fred Ferritti, *The Great American Marble Book* (New York: Workman Publishing Co., 1973); Mark E. Randall, "Early Marbles," *Historical Archaeology* 5(1971): 102–5; Nancie Swanberg, *Dolls Through the Ages* (San Francisco: Troubadour Press, 1979). For buttons see: Lillian Smith Albert, and Kathryn Kent, *The Complete Button Book* (Garden City, NY: Doubleday, 1949); Erwina Couse, L. and Marguerite Maple, *Button Classics*. (Chicago: Lightner Publishing Co.: 1941); Polly De Steiguer Crummett, *Button Collecting*. (Chicago: Lightner Publishing Co.: 1939); David F. Johnson, *The American Historical Button* (New Market, NJ: David F. Johnson, 1942); David F. Johnson, *Uniform Buttons; American Armed Forces, 1784-1948* (Watkins Glen, NY: Century House, 1948); Sally C. Luscomb, *The Collector's Encyclopedia of Buttons* (New York: Crown Publishers, 1967); Primrose Peacock, *Antique Buttons, Their History and How to Collect Them* (New York: Drake Publishers, 1968).

¹⁰ For nails see: James Aston and Edward B. Story, *Wrought Iron, Its Manufacture, Characteristics and Applications* (Pittsburgh: A.M. Byers, 1941); Amos J. Loveday, *The Rise and Decline of the American Cut Nail Industry: A Study of the Interrelationships of Technology, Business Organization, and Management Techniques* (Wesport, CN: Greenwood Press, 1983); Lee H. Nelson, *Nail Chronology as an Aid to Dating Old Buildings*. *Historic News* 24(1968):11.

¹¹ for glass see E.M. Elville, *The Collector's Dictionary of Glass*, (London: Country Life, 1961); Richard E. Fike, *The Bottle Book*, (Salt Lake City, UT: Peregrine Smith Books, 1987); Edward Fletcher, *Antique Bottles in Colour*, (Poole: Blandford Press, 1976); Larry Freeman, *Grand Old American Bottles; Descriptive Listings of Glass Bottle Types from Colonial Times to the Present* (Watkins Glen, NY: Century House, 1964); Oliver Jones and Catherine Sullivan, *The Parks Canada Glass Glossary* (Ottawa: Minister of the Environment, 1989); Ruth Webb Lee, *Early American Pressed Glass*, (Framingham Center, MA, Ruth Webb Lee, 1933); Don Maust, *Bottle and Glass Handbook; A History of Bottles Showing Their Various Styles, Types and Uses from Ancient Times to the Present*, Uniontown, PA: E. G. Warman Publishing Co., 1956); Cecil Munsey, *The Illustrated Guide to Collecting Bottles* (New York: Hawthorn Books, 1970); Emma Papert, *The Illustrated Guide to American Glass* (New York: Hawthorn Books, 1972); H.E. Putnam, *Bottle Identification*, (Fontana, CA: H.E. Putnam, 1965); Nancy A. Stehling and Meta F. Janowitz, *Bottle Makers and Their Marks* (New York: Thomas Nelson, Inc., 1971); Nancy A. Stehling and Meta F. Janowitz, *Fruit Jars* (Hanover, PA: Everybody's Press, 1977); Ronald R. Switzer, *The Bertrand Bottles, a Study of 19th Century Glass and Ceramic Containers* (Washington, D.C.: National Park Service, U.S. Department of

the Interior, 1974); Julian Harrison Toulouse, *Bottle Makers and Their Marks* (New York: Thomas Nelson, 1971); Julian Harrison Toulouse, *Fruit Jars: A Collector's Manual* (Caldwell, NJ: Blackburn Press, 2005).

¹² For cutlery see: Charles Bailey, *Knives and Forks* (London: The Medici Society, 1927); Lewis D. Bement, *The Cutlery Story: A Brief History of the Romance and Manufacture of Cutlery from the Earliest Times to Modern Methods of Manufacture* (Deerfield, MA: The Associated Cutlery Industries of America, 1950);

¹³ Tom Gwaltney, "New Philadelphia Pedestrian Survey: Final Report and Catalogue, Phase I Archaeology at the Historic Town of New Philadelphia, Illinois," white paper by *arGIS Consultants, LLC* (Bethesda: arGIS Consultants, 2004); and Joy Beasley and Tom Gwaltney, "New Philadelphia Pedestrian Survey: Phase I Investigations at an Historic Town Site," *Historical Archaeology* 44(1), 2010: 20–42.

¹⁴ Tom Gwaltney, "New Philadelphia Pedestrian Survey: Final Report and Catalogue, Phase I Archaeology at the Historic Town of New Philadelphia, Illinois," white paper by *arGIS Consultants, LLC* (Bethesda: arGIS Consultants, 2004); and Joy Beasley and Tom Gwaltney, "New Philadelphia Pedestrian Survey: Phase I Investigations at an Historic Town Site," *Historical Archaeology* 44(1), 2010: 20–42.

¹⁵ Terrance J. Martin and Claire Fuller Martin, "Courtly, Careful, Thrifty: Subsistence and Regional Origin at New Philadelphia," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 85–101; Paul A. Shackel, "Identity and Collective Action in a Multiracial Community," *Historical Archaeology* 44(1), New Philadelphia: Racism, Community, and the Illinois Frontier (2010): 64–5.

CHAPTER 5: CONCLUSIONS

Introduction

This dissertation asked: What were the material expressions for the emergent middle class on the American prairie during 19th-century? In order to arrive at a satisfying answer to that question, it first outlined the general historical context for the development of the prairie middle class in the 19th-century American Midwest. Within this context the prairie middle class was seen as influenced by the expansion of the capitalist mode of production. This expansion was comprised of three inter-related characteristics that revealed capitalism as an organizing force that synchronized cultural structures related to politics, markets, and demographics. Each of these three characteristics created a prairie middle class who were a) dependent on US political structure for protection of their private-property rights, b) were dependent on commercial markets to express their position within the national labor hierarchy, and c) were comprised of mobile family groups whose systemic contribution was to supply productive services and to consume commercial products.

Second, the general context of the prairie middle class was then tied to the specific historical-material record at New Philadelphia. This place marked a rare opportunity to gather data in a setting where 1. neither capitalism nor any other state-level society existed, 2. where people constructed social forms explicitly to exploit profit-making opportunities through capitalist markets, and 3. where we can delineate a sharp distinct between progressive social and conservative political behaviors.

New Philadelphia was a founder town, established by Free Frank McWorter who was born into slavery but purchased his freedom, along with that of 13 family members. The ability to sell town lots allowed Free Frank to take advantage of the speculative market created by Illinois's

expanding transportation infrastructure. Free Frank passed away in 1854 having secured enough assets to manumit 13 family members from slavery. New Philadelphia grew throughout the 1860s peaking at about 160 residents by 1865. In 1869, the Hannibal & Naples Railroad connected two towns flanking New Philadelphia. By not linking New Philadelphia as the middle depot between Griggsville and Barry, the H&N railroad's loop (just one mile north of New Philadelphia) was enough of a bypass to cause a rapid decline in New Philadelphia's population. By 1885, the town was vacated from the Pike County rolls and its land was designated for agricultural use. By the 1930s, no obvious signs of the town's existence remained.

The historical development for New Philadelphia showed that the town was connected to the larger process of capitalist expansion, but was also a very personal reflection for the life experience of town's founder Free Frank. Only through the racial paradigm of Frank's life could we understand his need to follow precisely any convoluted bureaucratic routine for property ownership. This was the only way to ensure that smallest technical legal challenge could not exploit his "middling" status as someone between slave and white. But as a complement to this paradigm, we sought to place the political-economic aspects of New Philadelphia first, in order to view the transformation of Frank from a person absolutely lacking property ownership to a person fully owning both his property and his labor. This continuum measured the relative amount of control over property and labor and was the type of large-scale phenomenon that political economic theory was capable of explaining. It was therefore the best metric for assessing why Frank's economic relationships were so successful at this particular time and place in American history.

Third, From the layers of historical context and similar theoretical approaches to the economic importance for understanding American racial dynamics, a series of general

observations for the expansion of capitalism were created. These observations further described the three-fold processes for 19th-century American capital. The first process, US political expansion, was the expansion of the capitalist relations of production. It was the process whereby two strangers could relate to each as citizens of the US and expect that their social contract with the government would supersede personal contracts and be the neutral arbiter of disputes. The second process, market expansion, was the expansion of the capitalist means of production. It was actuated by mercantile wealth's dominance and invested capital's transformative power. The third process, demographic expansion, was the intersection of the relations of production with the means of production. These were people whose migration was constrained by political relationships, whose motivations were mostly economic, and whose social value depended on their ability to produce and consume for mercantile markets.

New Philadelphia was a class of community defined by how its founder related to the large context of capitalist markets. In this environment, communities provided a consistency of purpose that served as a sort of placeholder so that its members could remain anonymous, transitory, and replaceable in accord with fluctuations in the capitalist superstructure. Taking all these things together, the middle class found in prairie communities had a specific type of patterning that was observable in the historic-archaeological record.

Forth, the observations for the historical context of capitalist expansion at New Philadelphia was analyzed by using the methodology of historical materialism and the theoretical explanation for how capitalism altered social relationships. This was done by describing three types of processes-of-change found in historical materialism. From this perspective, a general model for the expansion of the capitalist mode of production was stated. This model formed the basis for four general hypotheses about the broad cultural experience with capitalist expansion. Each of

these hypotheses led to specific or sub-hypotheses about the narrow personal experiences at New Philadelphia. These sub-hypotheses bridged the historical-archaeological record to the wider process of capitalist expansion.

The pairing of method and theory indicated that one particular artifact class should contain the most intensive relationship to capitalism and therefore be most likely to show variability in its distribution across the site. This was because the nature of the distribution was shown to have two characteristics that bridged the process of capitalism. First, the material record at New Philadelphia was a commercially homogenous assemblage of artifacts because it was produced within the single phenomenon of capitalism which was theorized to be a domineering force over other cultural phenomena. Second, because the only significant distinction found in the material record was in the most private artifacts reflecting dietary traditions, which are items reflecting non-commercial consumption, we expected a historical-materialist binary relationship along the most public classes of artifacts. The first of these dialectical relationships predicted that if items with the *least* commercial intensity show distinctions in the artifact record, then items with the *most* commercial intensity should mark different groupings of artifact as well. These items with the most commercial consumptive potential were tablewares because they represented the end of the global production line.

Fifth, chi-square tests performed on the distributions for artifact category group verified that the distribution for those groups did represent statistically distinct samples. These distinctions were based on the dominance of tableware over storage, and improvement artifact. The use of table ware was indicated as a likely source of variation only after a model for the expansion of the capitalist mode of production was bridged to the physical record created by the historic residents at New Philadelphia.

The artifact ratios further implied a temporal distinction for features dating before the 1860s to those dating after that decade. Even though the post-Civil War period was marked by a dramatic increase for the availability of foreign tablewares and for the beginning of US tableware production, the antebellum features were the grouping with the highest frequency of tablewares compared to storage and improvement artifacts. This was the opposite pattern than would be expected if not for the model for capitalist expansion that suggested this was an effect of the dependence that the prairie middle class had on commercial markets. Although tablewares had to be brought to New Philadelphia from foreign markets, the early residents seem to have relied on these market relations over others that might have supplied locally produced stonewares. Everything we presented about capitalism suggested that focusing only on the distinction between foreign and local markets at New Philadelphia can obscure the more meaningful distinction between these two networks of interaction. Foreign-versus-local was really just an idiosyncratic product of the relative geographic location of the town. The more important dichotomy is which of these networks best satisfied town resident's need to access capitalist relationships (of either political, economic, and demographic qualities). Perhaps, as capitalism matured in the region the older networks, which supplied locally produced wares, became subsumed into the wider capitalist network. This would be anticipated by the economic theory we laid out and would be a fine example for how pre-capitalist relationships maintained their outward appearance even as their internal qualities were transforming in accordance to the dominant mode of production

Contribution to Current Scholarship

Taken together the above analysis indicated that the prairie middle class did leave a material record reflecting their high degree of dependence on the capitalist mode of production. This case

study has the potential to contribute to similar studies by a providing a base line from which to sparse out other consumption patterns and that seem to coincide the transition to capitalism.

Some patterns, for example, were found to endure the transition to capitalism. This was true in food preparation sites with a continuous occupation from slavery to freedom. Michael Tuma found a consistent pattern in the material record of descendant communities of former slaves.¹ During a multi-year study, Tuma investigated the disposal patterns of a lower-income community yard in Mississippi. He noted patterns of food preparation, consumption, and refuse that were linked to similar patterns and behavior seen in the material record of the Saragossa Plantation in Natchez, Mississippi. Our analysis supports this one by showing that the endurance of traditional foodways can be complemented by the appearance of relations to capitalism. These new relations and the materials they require can be neatly adapted to the maintenance of traditional behaviors for food consumption.

This analysis also can provide a comparison for other studies focusing on the transition of capitalism in different regions of the US. Luanne Wurst's work on rural cemeteries in upstate New York showed how significant religious movements were in this region's transition to capitalism.² She documented the importance of religion through gravestone iconography. The adoption of Second-Great-Awakening symbols occurred at different rates throughout the region than historical accounts had suggested. And it was the archaeological record that best documented how middle class entrepreneurs, such as merchants and millers, were the first to depict religious ideals of the Second Great Awakening on their tombstones. This developed the communal identity that strengthened their commercial network. Religious iconography became shorthand for trustworthiness in commerce. Our analysis can aide this one by showing that mobile middle class members sought strategies for building new social networks. Their social

networks were based on commercial markets because this class was inherently dependent on the production of capital.

Archaeologists working in US Northeast have concentrated heavily on adaptations to industrial life by laborers. For this region, the focus of research tends to concentrate on the maturation of capitalism giving archaeologists such as Randall McGuire, Charles Cheek and Donna J. Seifert; and Lu Ann De Cunzo a clearer sense of capitalism's affect over urban populations.³ They argue for clear indications within material record of increasing separations between producing and owning classes, as well as a general trend towards homogeneity within each group. Our analysis can aid these ones by showing that apparent homogeneity may be masking significant heterogeneity that occurs through time. Our analysis can aid these ones by providing a clear baseline for variation within a single class that not blurred by dense urban settlement.

Other archaeologists have explored similar transformations and struggles in other contexts. Robert Paynter bases his discussion of racial dynamics on the excavations he carried out at the W. E. B. DuBois Boyhood Homesite.⁴ Although this is a single-site discussion, Paynter uses archaeology work as a platform to demonstrate how archaeological research expands our understanding of the past even about unpopular subjects like racism. Paynter shows that excavations at the site often incurred negative sentiments within the predominately-white Great Barrington community in Massachusetts. The site exposed community residents acknowledgements that the North was often as racially hostile as the South. The unease with which local residents felt was expressed in newspaper editorials and in efforts within local government to block public funds for converting the abandoned site into a public park. Our analysis can aid this one by showing the racial dynamics can be placed along different social

continuum to yield complementary insights.

Archaeologists working in post-Civil War sites have engaged issues of adjustments made by Southerners after the American Civil War. The main focus of work has centered on the elimination of slave-based agriculture. Charles Orser has led efforts to document the transition of former slave plantations to wage-based tenant farming.⁵ Orser argues for a sustained pattern of asymmetrical power relations after the end of slavery. J. W. Joseph and Mary Beth Reed also have dealt with adjustments within agricultural communities.⁶ They showed a distinct material signature associated with migrating tenant farmers of the late nineteenth and early twentieth centuries. Charles Faulkner has documented the abandonment of family craft production in urban contexts during this period.⁷ Our analysis can aid these ones by showing the dramatic effects of market changes on a community population – even when that community has considerably more control over their labor than tenant farmers.

Archaeologists working in the antebellum South have paralleled the work of archaeologists in other regions. They also have focused on adaptations to the spread of commercial capitalism. They have documented the material signatures of a growing middle class in urban contexts,⁸ in smaller towns,⁹ and on small farmsteads. Studies like Melanie Cabak and Mark Groover's compare household incomes of Georgia planters to assess the material record uncovered at the Bush Hill Plantation site.¹⁰ Here, the archaeological record demonstrated that the Bush family was frugal in the quality of household purchases, but were "aggressive consumers" as indicated by the quantity of material they left. This study highlights the complexity of wealthy planter society by showing a family whose massive wealth did not translate to a material record that would suggest such wealth. Our analysis can contribute to these studies by giving an indication for the variation of middle class material expression in settings

where northerners and southerners settled comingled.

Directions for Further Study

A fruitful direction for future study is to compare similarities in transitioning to other modes of production across different cultural groups. Here the work of the great anthropologist Eric Wolf is instructive.

Eric Wolf spoke about the human communal experience with cultural intuitions that form the bedrock for meaning and analysis of our species. In *Pathways to Power* Wolf Stated:

...institutions are ultimately but cultural patterns for group relationships. Their complex forms allow groups to relate to one another in the multiple processes of conflict and accommodation that must characterize any complex society.¹¹

So it is our institutions that stand as the material container for the web of human relations. And although they present themselves to us as a single unit, Wolf contends that “the focus of study is not communities or institutions but groups of people.”¹²

So, moving forward, if we start with a prediction for the basic fundamental relationship of all complex society that “No matter what other functions such a society may contain or elaborate, it must both produce surpluses and exercise power to transfer a part of these surpluses from the producing communities to people other than the producers,”¹³ then we can use production as the foundation for all cultural comparison. Because production is inherently an economic activity and because apportionment is inherently a political activity; the superstructure for which all group behavior is understood is political-economy. This is the logic for which all historical events involving national groups will serve to either strengthen or weaken the state's chances of reproduction. This basic relationship implies a universal pattern of cultural behavior that is evident in

no matter what combination of cultural forms such a society may utilize, it must also wield power to limit the autonomy of its constituent communities and to interfere in their affairs.

This means that all interpersonal and intergroup relationships in such a society must at some point conform to the dictates of economic or political power.¹⁴

But in tandem with the universal foundation of how humans relate to each other inside complex societies is the unceasing motion of change that is an idiosyncratic (i.e., historical) process. This is because while a state wields its power as the entity who creates the pairing of one nation-orientated group against another group, it is limited to two options for the way in which it maintains its power. So while the state determines or sanctions the existence of group relations its reproduction depends on the relationship being characterized as either conflict/accommodation or integration/disintegration. The linkages between these relationships must be references to conditions other than economic or politics so that they can change without disrupting the particular way of making surplus or the particular arrangement for how it is distributed. And so while the predictions require us to freeze a state at a particular period of time in order to define one group's relationship to another, we can make sense of those relationships only adding the historical dimensions that sees "their present as a rearrangement of their past, and their past as a determinant of their present."¹⁵

For example, if we compare shared features of haciendas and southern slave agriculture, we see that both modes of production inhibited the influx of capital investment and relied on developments in social organization (as opposed to developments in technology machinery) to extract agricultural resources. In Mexico, the transition to capitalism took a different historical course than what occurred in the US, but many of the general processual similarities remained. The processes were just expressed differently.

In haciendas, land ownership transitioned from communal control to private ownership in two broad ways depending on the past relationships of private to the community. Both pathways fit identical patterns of transactions that occurred "not to the common understandings of

community-orientated groups but to the interests of nation-orientated groups outside the community.”¹⁶ If the a land transferred from a community to outside private entity, the transfer might take the shape of any other commodity purchase but would often occur from “taking land as security on unpaid loans.”¹⁷ If the land transfer was from the community to a single entity made up separated group of community members the transfer was often the result of capital investment in farming equipment like plows and oxen. This phenomenon was described by Oscar Lewis in the early 1950s and Wolf summarized his work saying “as Oscar Lewis has so well shown for Tepoztlán, once private ownership in land allied to plow culture is established in at least part of a community, the community tends to differentiate into a series of social groups, with different technologies, patterns of work, interests, and thus with different supracommunity relationships.”¹⁸

Additionally Wolf stated that:

Confronted by these contrasts between the mobile and the traditional, the nation oriented and the community oriented, village life is riven by contradictions and conflicts, conflicts not only between class groups but also between individuals, families, or entire neighborhoods. Such a community will inevitably differentiate into a number of unstable groups with diverse orientations and interests.¹⁹

Wolf pointed out two phenomena that seem to occur when communities cope with rapid change. First, new types of relationship tended support the retention of traditional behaviors. Haciendas allowed for peripheral wage labor activities whose proceeds went entirely to traditional social or religious festivals. Second, communities allowed for the creation of “brokers” who functioned as lines of communication between community-orientated groups and nation orientated ones. These people were the focal point for enacting new relationships and were the best perspective to understand the specific direction of change for that community. These individuals were able to bridge the new social gap and could “relate to community-orientated individuals who want to

stabilize or improve their life chances, but who lack economic security and political connection, with nation-oriented individuals who operate primarily in terms of the complex cultural forms standardized as institutions, but whose success in these operations depends on the size and strength of their personal following.”²⁰

So as we move forward we should look to cultural comparisons with a number of insights:

1. Social systems take new forms only after dominant social institutions no longer perform their original functions. This is observable either as subordinate institutions take on the visage of traditional institutions, or as they apply traditional behaviors to subordinate institutions. This applies particularly to the dominant relationships which were originally instrumental in structuring the social organization but no longer holding the power they once had. As a result competing forms of relations (especially those that were subordinate or peripheral) can rationalize their rise to power by exploiting the gap between powered institutions assumed level of effectiveness and their actual abilities. In practice, this usually takes one of two forms.
2. Peripheral institutions appeal to the façade of tradition while seeking to make their relationships the dominant organizing principle. Or, peripheral institutions can seek to re-apportion the spoils of traditional relationships to their group. This is like alternating combinations of new packages for old contents.
3. How capitalism effected United States social organization may be most striking in other historical processes like the process of town founding

Towns were founded by either individuals or corporate bodies with political, religious, or economic orientations. Once we acknowledge their intentions, clear trends appear in the rationales for founding towns. These general trends reveal two important processes woven

throughout the history of American town founding. First, towns became a way of transferring the values of a person or group onto the physical landscape. The town then becomes an instrument to reflect those values back to the inhabitants in a way that reinforces and reproduces the original intent.

Second, towns are also a tool for accumulating the collective efforts of individuals into a single communal whole. This has the effect of turning certain redundant individuals like farmers or workers (who relate to each other as individuals outside the town) into a homogeneous group of agriculturalists or laborers who then relate to the town in terms of markets, factories, or neighborhoods. It is the town, therefore, where the boundaries of a community, both literal and figurative, are drawn.

Each of these rationales will define a community that fits into a serviceable node within a preexisting network based on political, religious, or economic necessities. So the intentionality of the town founding allows us to connect the personal goals of individuals Frank McWorter to the broad range of social potential within which their historical context provides (whether mercantilism or capitalism). And so it is in the town founders' desire to base their communities on outward use that we find the most exciting analytical usefulness.

4. Town's set up within a capitalist system were unique from other modes of production because they do not require a material expression for either their physical security or their economic base. Security flows from the adherence to law and order that is formalized and maintained by the bureaucracy. The economic network is so large and so diversified that links between production points are more difficult to establish. So in a fully capitalized economy, we should expect to see towns created without physical considerations for

community-wide security. In other words, we expect no walled fortifications, moles, or other barriers of entry.

To the contrary, attempts to affect access to or within the town should be designed towards improving access to commercial centers. This is what gives capitalized economies an overall sense of peace, although the coherence through violence is always present in the form of property seizure or imprisonment from failure to meet financial obligations whether those are public or private.

5. It is the legal apparatus that legitimizes towns and secures their property rights.
6. It is ultimately the logic of financial markets and how infrastructure investment is allocated that ultimately determines the new artificial networks of the industrial era.

Conclusions

Subsistence patterns were the aspect of behavior at New Philadelphia that appears to have resisted change most strongly under the influence of expanding capitalism. This may seem rather unimpressive, but it's obviousness is what makes it such a valuable study. This is because most other places had either pre-existing relationships with western modes of production and or had longer records of experiencing capitalism. Both these qualities will add complications to the survey and analysis of material record and so isolating a narrow time frame gives a good indication for the specific patterning of change to look for in urban settings or for towns that survived into the next phase of the maturation of capitalism. In both these scenarios we would expect to find multiple types of change in the record that could be either unique to their experience with the expansion of capitalism or part a process not seen at New Philadelphia. In either case, we now have a much better sense for the comparisons needed to address broader cultural contexts for the general model of capitalist expansion we identified.

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- ⁴ Paynter, Robert, 1990, Afro-Americans in the Massachusetts Historical Landscape. In *The Politics of the Past*, edited by Gathercole and D. Lowenthal, pp. 49–62. Unwin Hyman, London.
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- ⁹ Groover, Mark D., 2005, The Gibbs Farmstead: Household Archaeology in an Internal Periphery. *International Journal of Historical Archaeology* 9:229–289.
- ¹⁰ Cabak, Melanie A. and Mark D. Groover, 2006, Bush Hill: Material Life at a Working

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¹¹ Eric R. Wolf, *Pathways to Power: Building and Anthropology of the Modern World*, with Sydel Silverman, forward by Aram A. Yengoyan. Berkeley: University of California Press (2001), 124–6.

¹² Wolf, *Pathways*, 126.

¹³ Wolf, *Pathways*, 126.

¹⁴ Wolf, *Pathways*, 127.

¹⁵ Wolf, *Pathways*, 127.

¹⁶ Wolf, *Pathways*, 131.

¹⁷ Wolf, *Pathways*, 131.

¹⁸ Wolf, *Pathways*, 132.

¹⁹ Wolf, *Pathways*, 135.

²⁰ Wolf, *Pathways*, 138.

APPENDICES

Appendix A. Maps, Photographs, and Diagnostic Artifacts 11PK455.

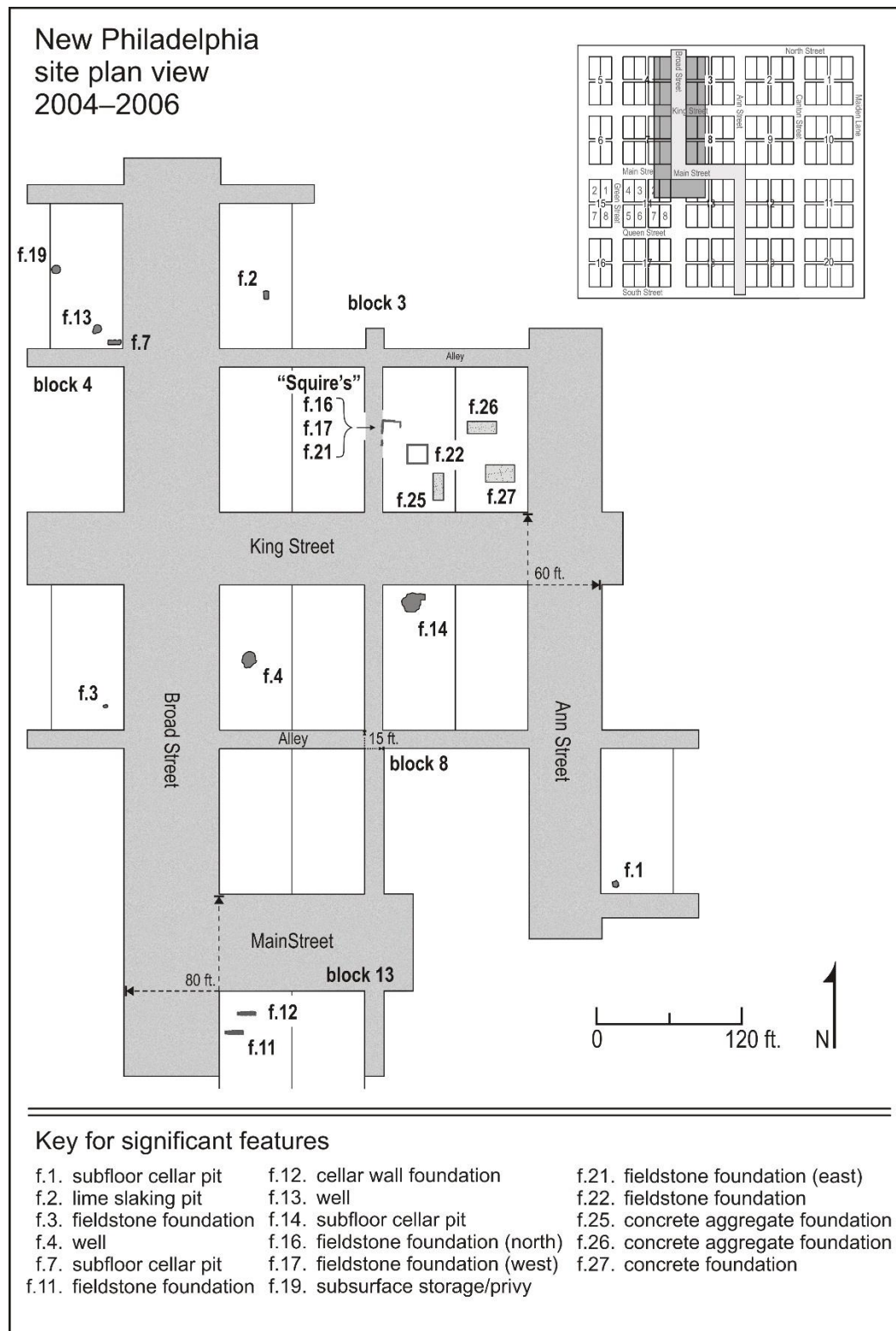


Figure A.1. New Philadelphia Site Plan view drawn by Chris Valvano.

Feature 1.

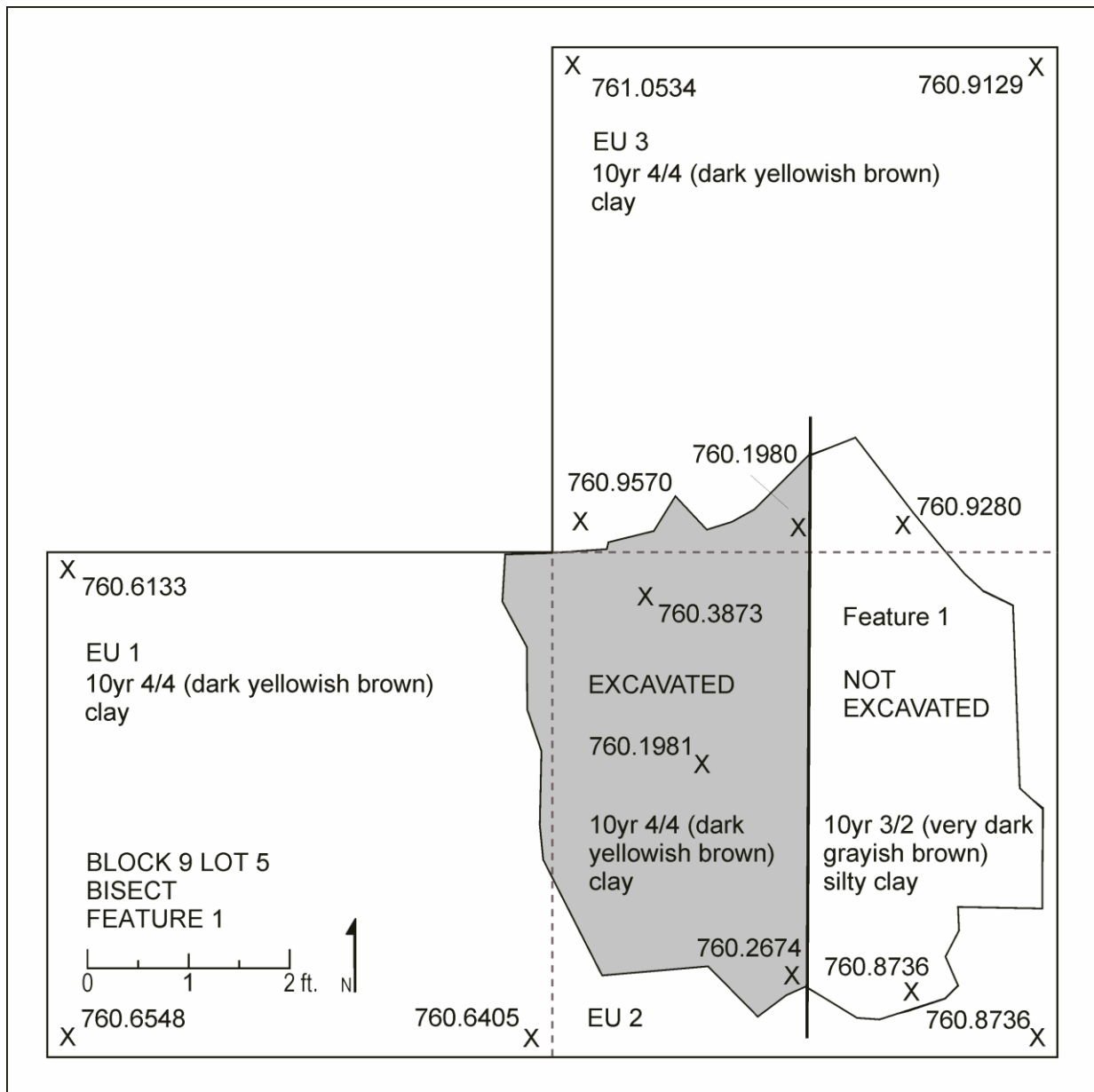


Figure A.2. Plan view of feature 1, the cellar pit attributed to Casiah Clark and her family. Drawing by Christopher Valvano. Copied from Paul Shackel, *New Philadelphia Archaeology*, 65.

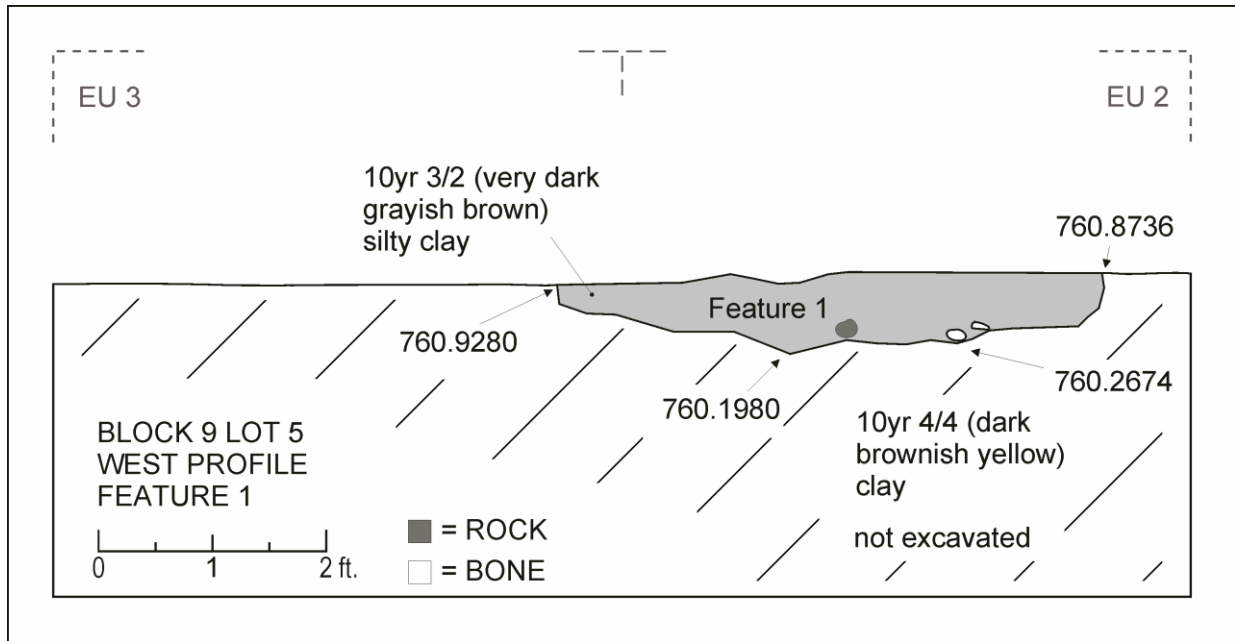


Figure A.3. Profile of feature 1 bisected. The feature fill dates to about the 1850s. Drawing by Christopher Valvano. Copied from Paul Shackel, *New Philadelphia Archaeology*, 65.



Figure A.4. Scroll Flask manufactured in Louisville, Kentucky, from about 1840 to 1860, found in Casiah Clark's pit cellar. Photograph by Christopher Valvano. Copied from Paul Shackel, *New Philadelphia Archaeology*, 67.



Figure A.5. Extinct Passenger Pidgeon Bones.

PLAN VIEW

Feature 7 is shown in plan view, divided into "Not excavated" (top) and "Excavated" (bottom) areas by a dashed line. The feature is composed of 10YR 3/2 (very dark grayish brown) compacted silty clay with brick and mortar. The excavated area is composed of 10YR 4/6 (dark yellowish brown) silty clay. The plan view includes a north arrow pointing up. Elevation points are marked with 'X' and values: 766.258, 766.203, 766.288, 766.202, 765.039, 765.107, 765.107, 765.000, 766.208, 764.992. The plan view is divided into sections by vertical dashed lines labeled EU 14, EU 7, EU 4, EU 5, and EU 1.

NORTH PROFILE

The north profile shows the cross-section of Feature 7. The top surface is at elevation 766.106 on the left and 766.324 on the right. The bottom of the feature is at elevation 765.039 on the left and 765.000 on the right. The profile shows the 10YR 3/1 (very dark gray) silty clay. The area below the feature is labeled "not excavated". The profile is divided into sections by vertical dashed lines labeled EU 14 and EU 4.

LEGEND

- ⊗ = METAL
- ▣ = BRICK
- = FIELDSTONE
- stone and mortar concentration
- brick and mortar concentration

SCALE

0 1 2 ft.

**BLOCK 4 LOT 1
FEATURE 7**

185



Figure A.7. Feature 7 Field Photograph by Paul Shackel.

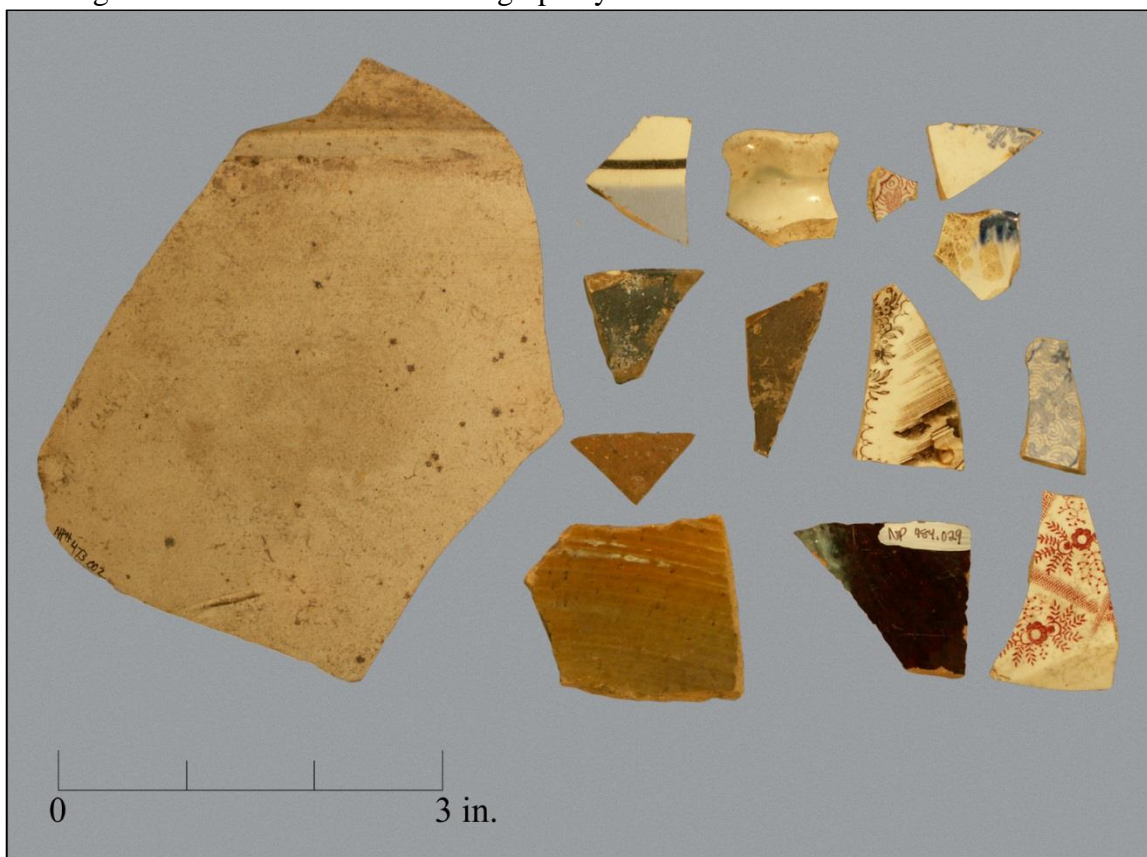


Figure A.8. Feature 7 Ceramic Minimum Vessel Count. Photograph by Chris Valvano.



Figure A.9. Feature 7 Minimum Glass Vessel Count. Photograph by Chris Valvano.



Figure A.10. Feature 7 Representative Faunal Assemblage. Photograph by Terry Martin.

Feature 13.

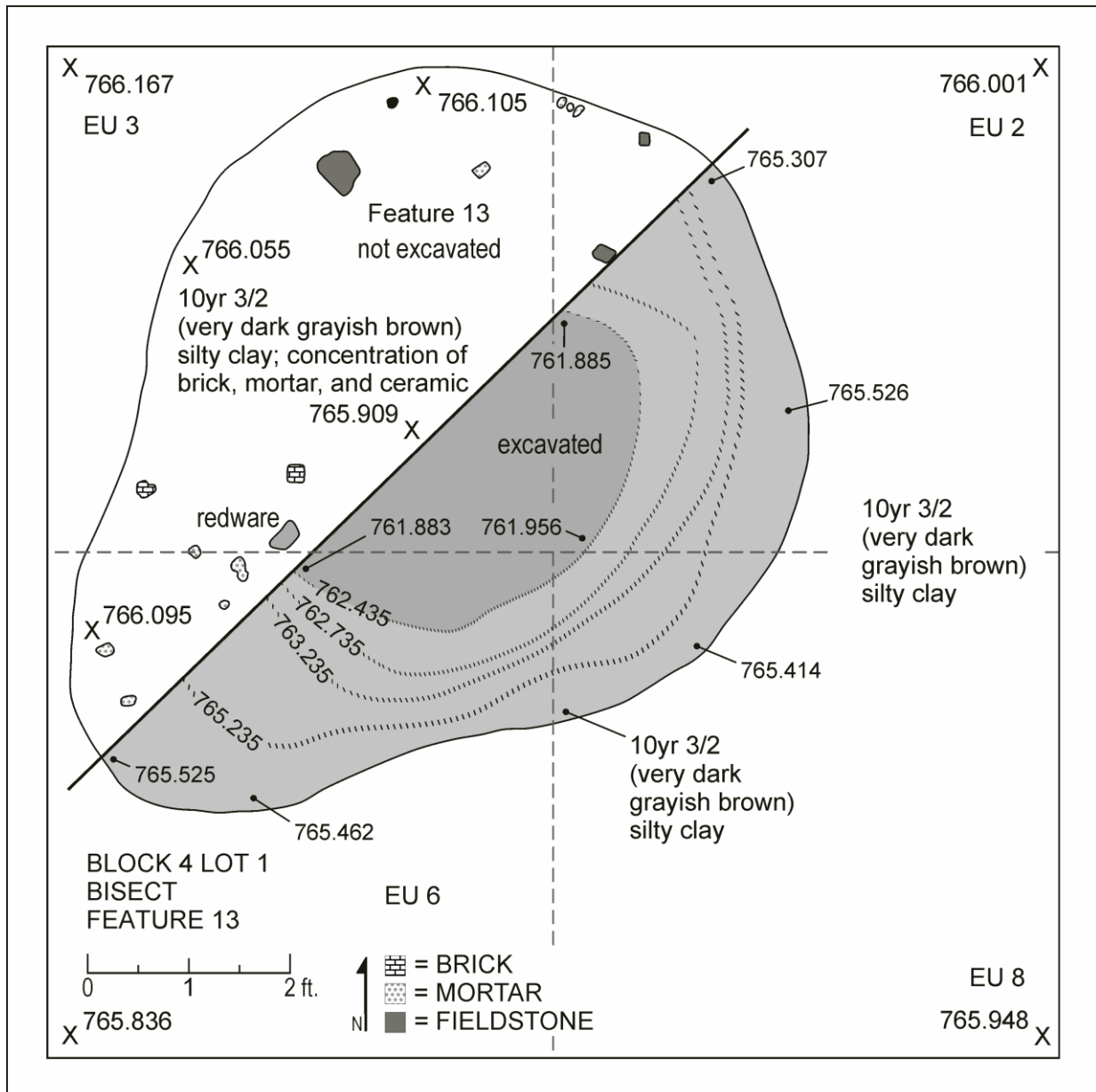


Figure A.11. Feature 13 Plan View Drawn by Chris Valvano.

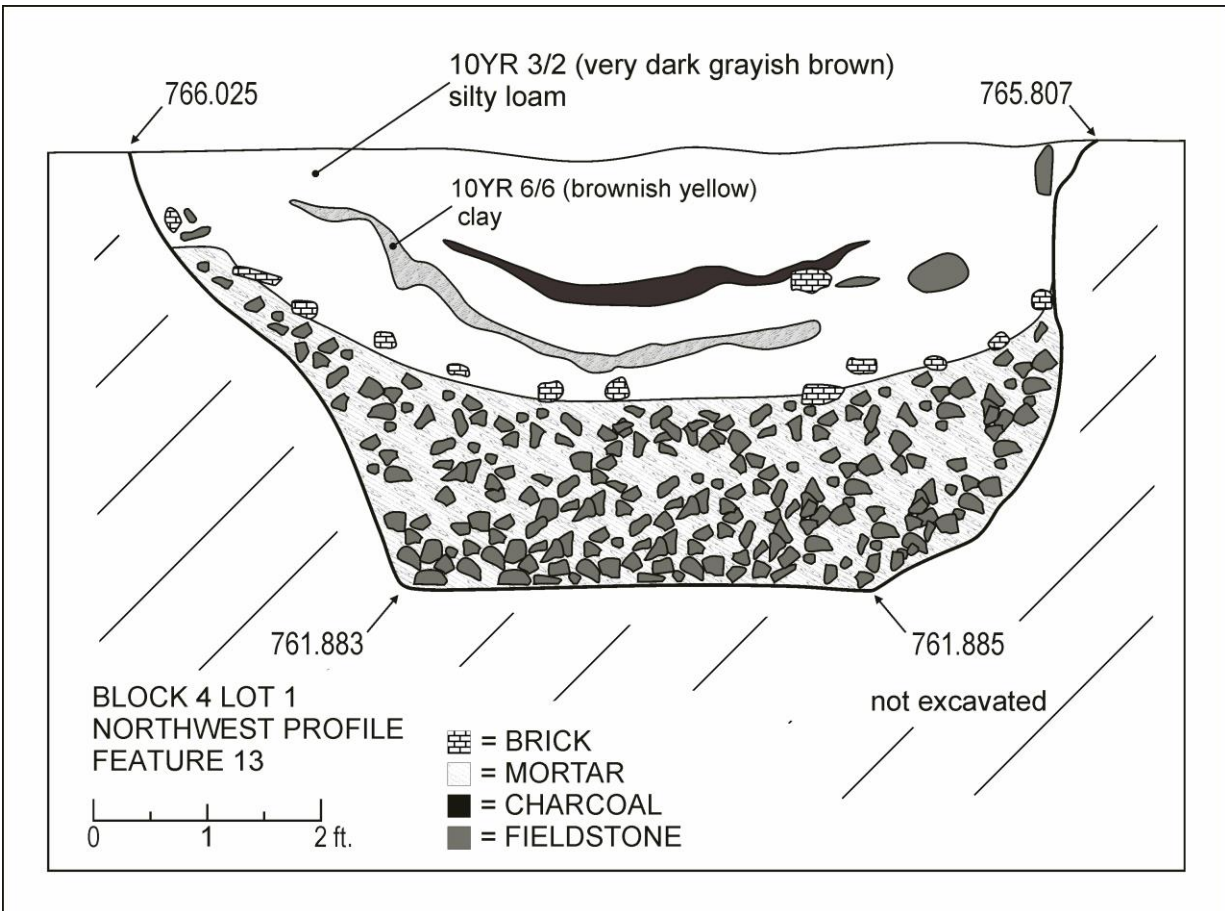


Figure A.12. Feature 13 Profile Drawn by Chris Valvano.



Figure A.13. Feature 13 Field Photo by Paul Shackel.

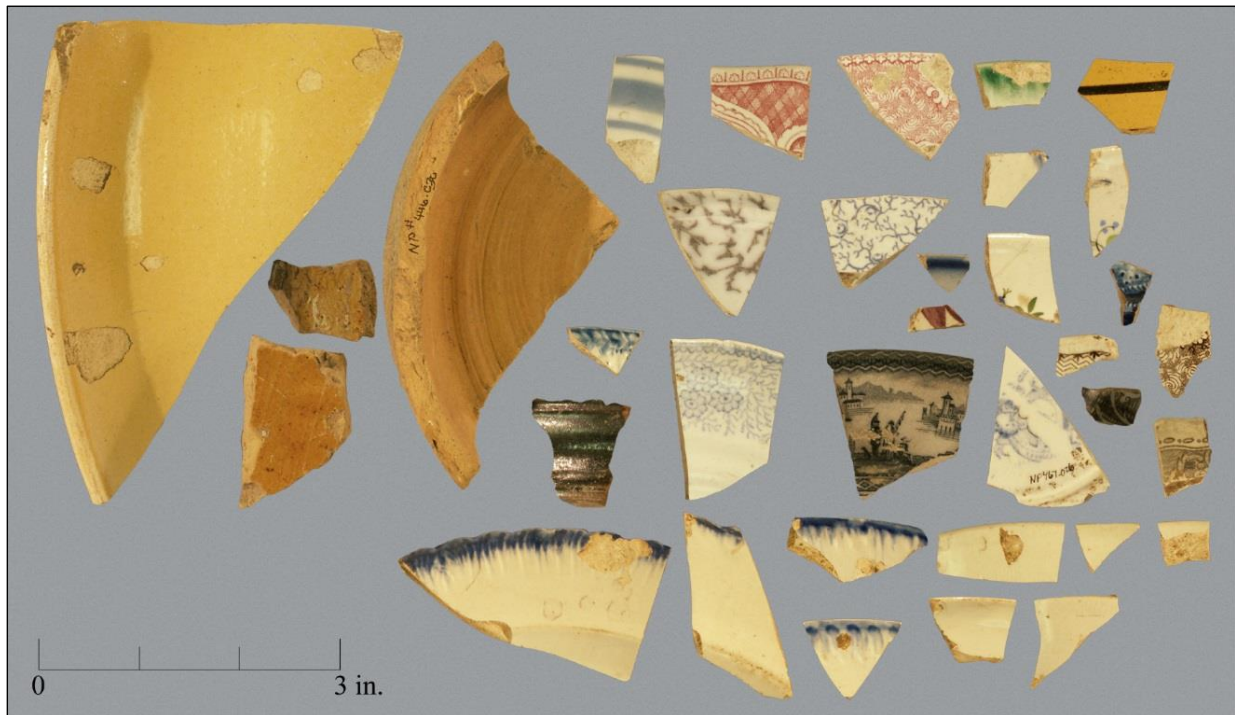


Figure A.14. Feature 13 Minimum Ceramic Vessel Count. Photograph by Chris Valvano.

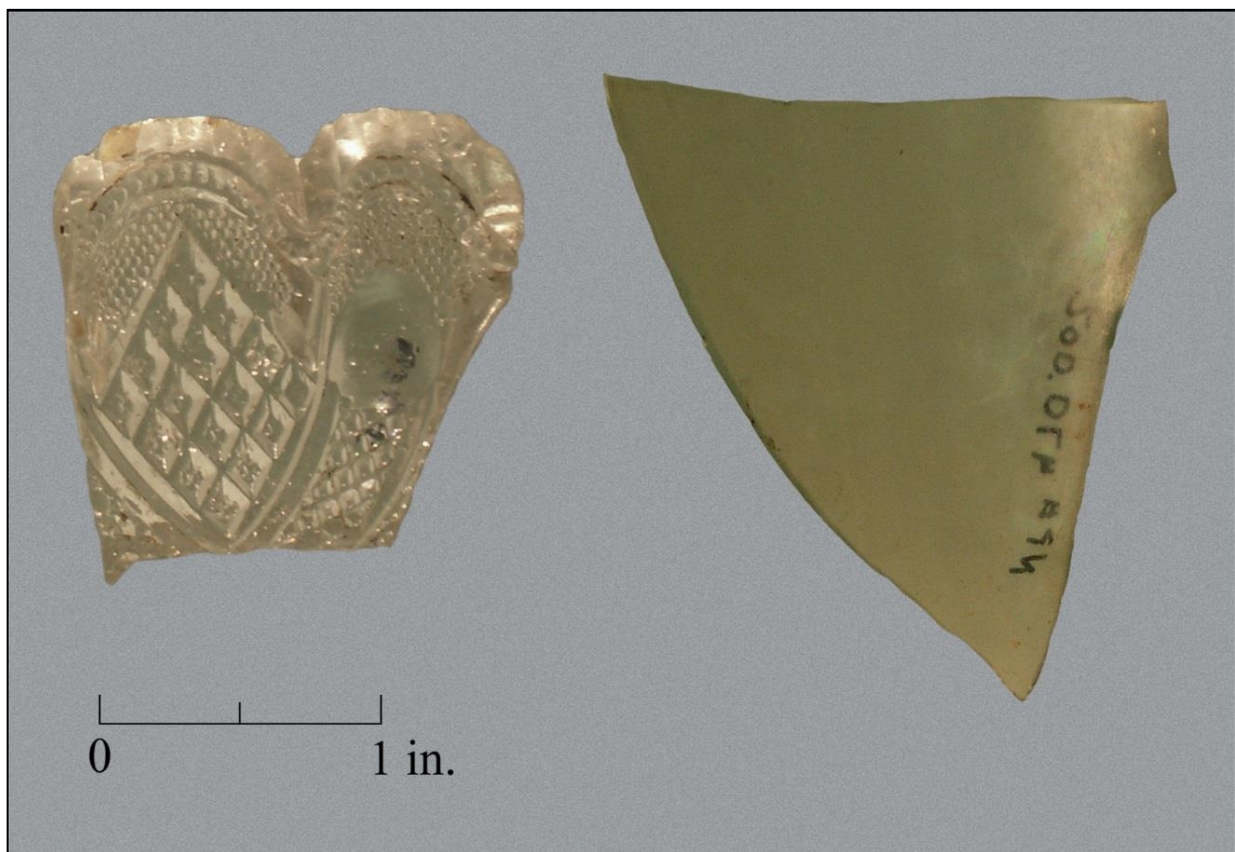


Figure A.15. Feature 13 Minimum Glass Vessel Count. Photograph by Chris Valvano.



Figure A.16. Feature 13 . A sample of faunal remains from feature 13. (a) pig mandible, (b) pig mandible, (c) juvenile pig maxilla, (d) turkey bone (tibiotarsus), (e) Canada goose bone (radius), (f) pig humerus, (g) burned sheep humerus, (h) cow humerus, saw-cut and burned. Photograph by Terrance Martin. Copied from Paul Shackel, *New Philadelphia Archaeology*, 132.

Feature 14.

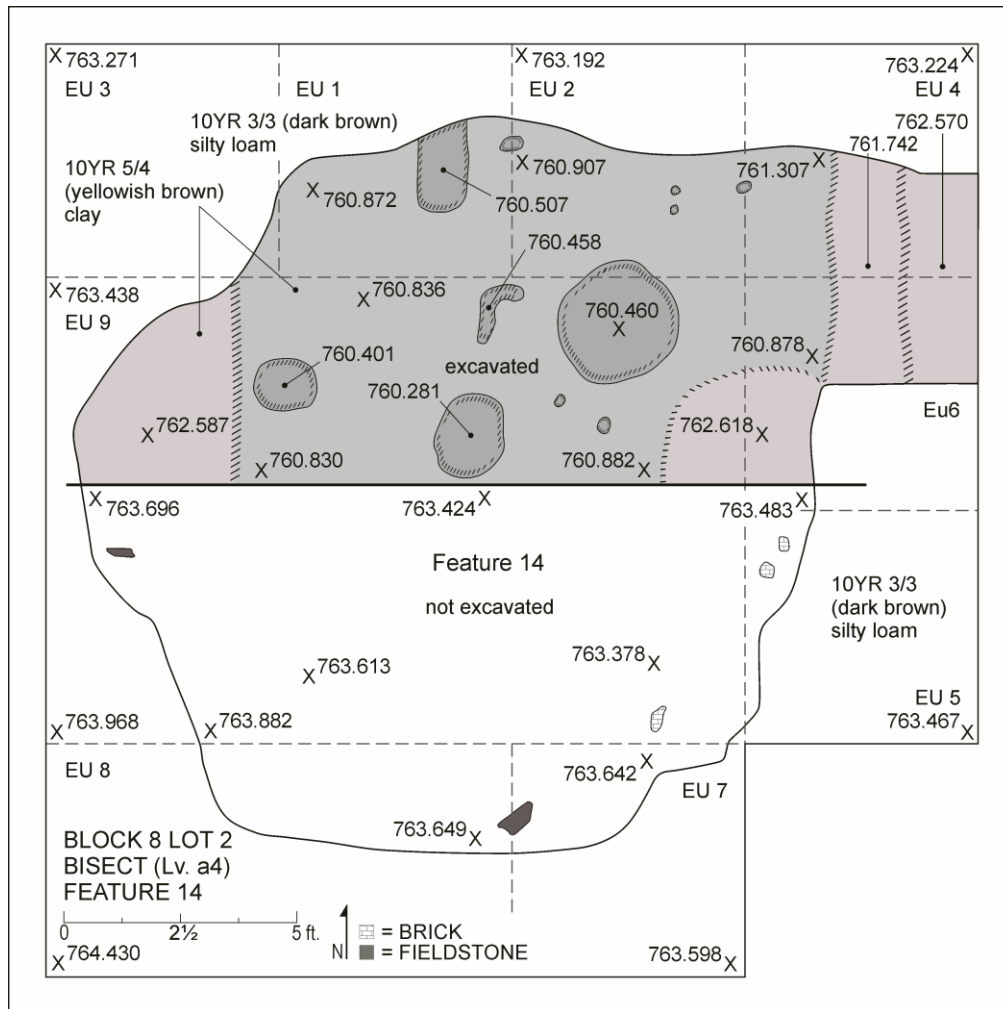


Figure A.17. Drawing of feature 14 with the northern half excavated. Notice the post holes and barrel depressions. Drawing by Christopher Valvano. Copied from Paul Shackel, *New Philadelphia Archaeology*, 142.

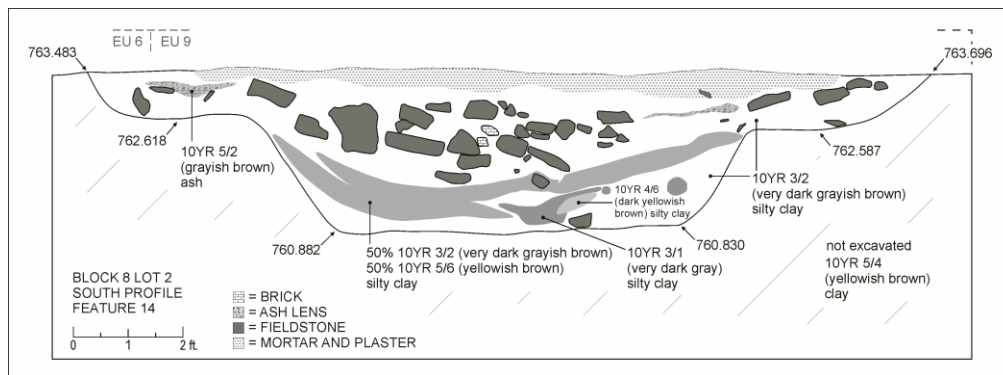


Figure A.18. Feature 14 Profile. Drawn by Chris Valvano.



Figure A.19. Feature 14 Field Photograph by Paul Shackel



Figure A.20. Feature 14 Profile Photograph by Paul Shackel.

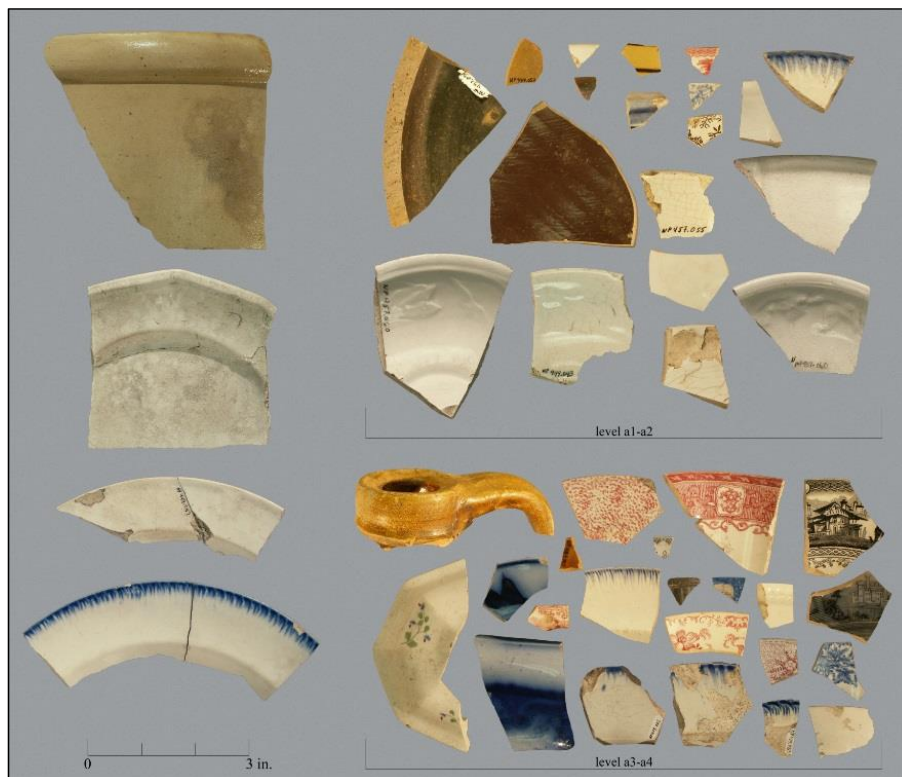


Figure A.21. Ceramic assemblage from feature 14. The lower levels (a3 and a4) were deposited in the 1860s, and levels a1 and a2 were deposited in the early 1870s. Photograph by Christopher Valvano. Copied from Paul Shackel, *New Philadelphia Archaeology*, 143.



Figure A.22. Feature 14 Minimum Glass Vessel Count. Photograph by Chris Valvano.



Figure A.23. Feature 14 Representative Faunal Assemblage. Photograph by Terry Martin.

Feature 19.

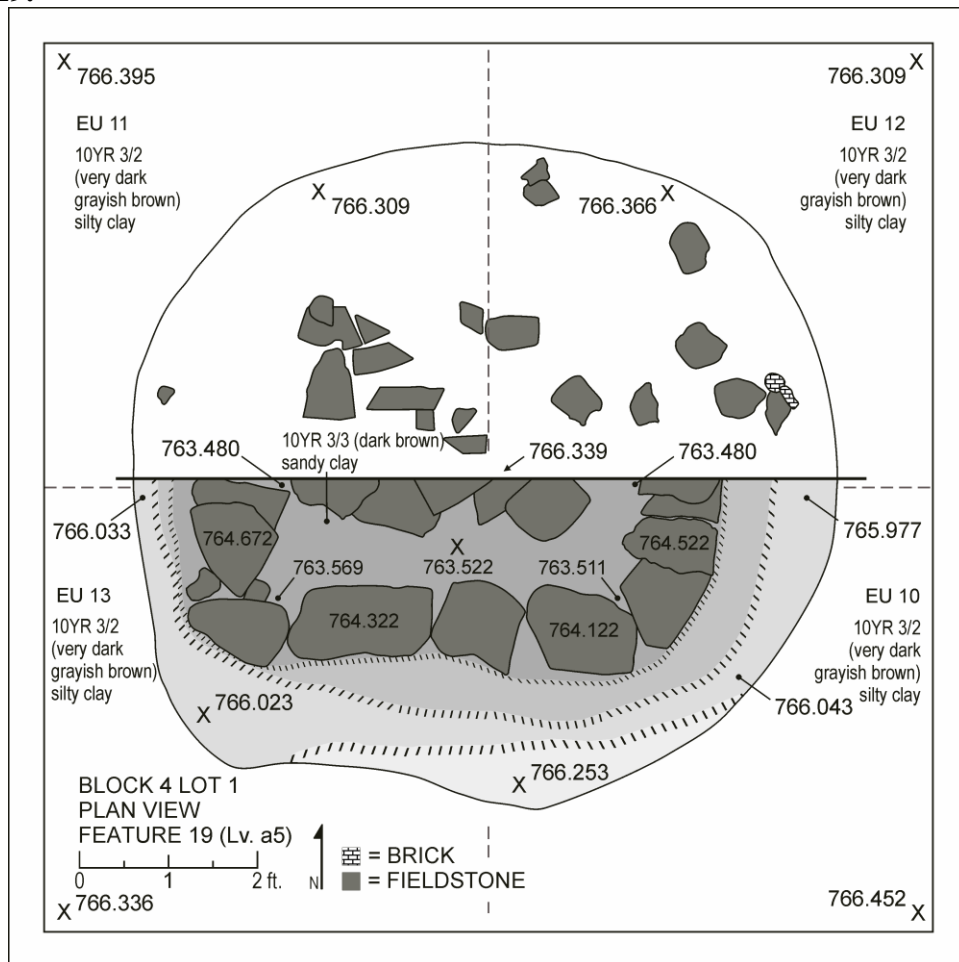


Figure A.24. Feature 19 Plan View. Drawn by Chris Valvano.

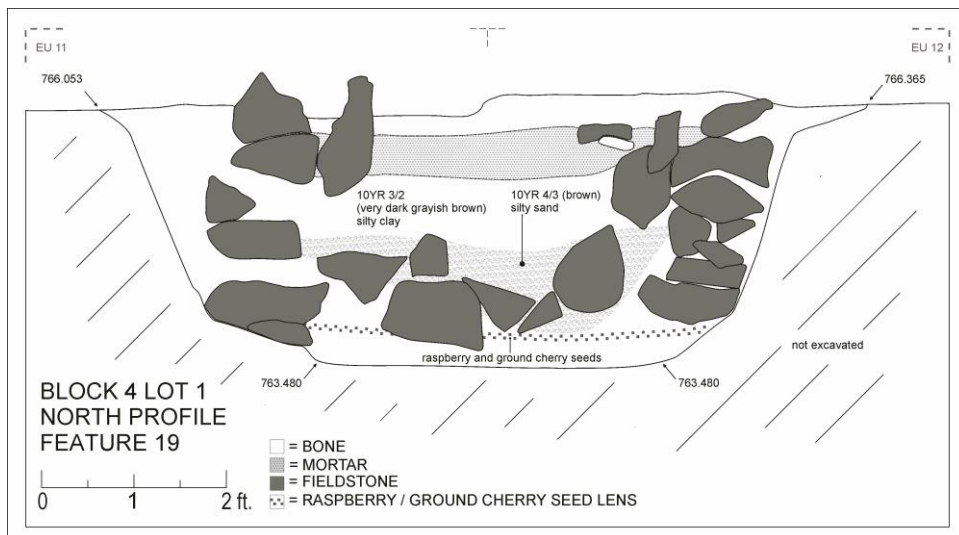


Figure A.25. Feature 19 Profile. Drawn by Chris Valvano.



Figure A.26. Feature 19 Field Photograph by Paul Shackel.



Figure A.27. Feature 19 Minimum Glass Vessel Count. Photograph by Chris Valvano.



Figure A.28. Feature 19 Minimum Ceramic Vessel Count. Photograph by Chris Valvano.



Figure A.29. Feature 19 Representative Faunal Assemblage. Photograph by Terry Martin.



Figure A.30. “Union” bottle dating to the 1860s. Photograph by Christopher Valvano. Copied from Paul Shackel, *New Philadelphia Archaeology*, 137.



Figure A.31. Feature 19 Bottle with pontil scar typical of antebellum manufacturing.

“Squire’s”.

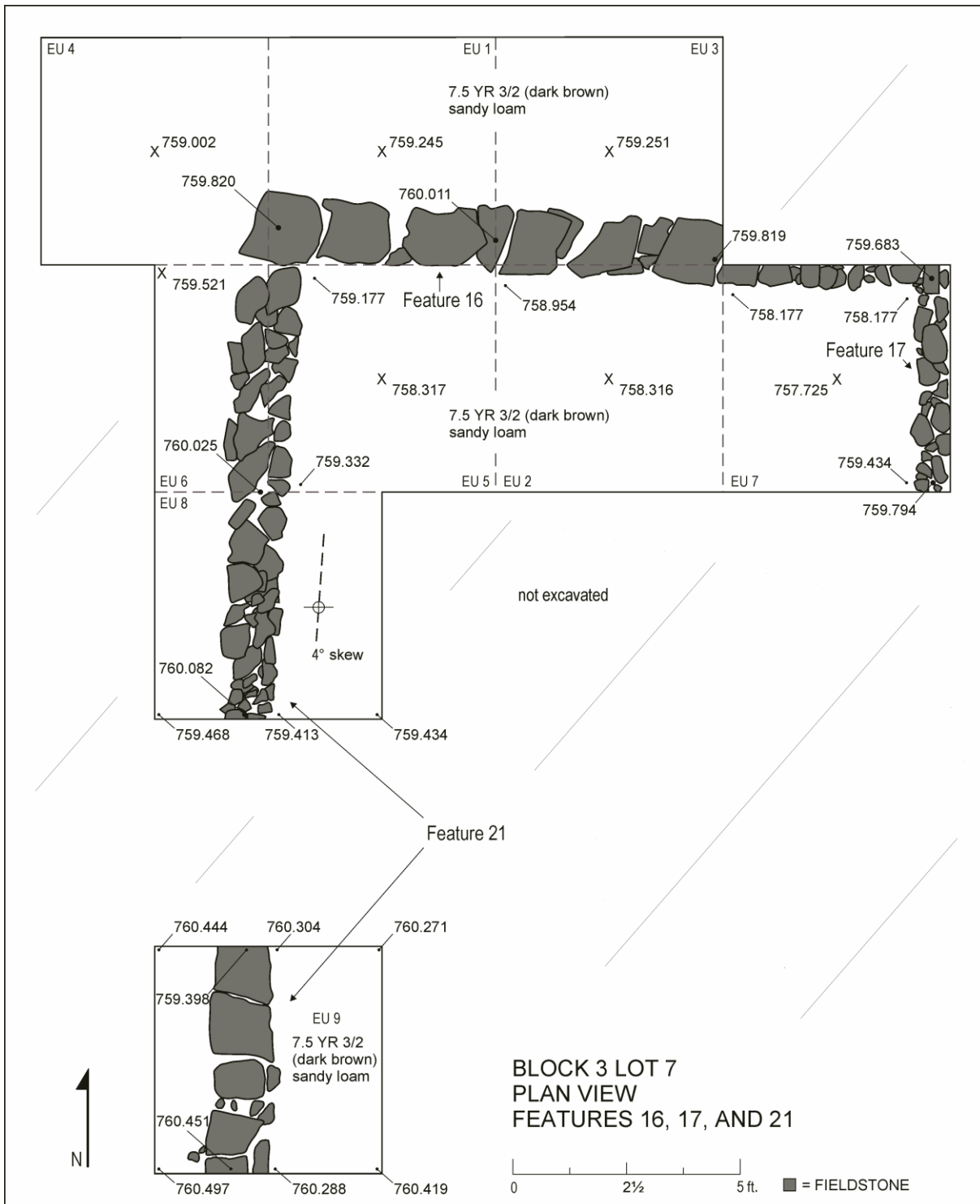


Figure A.32. Plan View of Block 3 Lot 7.



Figure A.33. “Squire’s” Field Photograph by Paul Shackel.

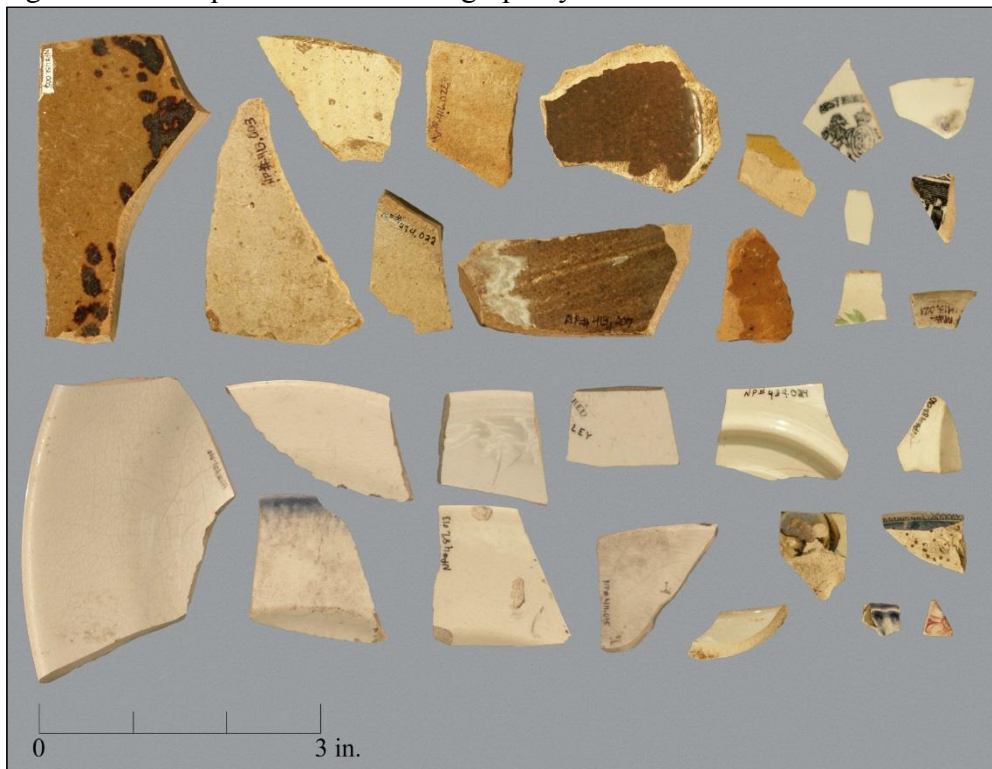


Figure A.34. “Squire’s” Minimum Ceramic Vessel Count. Photograph by Chris Valvanoo.



Figure A.35. “Squire’s” Minimum Glass Vessel Count. Photograph by Chris Valvano.



Figure A.36. “Squire’s” Sauce bottles typical after ca.1870.

Appendix B: Capital Investment in the United States 1840–1890 with Midwest detail.

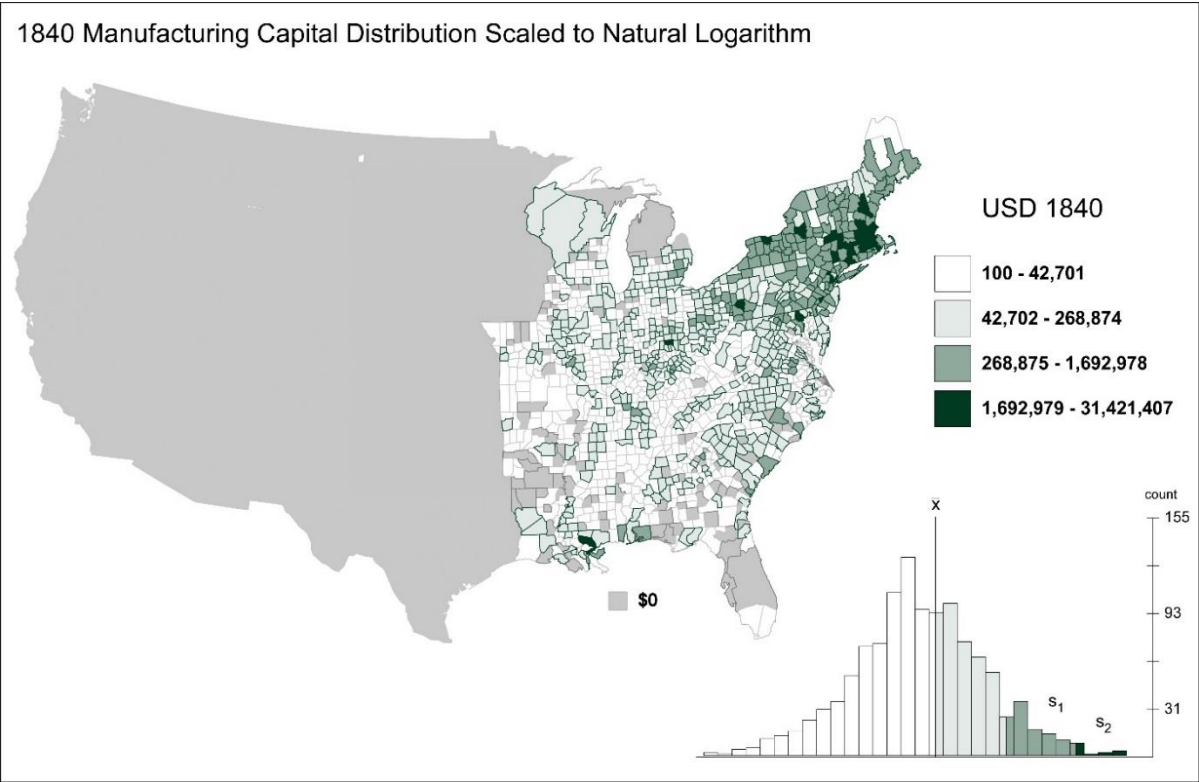


Figure B.1. 1840 Manufacturing Capital.

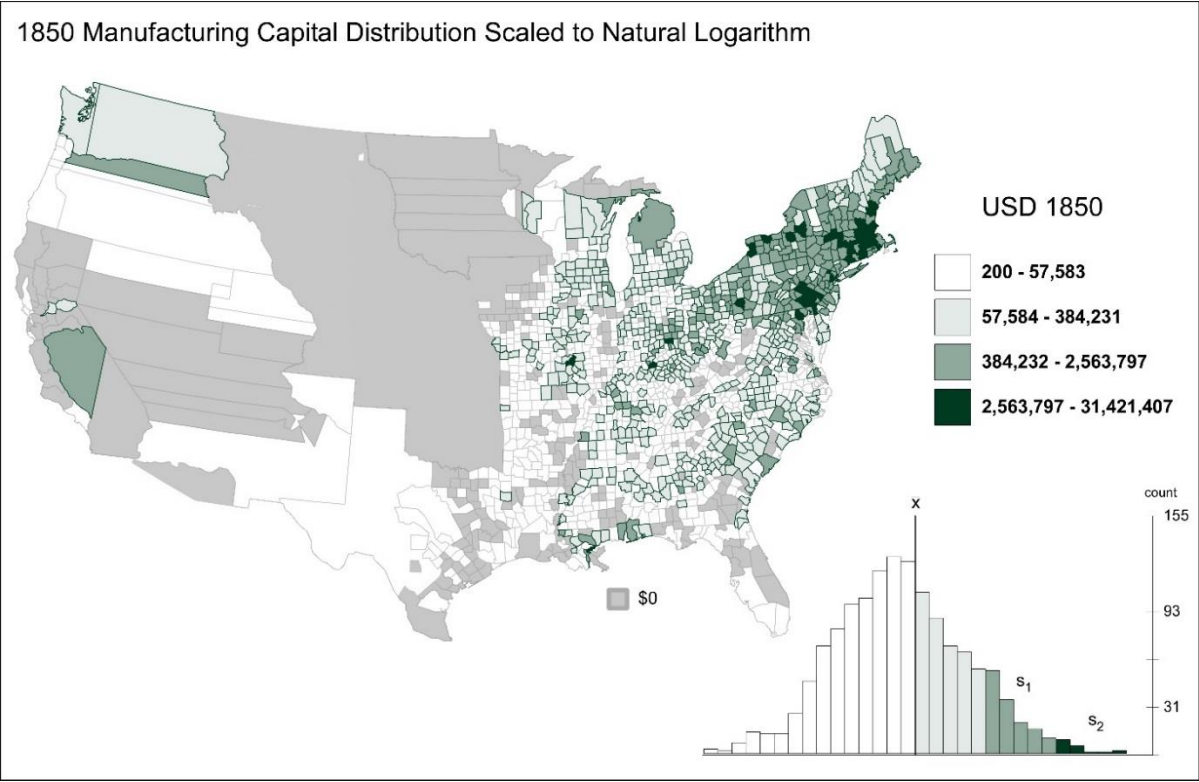


Figure B.2. 1850 Manufacturing Capital.

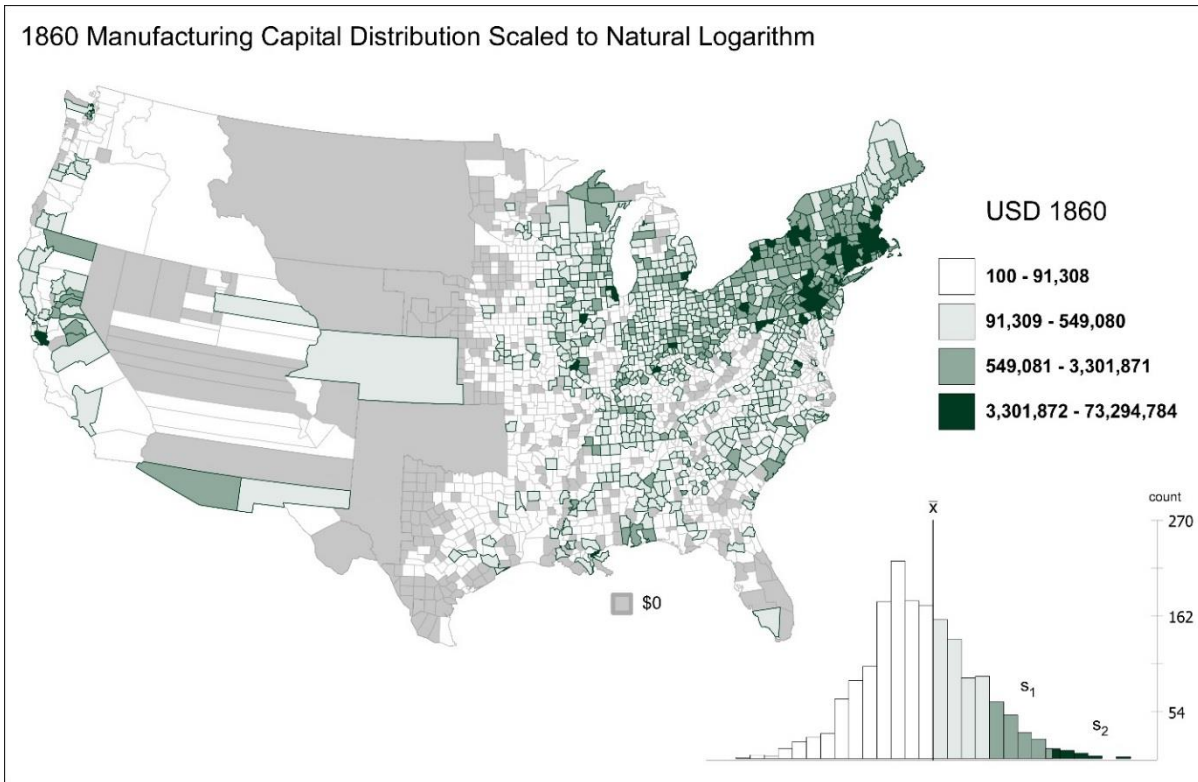


Figure B.3. 1860 Manufacturing Capital

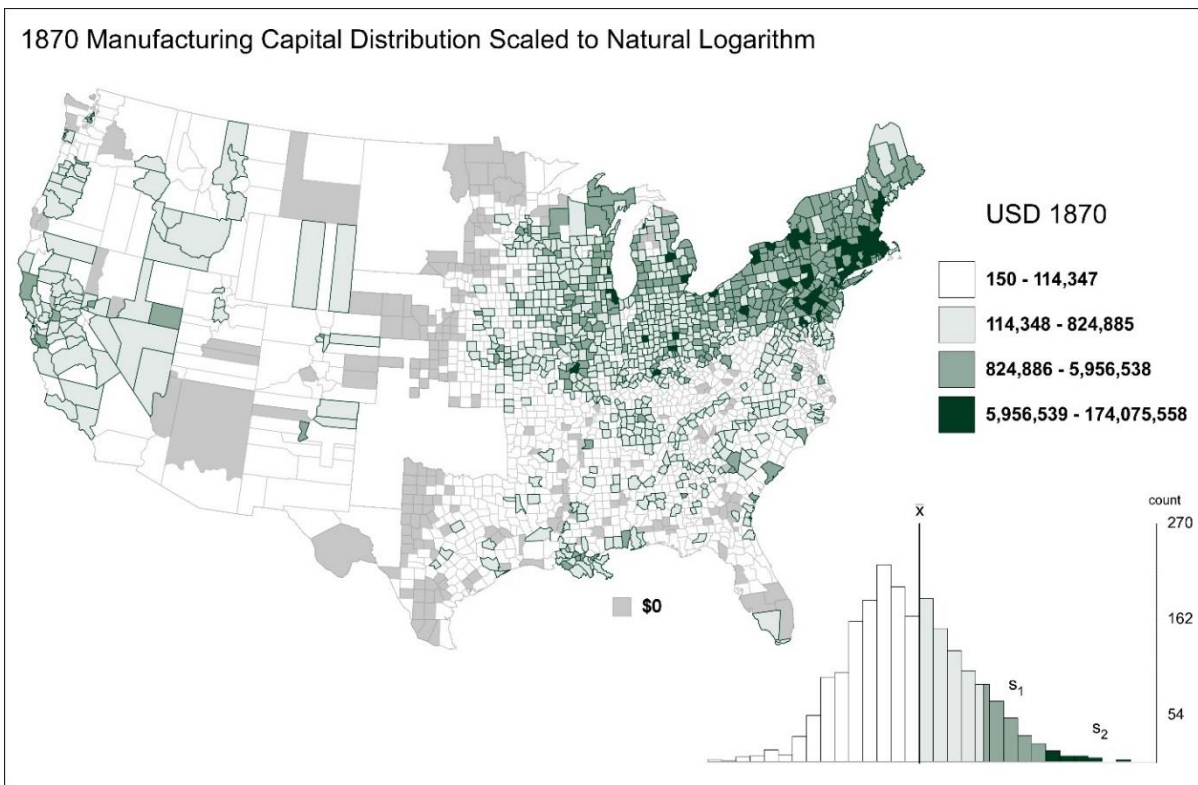


Figure B.4. 1870 Manufacturing Capital.

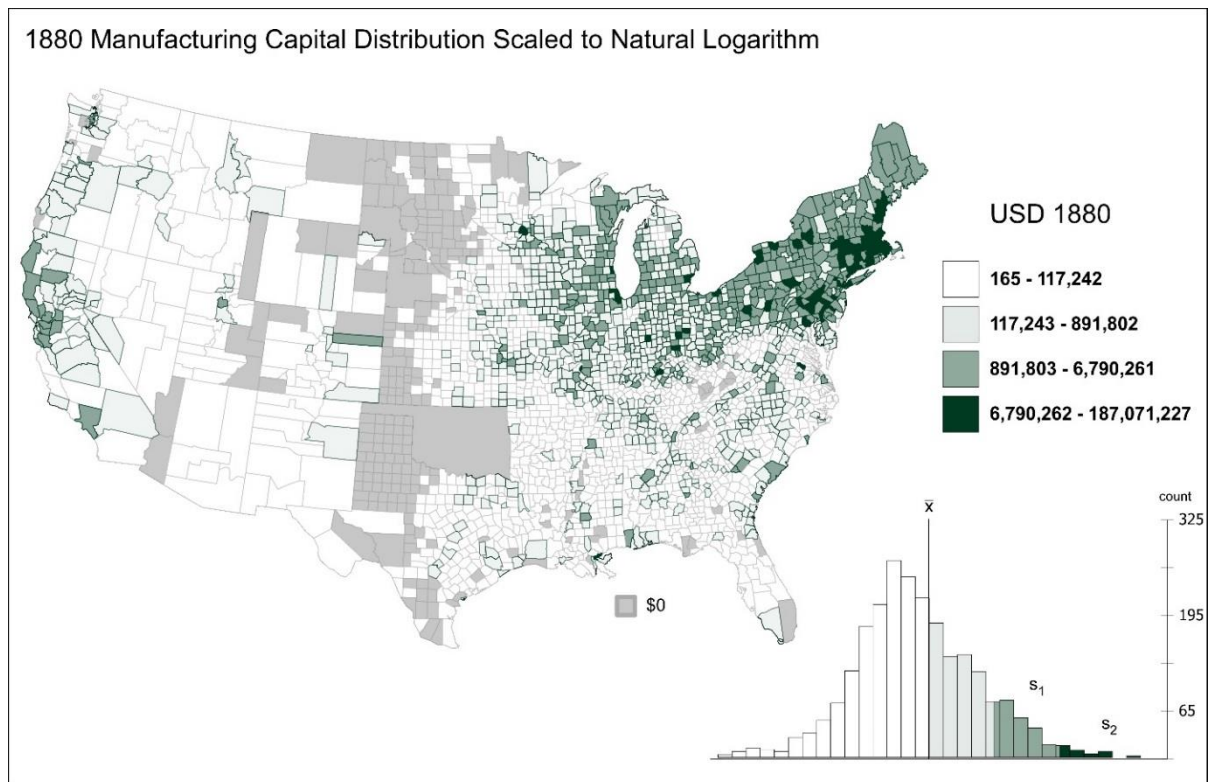


Figure B.5. 1880 Manufacturing Capital.

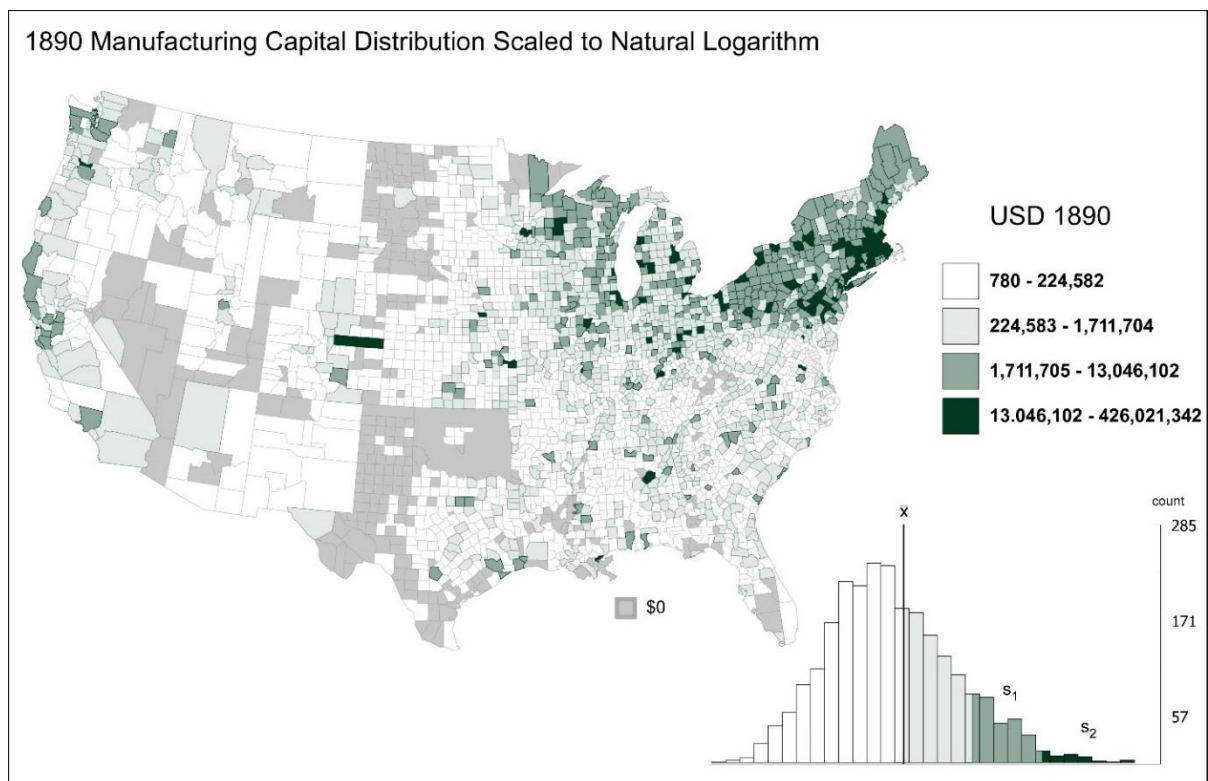
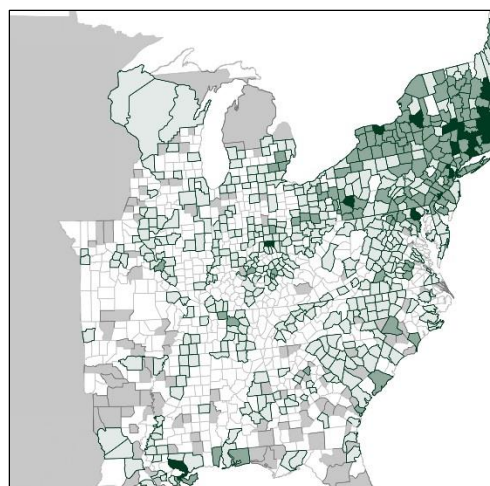
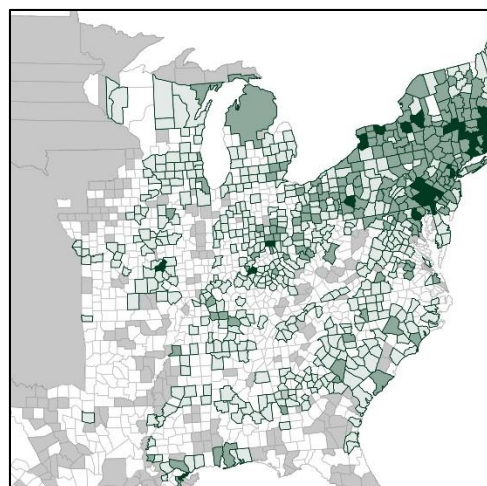


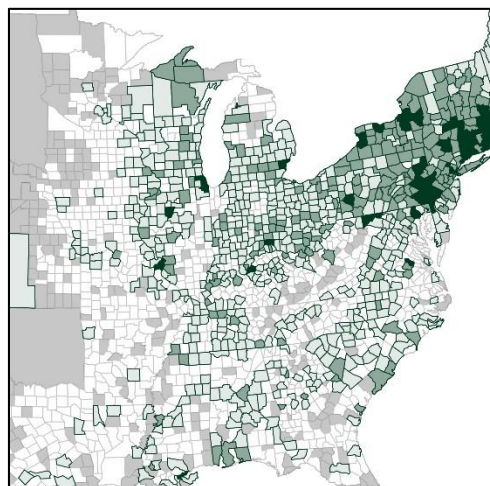
Figure B.6. 1890 Manufacturing Capital.



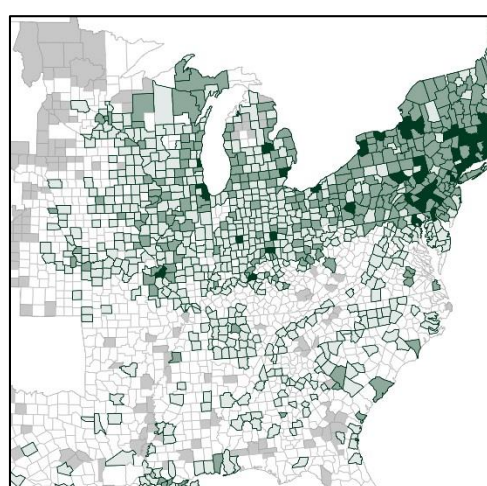
1840



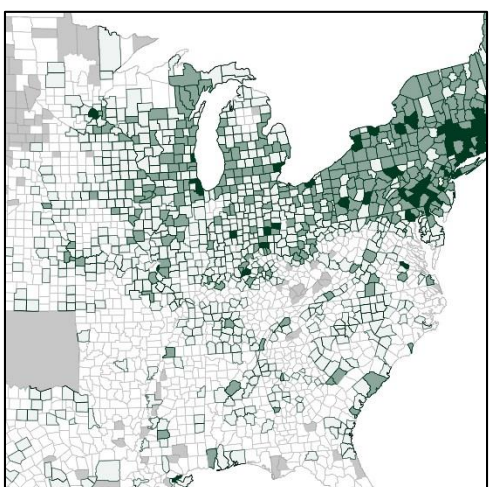
1850



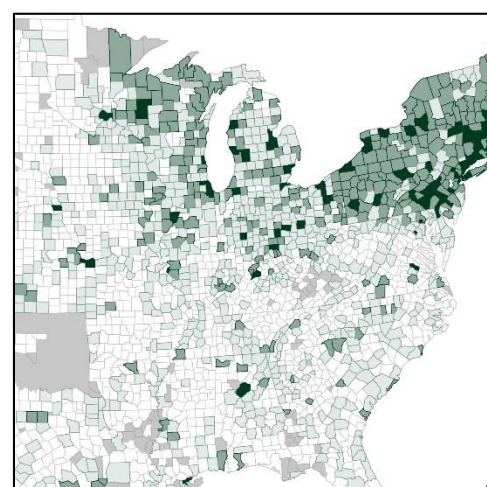
1860



1870



1880



1890

Figure B.7. Detail of Manufacturing Capital 1840–1890.

Appendix C: Congressional Voting District Cohorts 1800–1900.

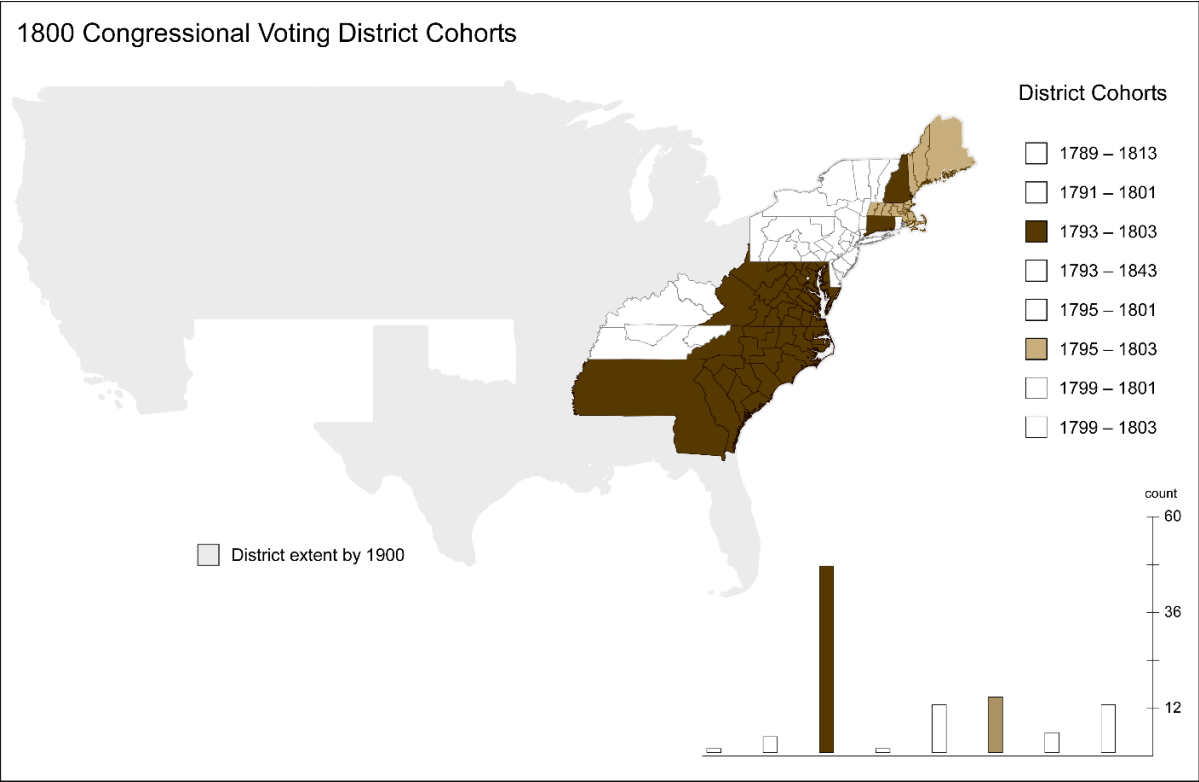


Figure C.1. 1800 Congressional Voting District Cohorts.

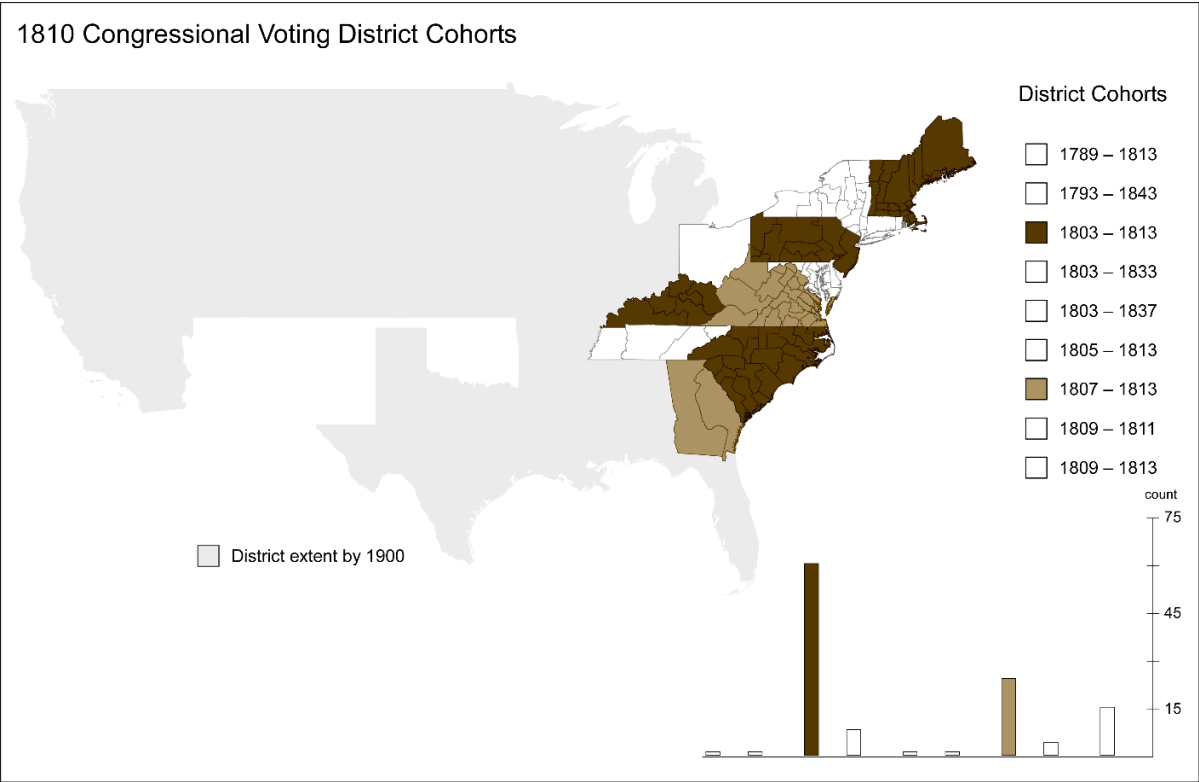


Figure C.2. 1810 Congressional Voting District Cohorts.

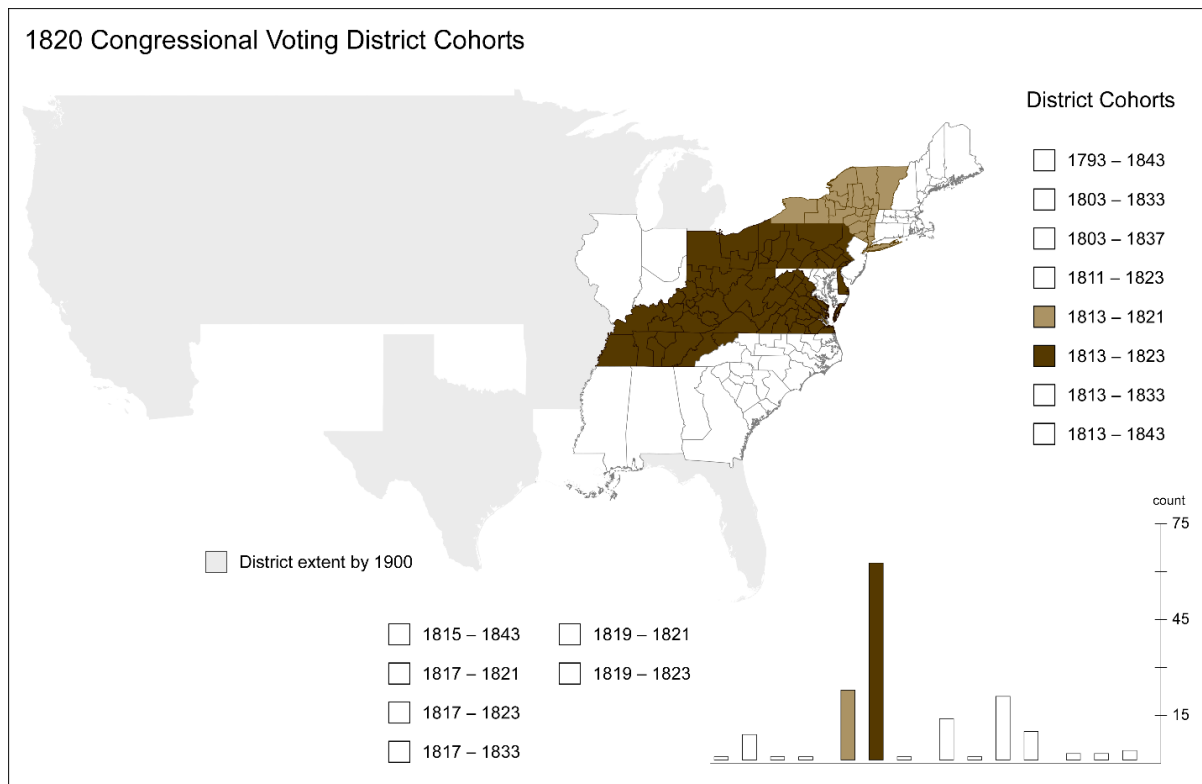


Figure C.3. 1820 Congressional Voting District Cohorts.

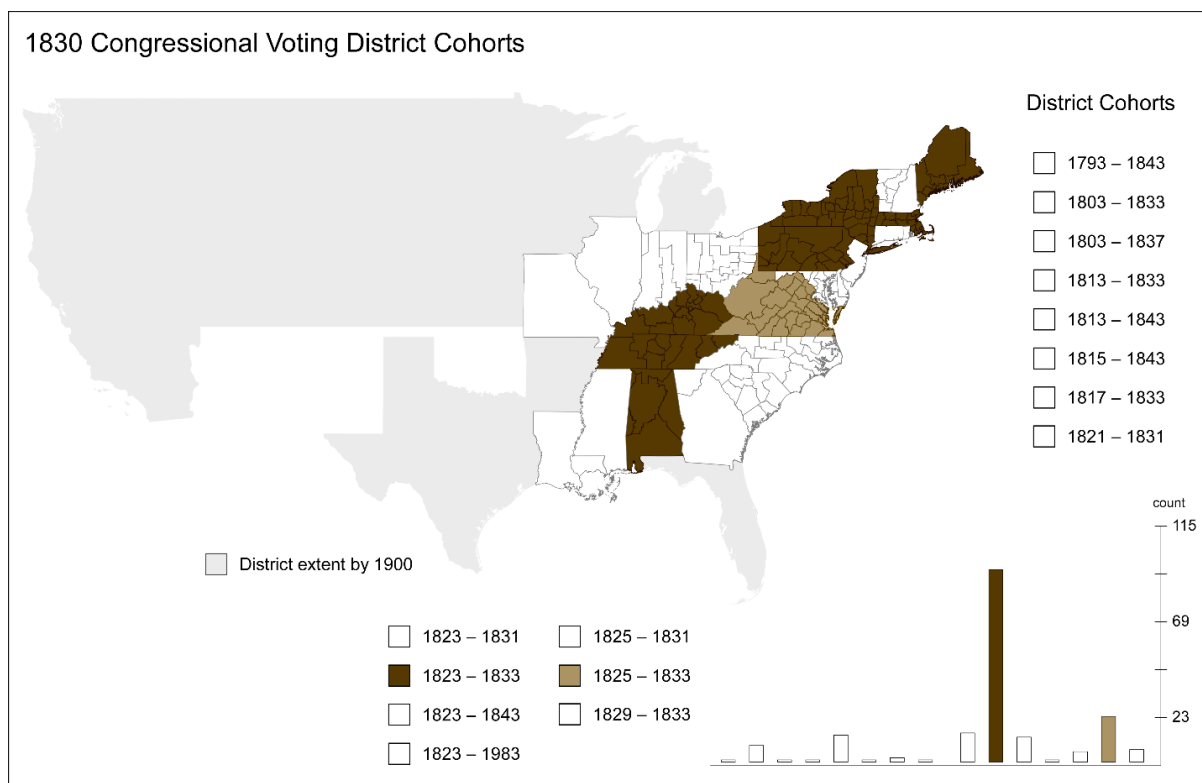


Figure C.4. 1830 Congressional Voting District Cohorts.

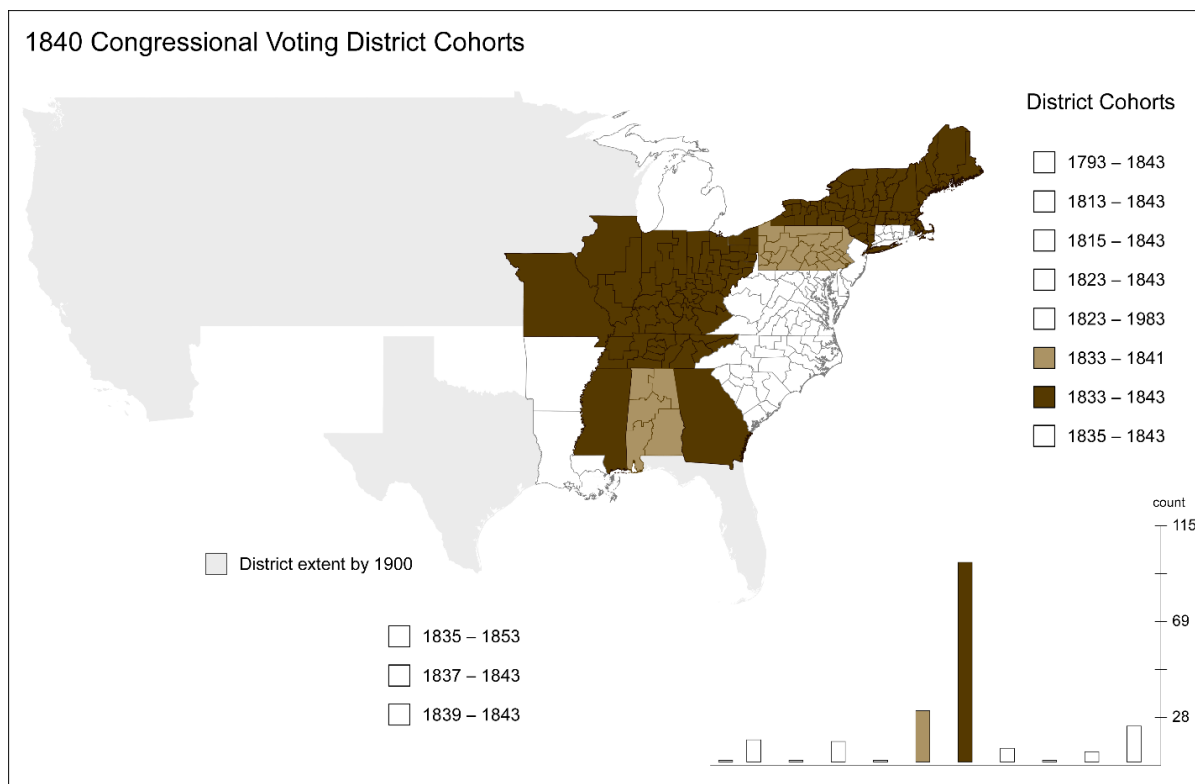


Figure C.5. 1840 Congressional Voting District Cohorts.

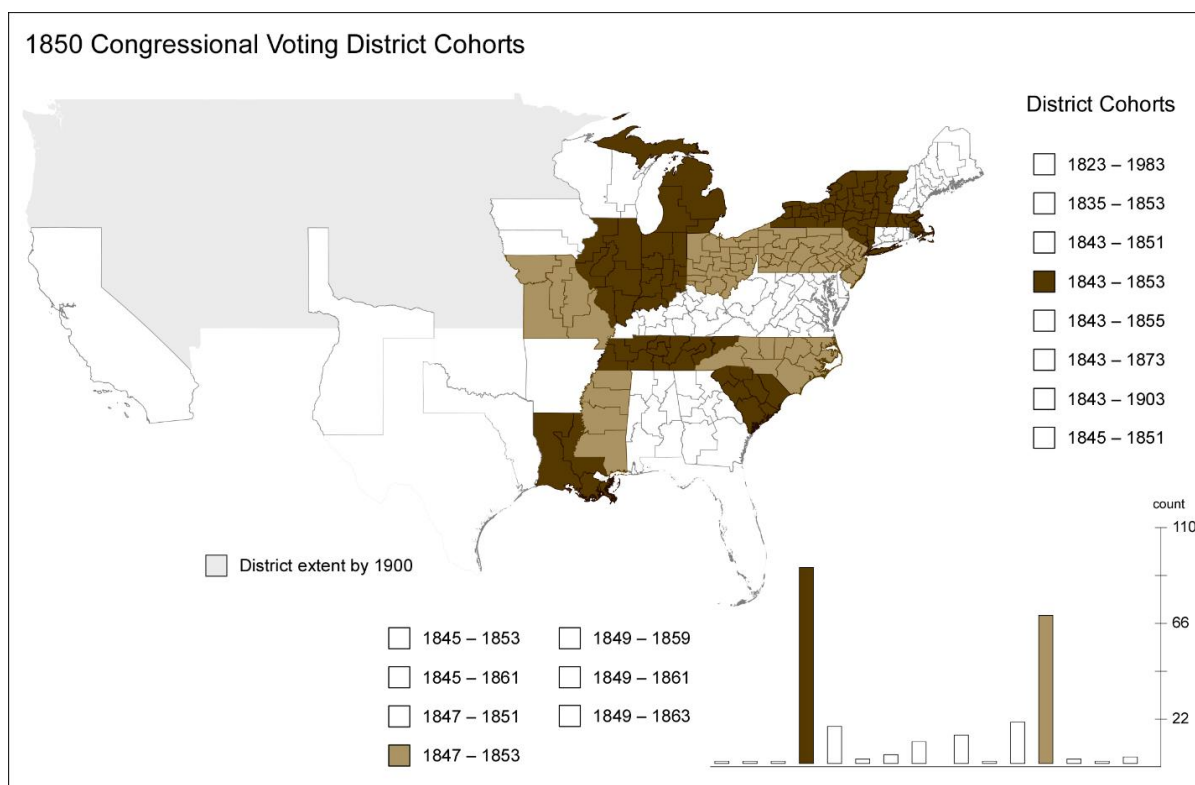


Figure C.6. 1850 Congressional Voting District Cohorts.

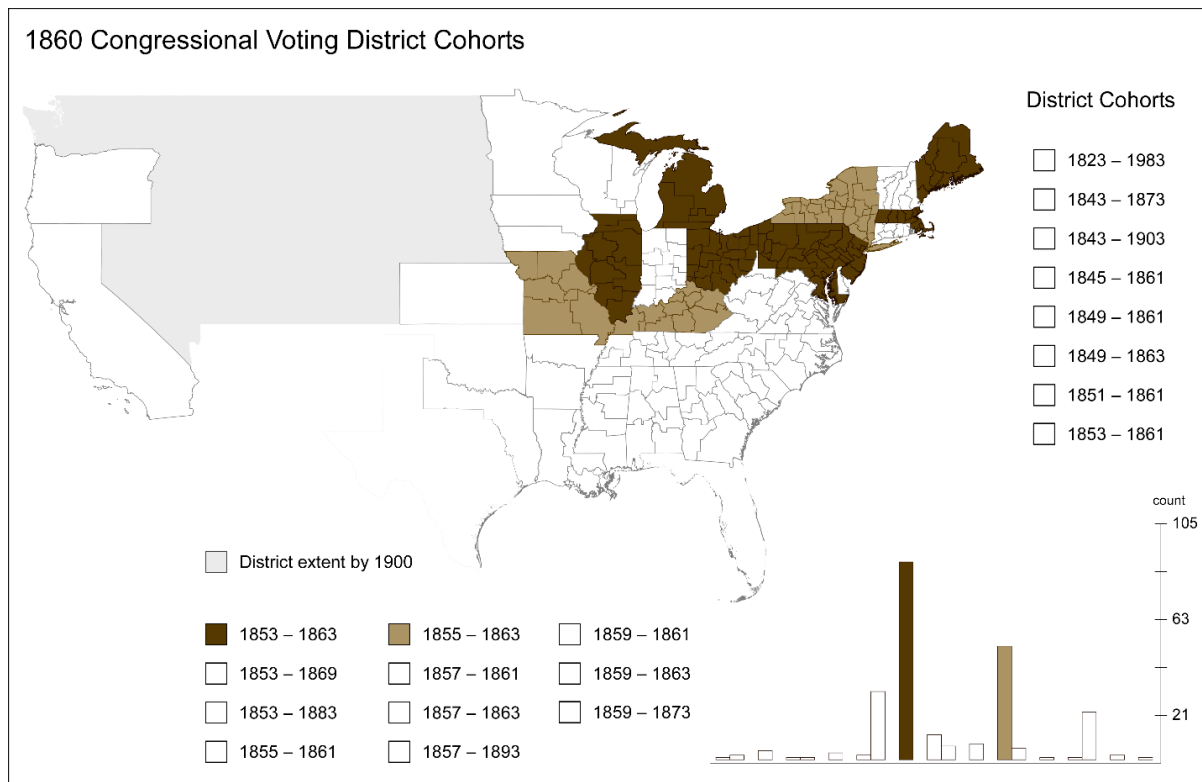


Figure C.7. 1860 Congressional Voting District Cohorts.

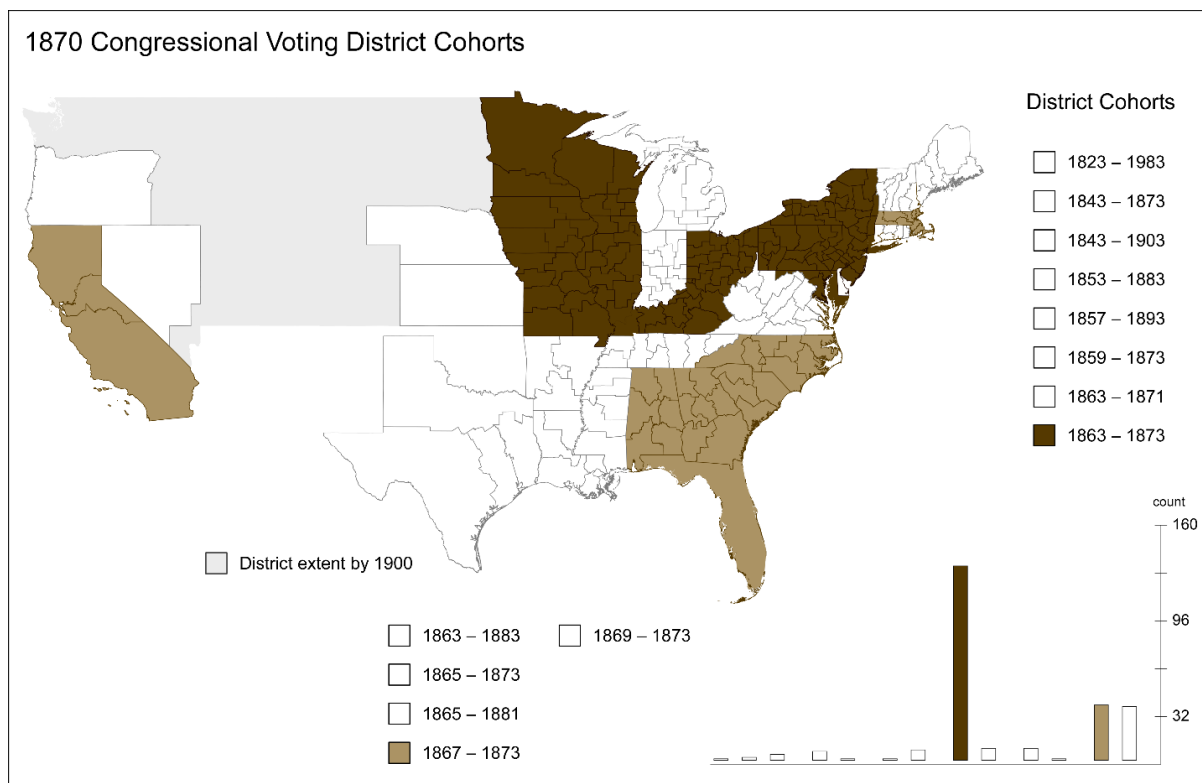


Figure C.8. 1870 Congressional Voting District Cohorts.

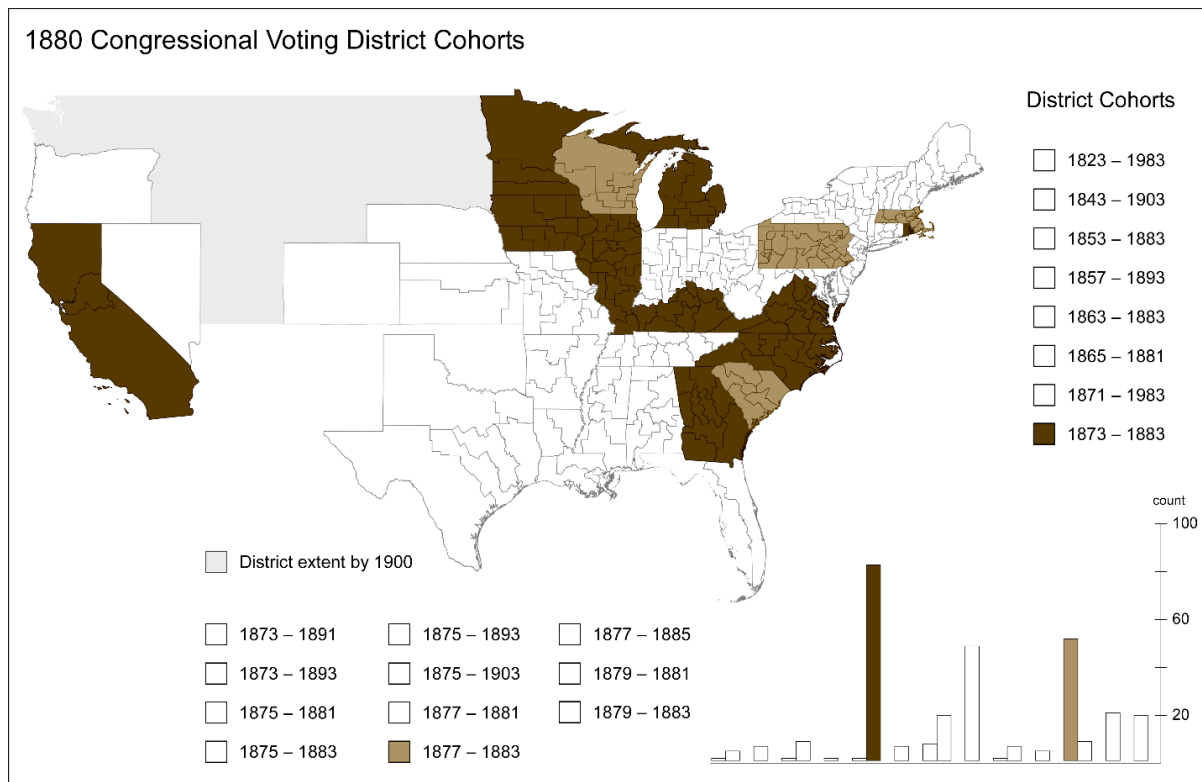


Figure C.9. 1880 Congressional Voting District Cohorts.

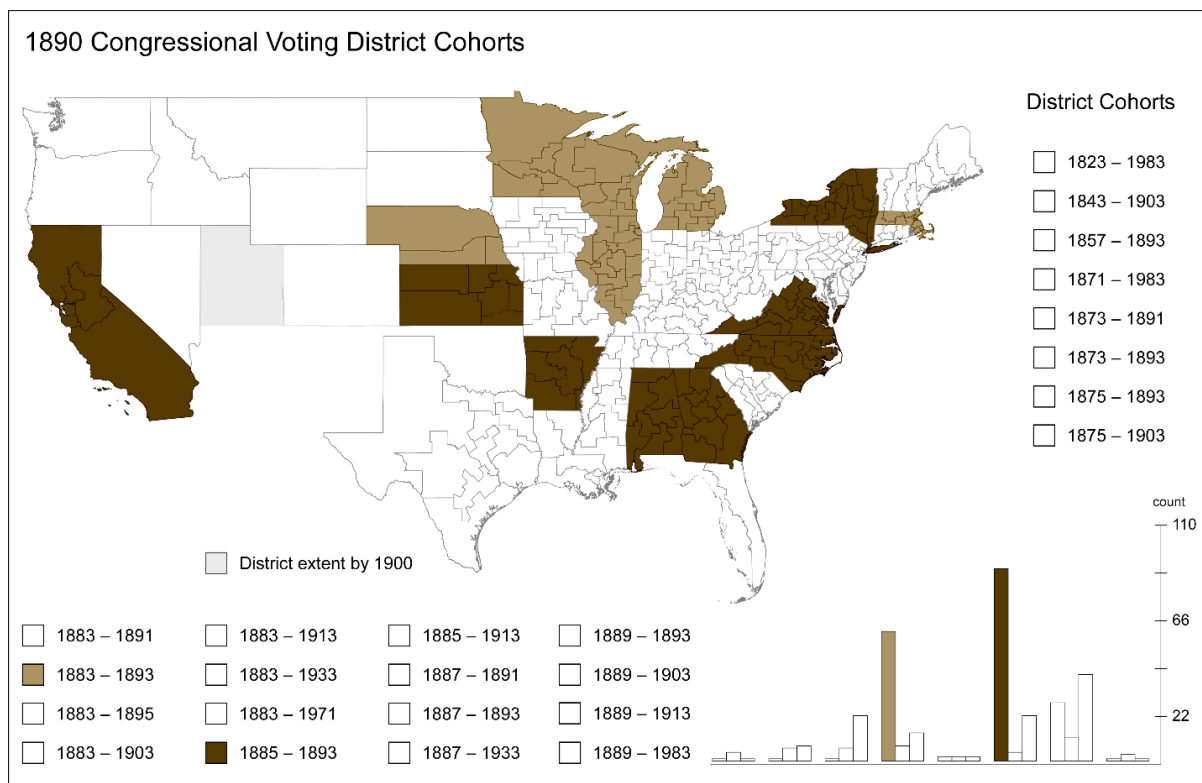


Figure C.10. 1890 Congressional Voting District Cohorts.

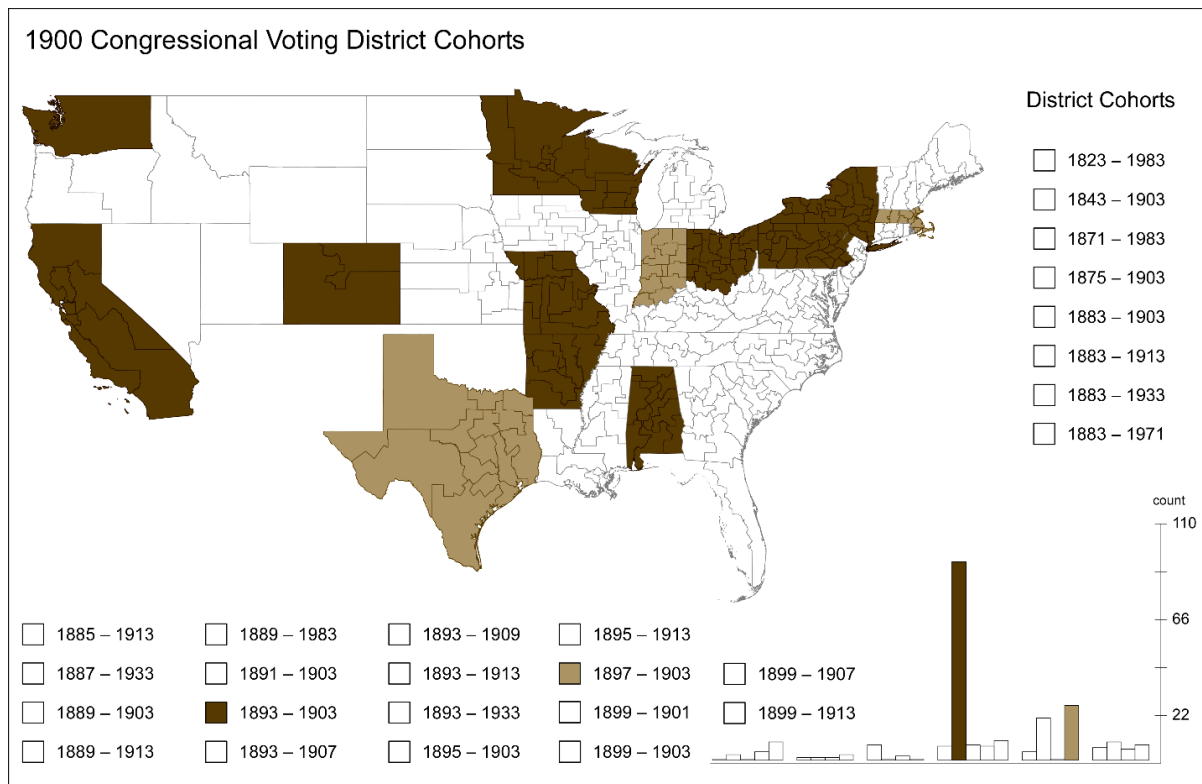


Figure C.11. 1900 Congressional Voting District Cohorts.

Appendix D: Dependency Ratio based on European Marriage Pattern 1830–1860

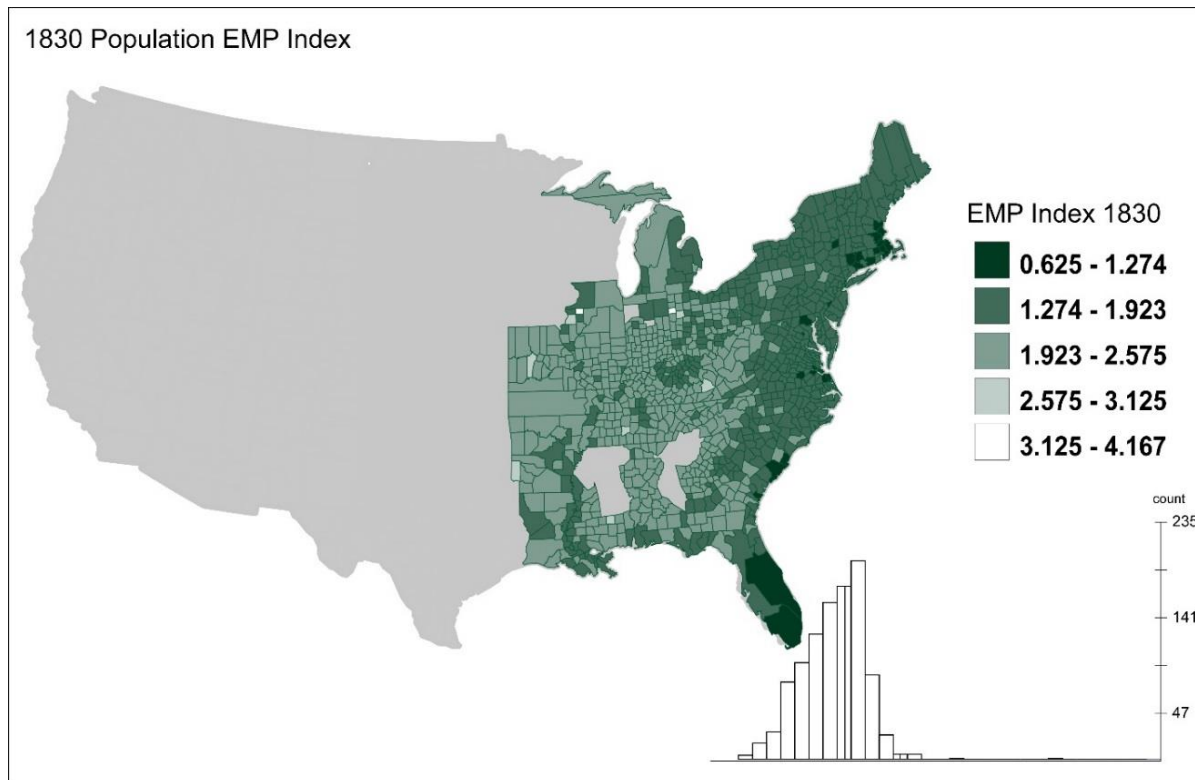


Figure D.1. 1830 Population EMP Index.

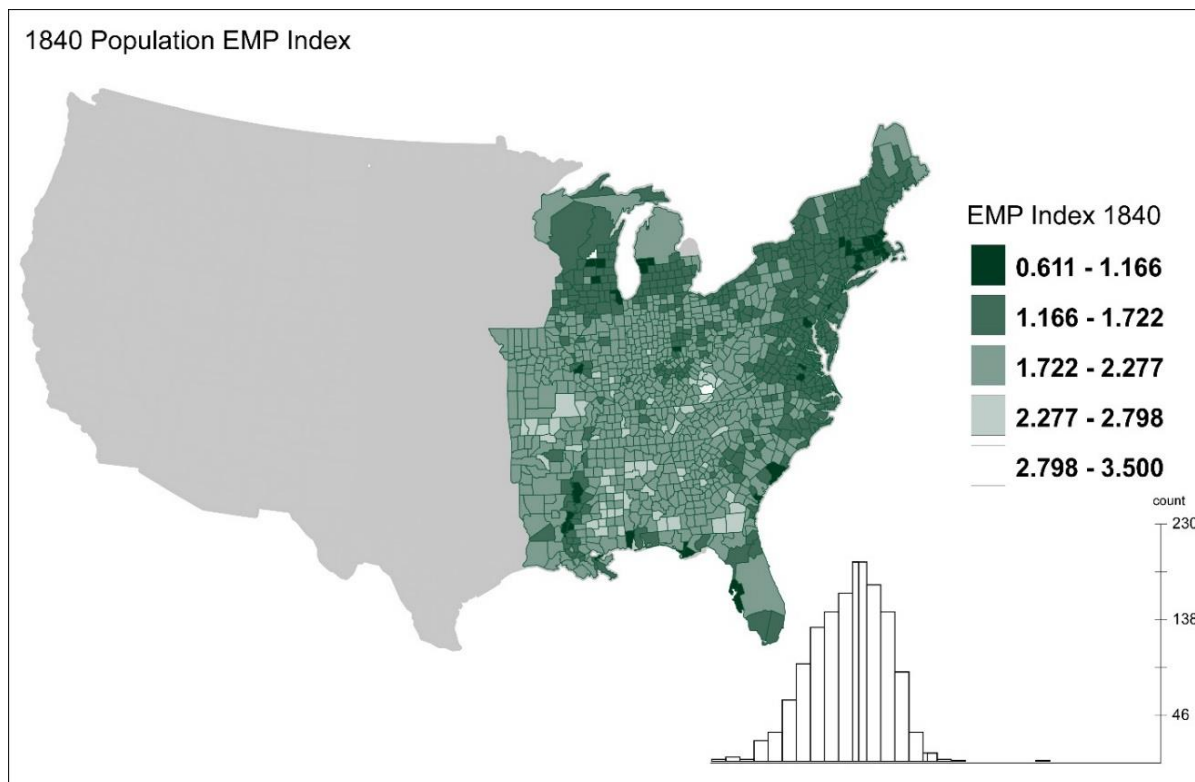


Figure D.2. 1840 Population EMP Index.

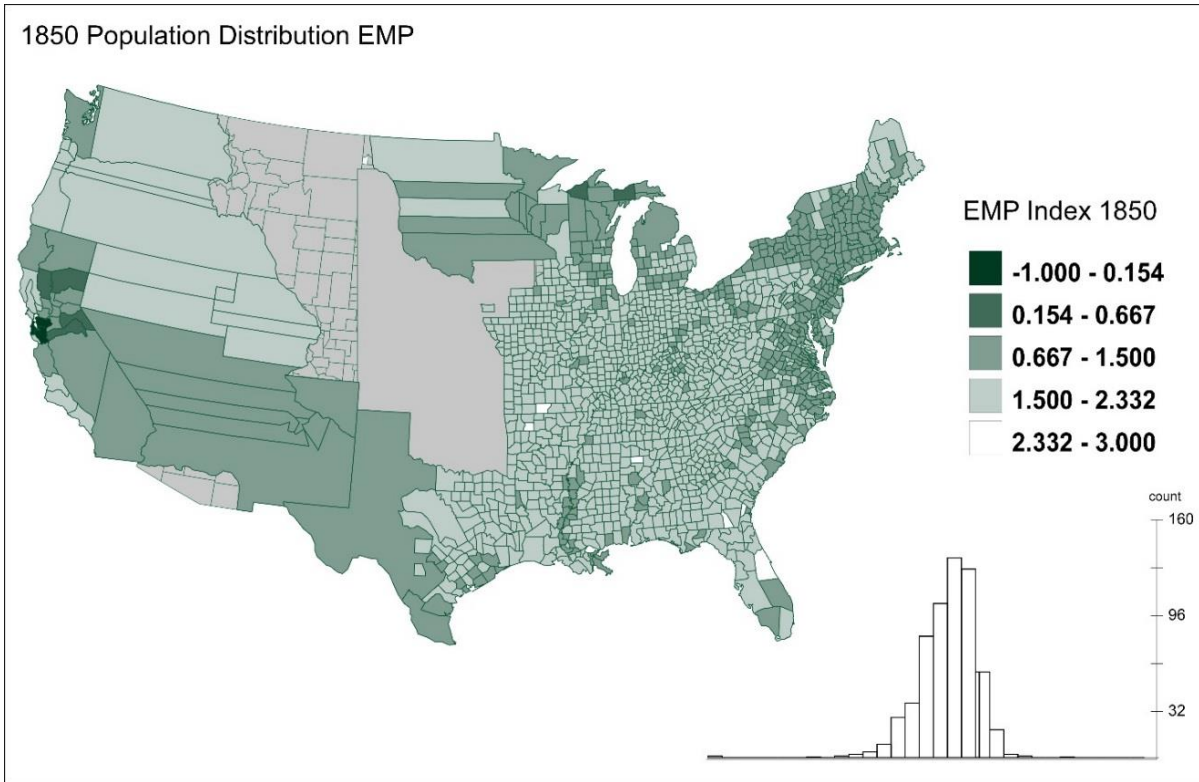


Figure D.3. 1850 Population EMP Index.

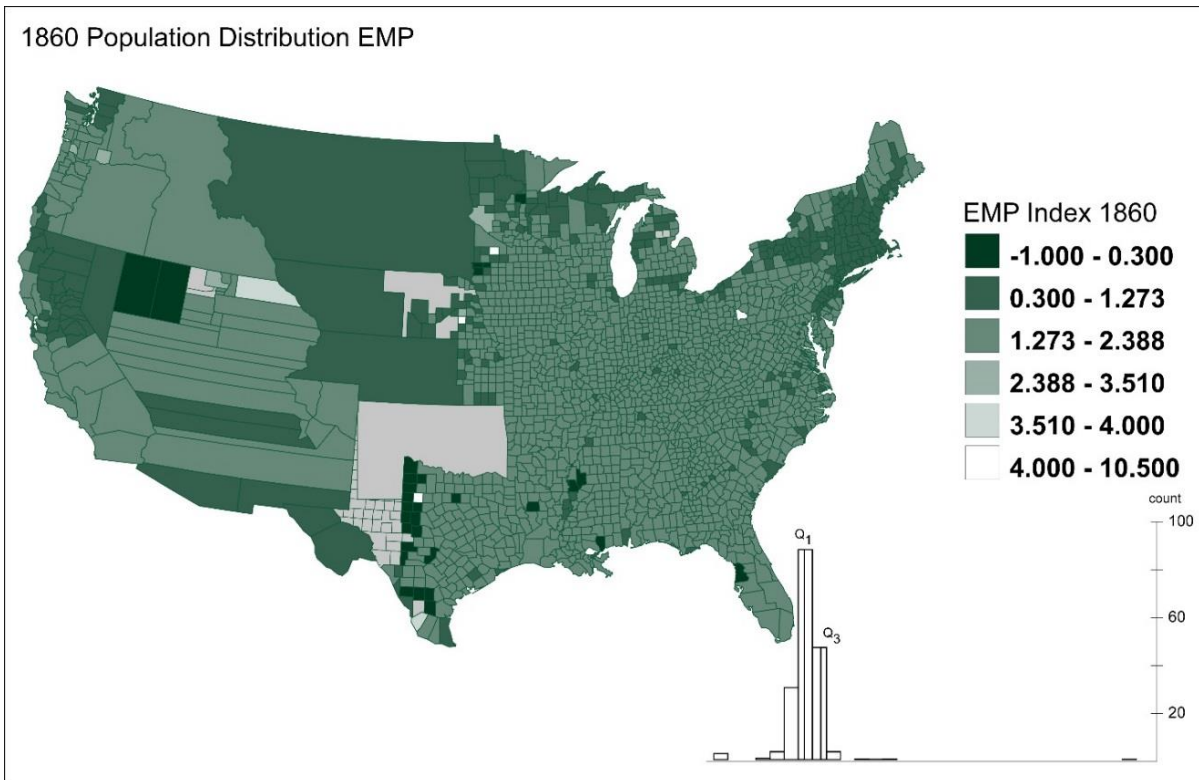
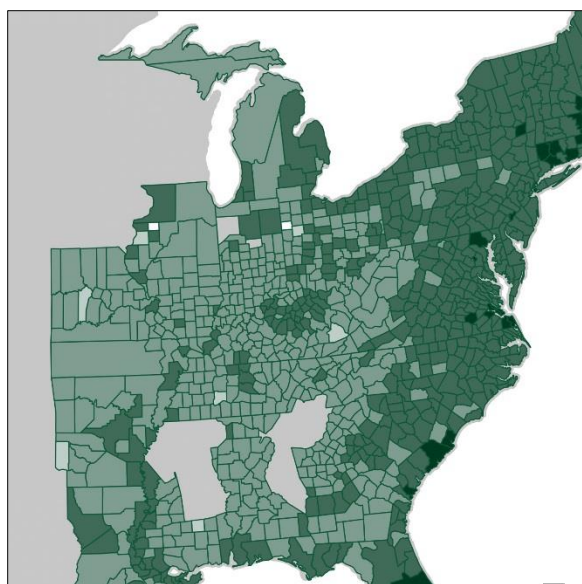
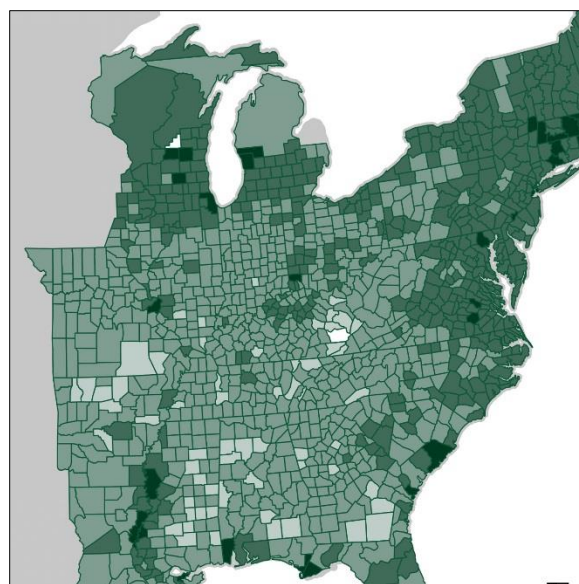


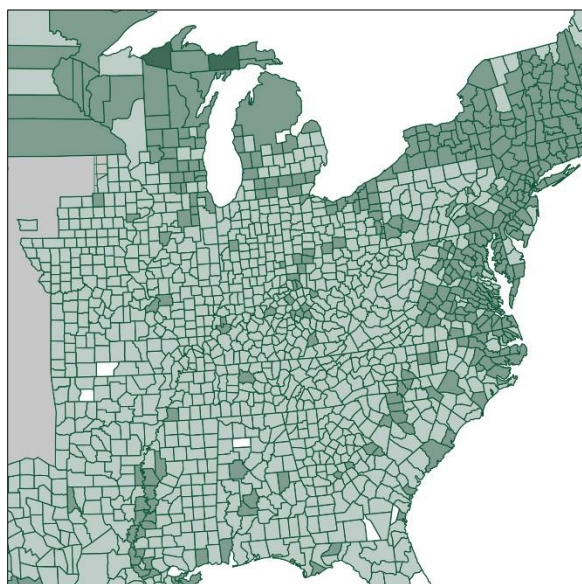
Figure D.4. 1860 Population EMP Index.



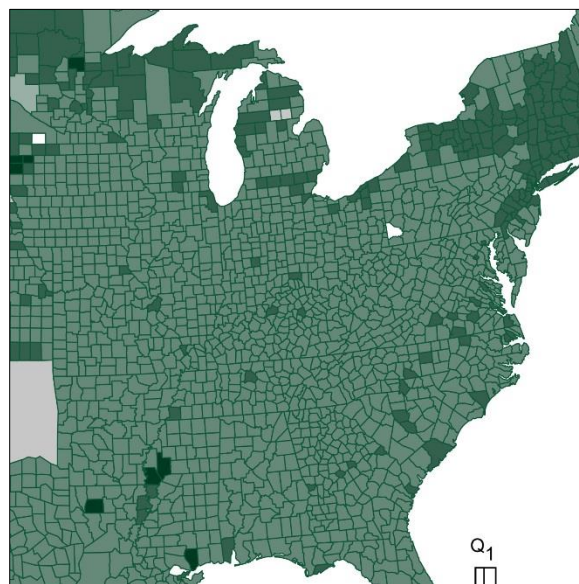
1830



1840



1850



1860

Figure D.5. Detail of Population EMP Index 1830–1860.

Appendix E: Composition of Artifact Collection from Pedestrian Survey 11PK455

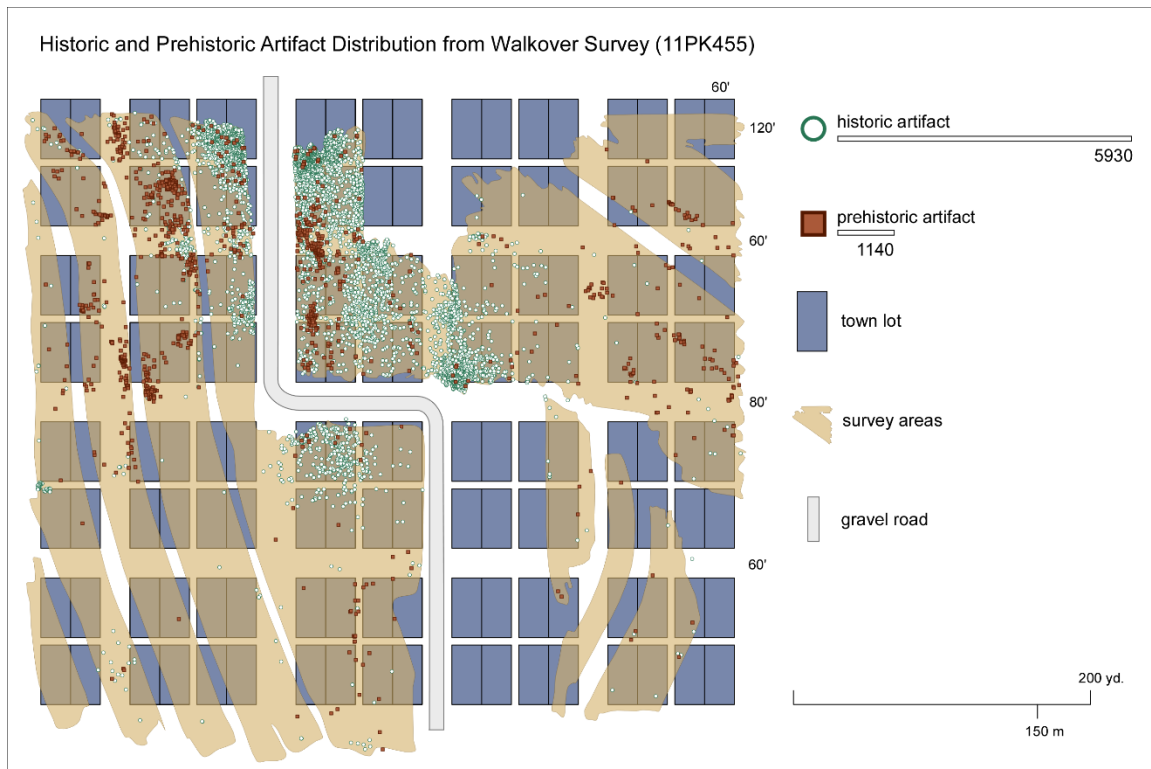


Figure E.1. Historic and Prehistoric Artifact Distribution from Walkover Survey (11PK455).

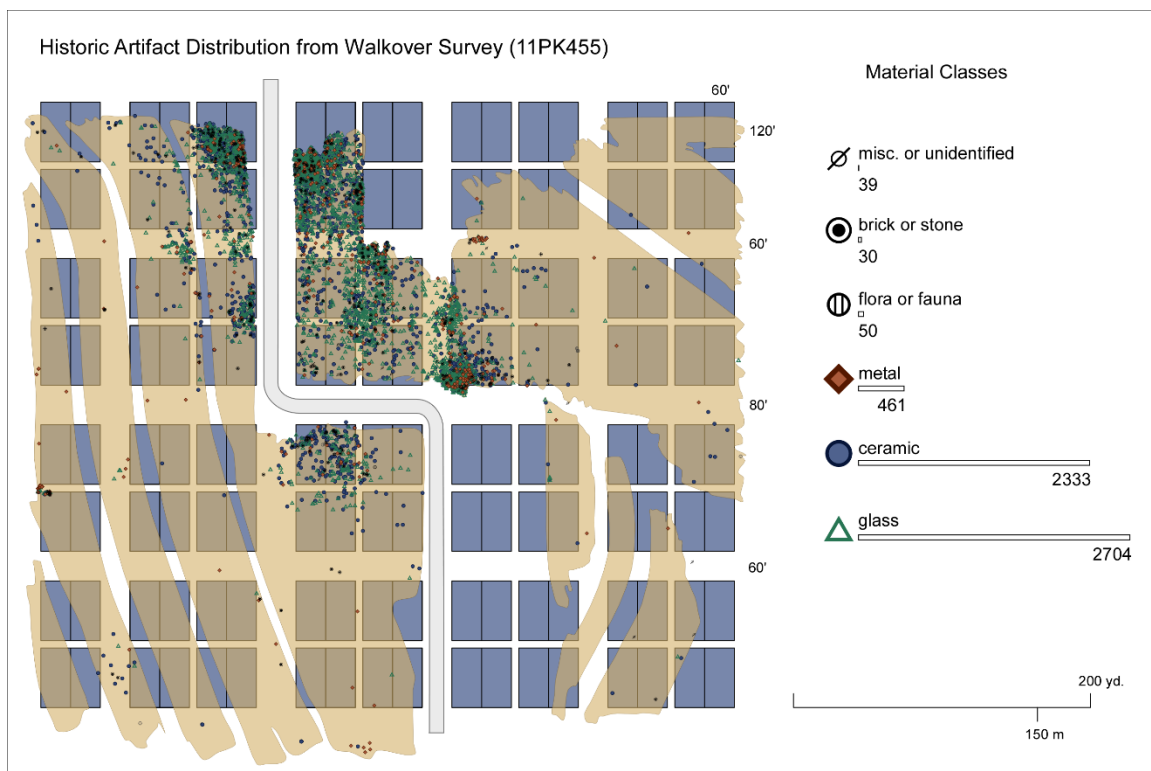


Figure E.2. Historic Artifact Distribution from Walkover Survey (11PK455).

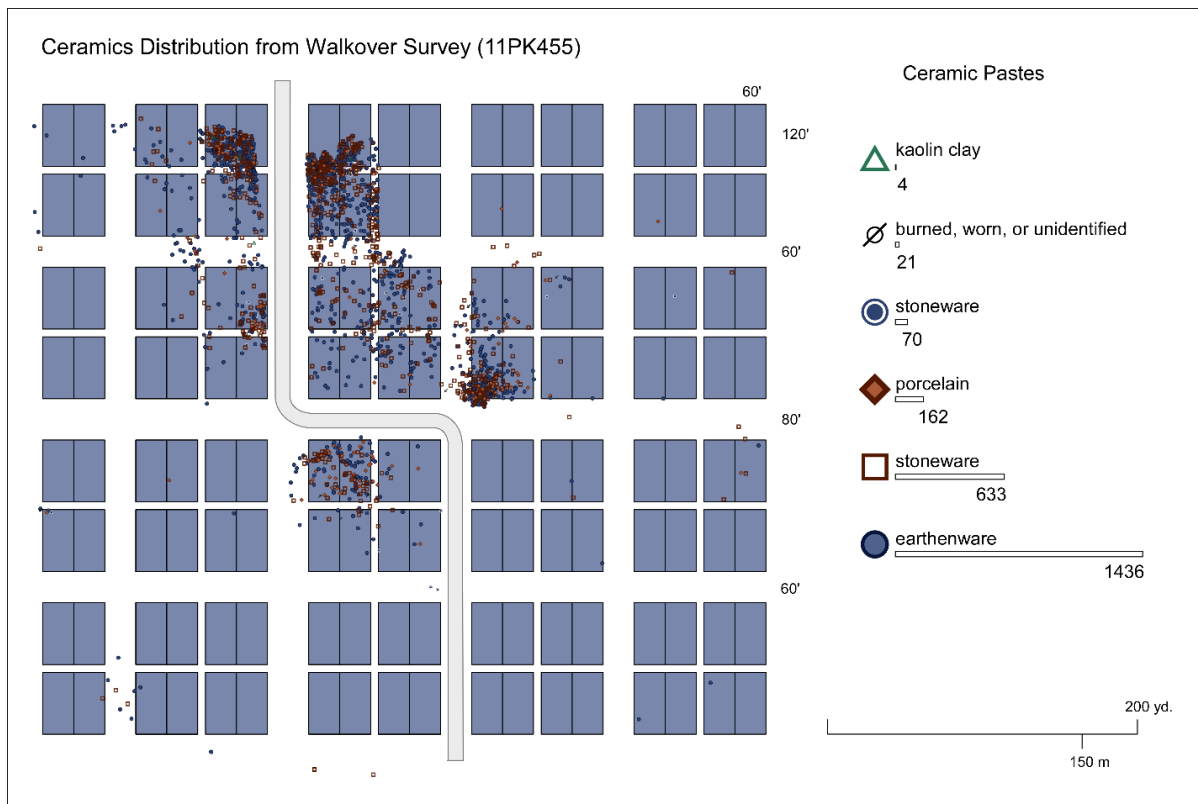


Figure E.3. Ceramics Distribution from Walkover Survey (11PK455)

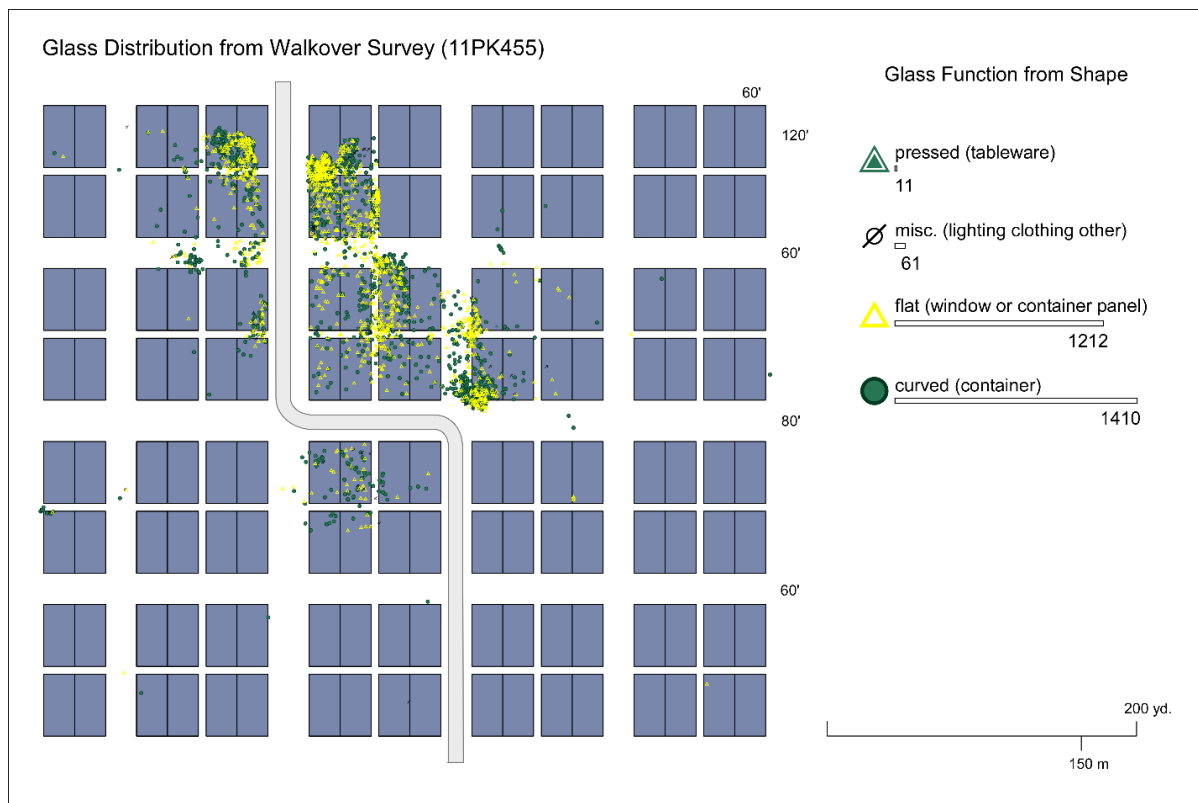


Figure E.4. Glass Distribution from Walkover Survey (11PK455).

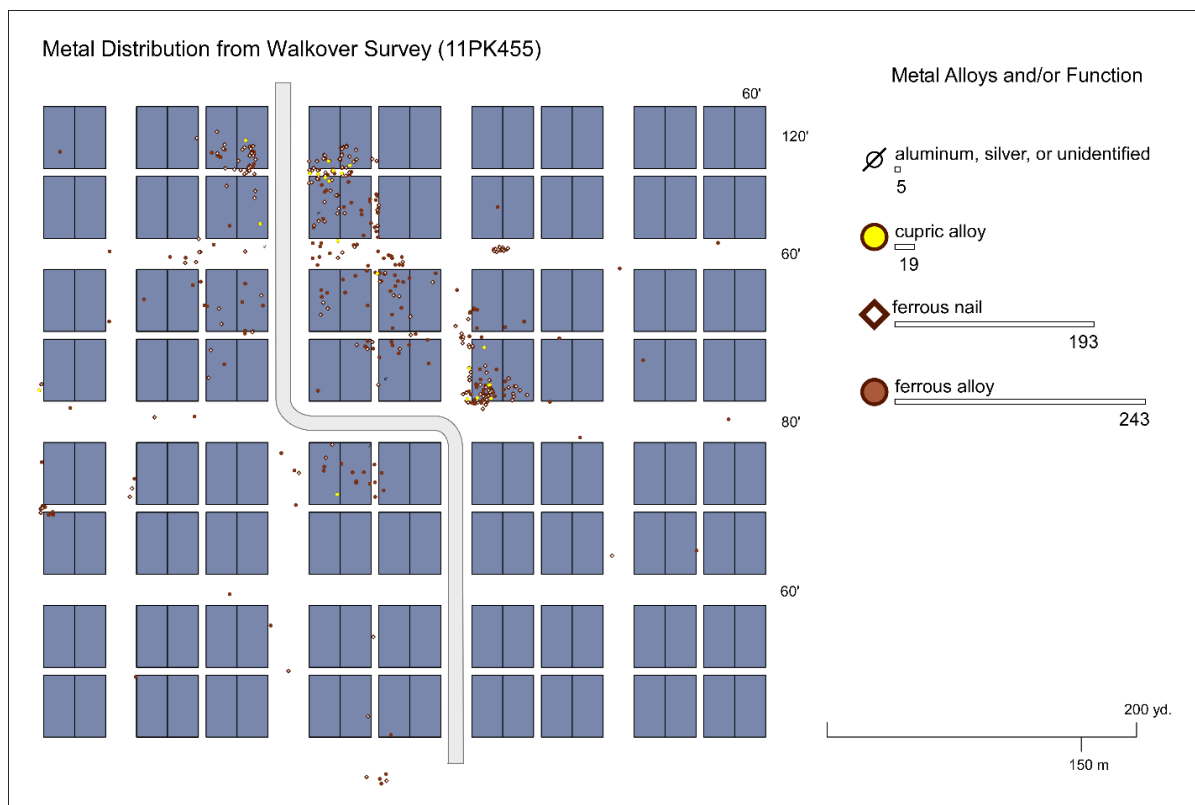


Figure E.5. Metal Distribution from Walkover Survey (11PK455).

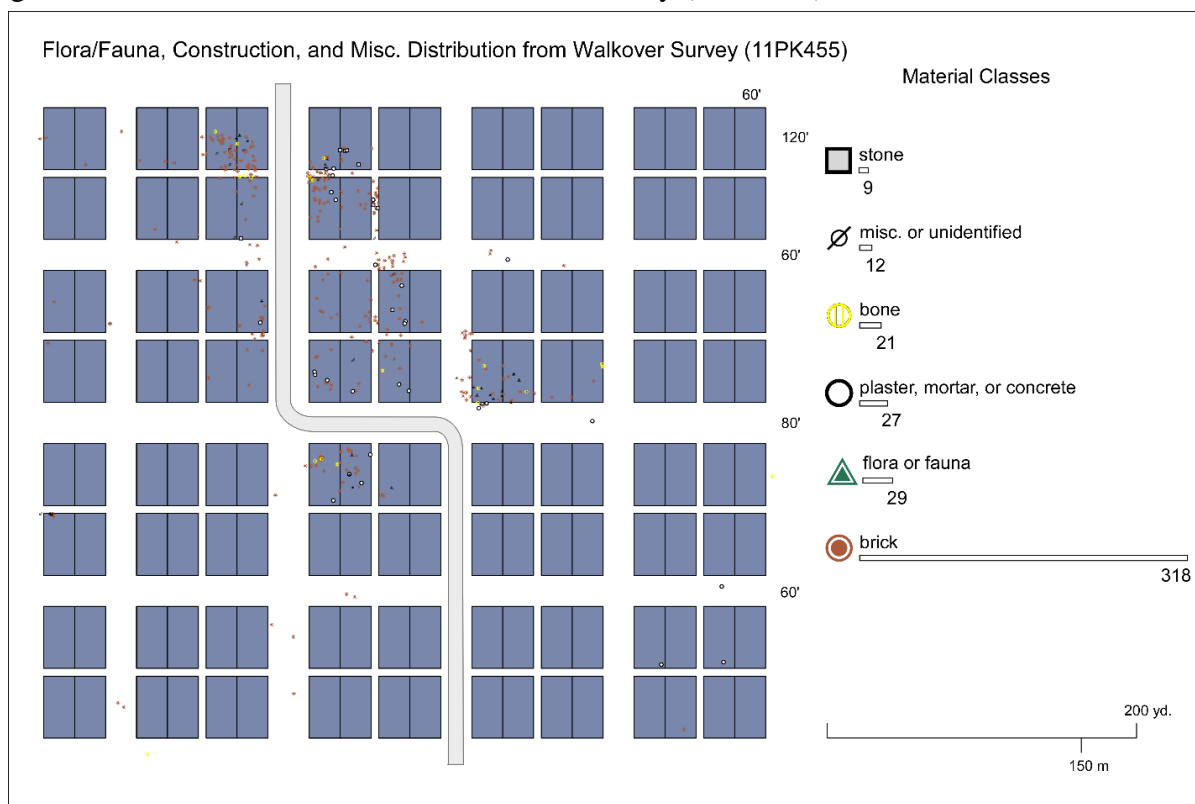


Figure E.6. Flora/Fauna, Construction, and Misc. Distribution from Walkover Survey.

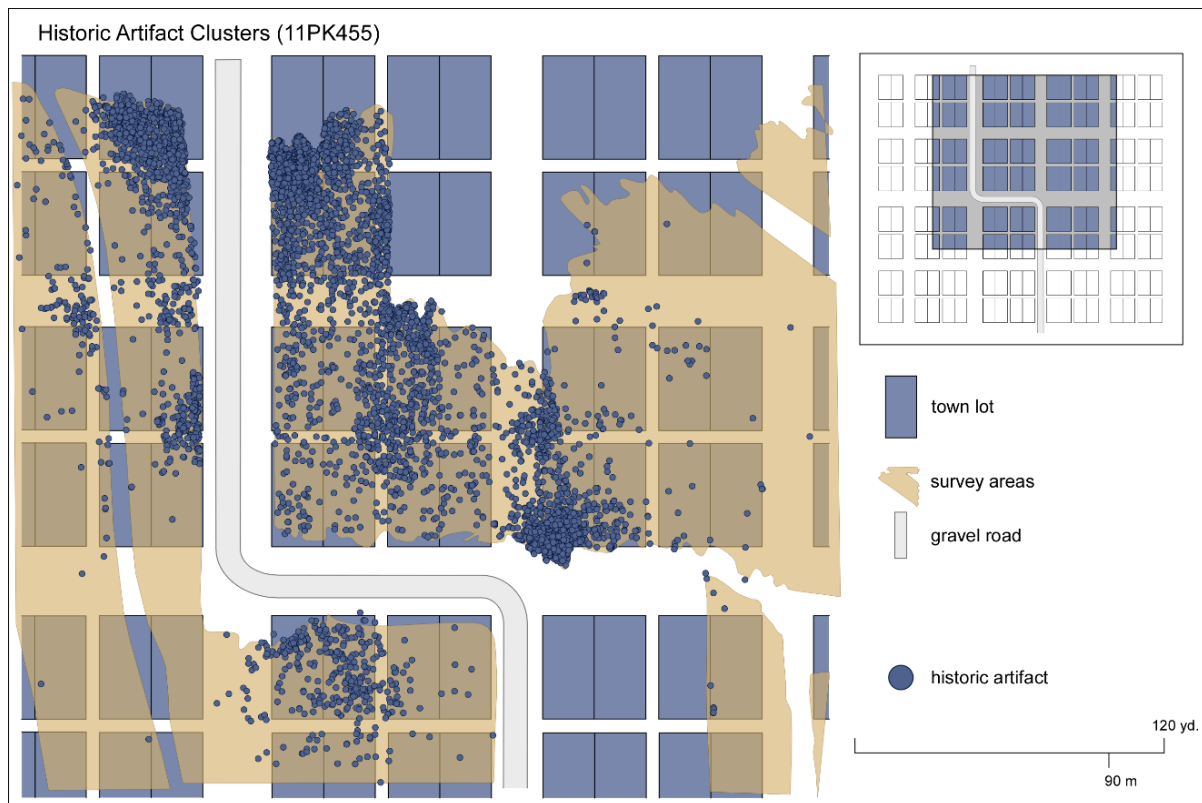


Figure E.7. Historic Artifact Clusters Over Survey Area (11PK455).

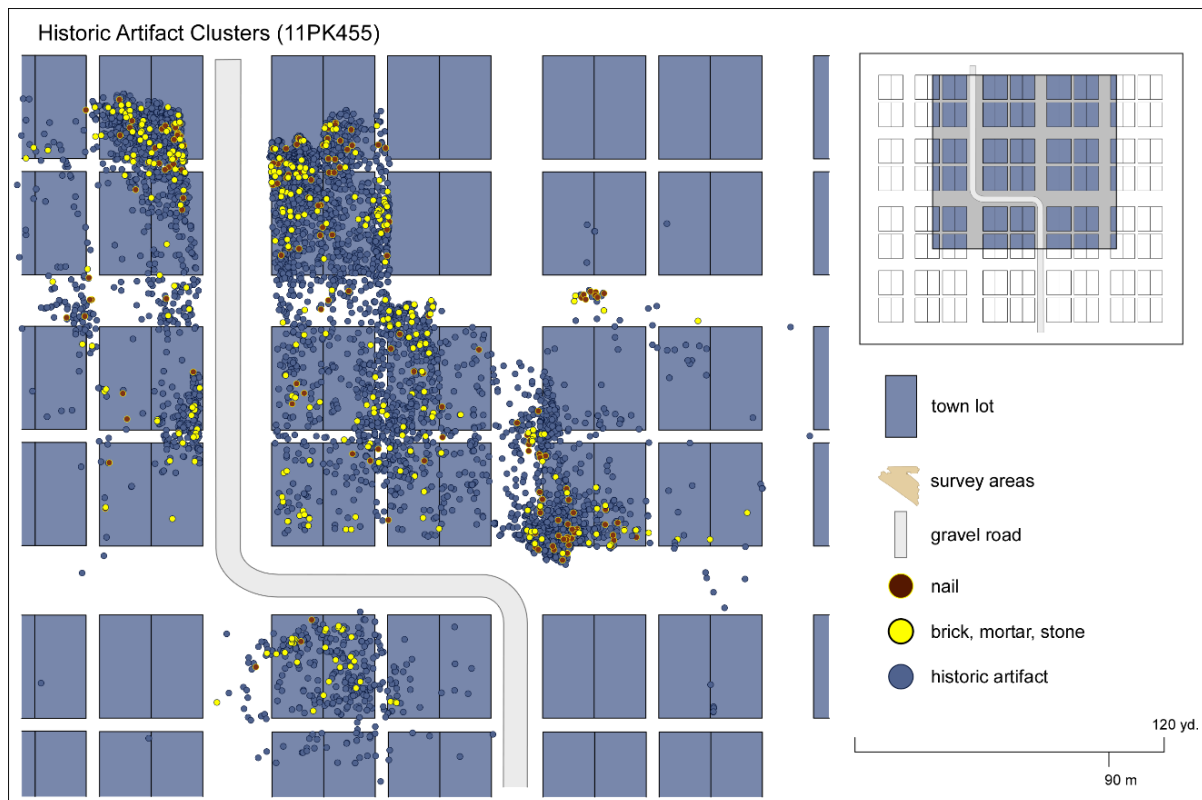


Figure E.8. Historic Artifact Clusters with Architectural Artifact Distribution (11PK455).

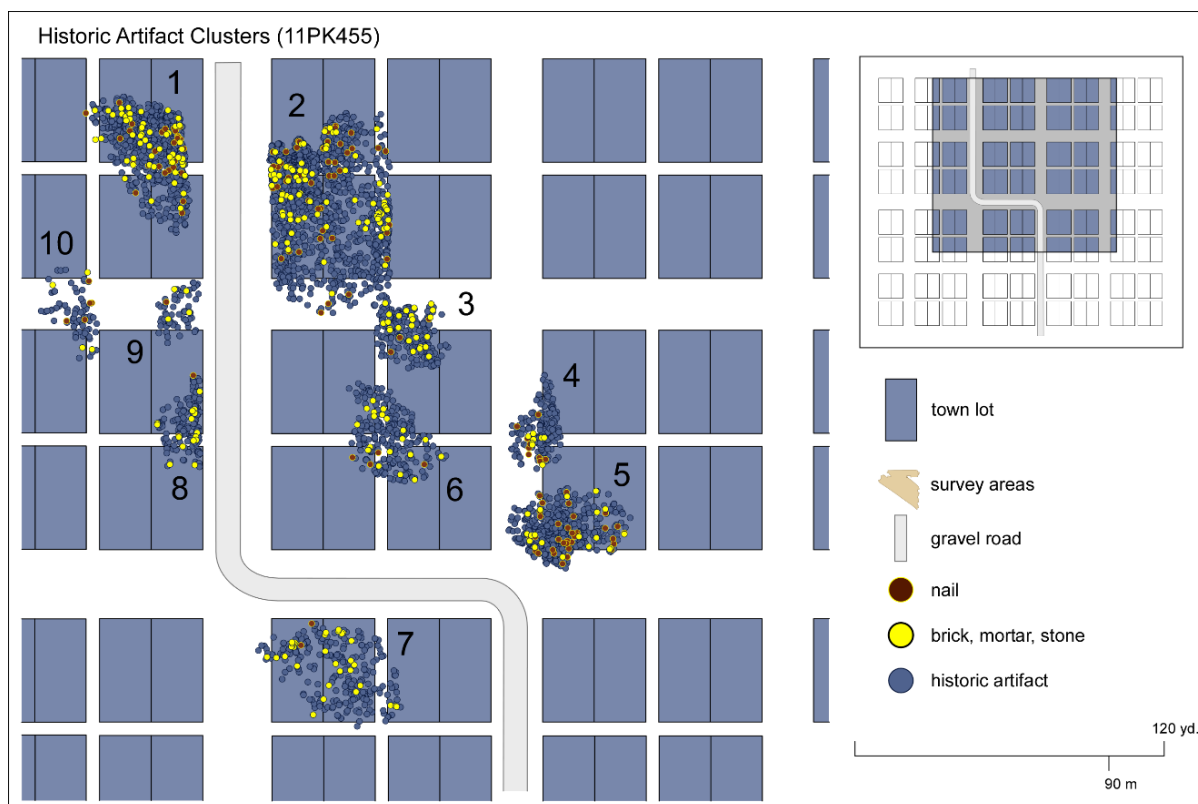


Figure E.9. Historic Artifact Clusters with Artifact Groups and Numbered (11PK455).

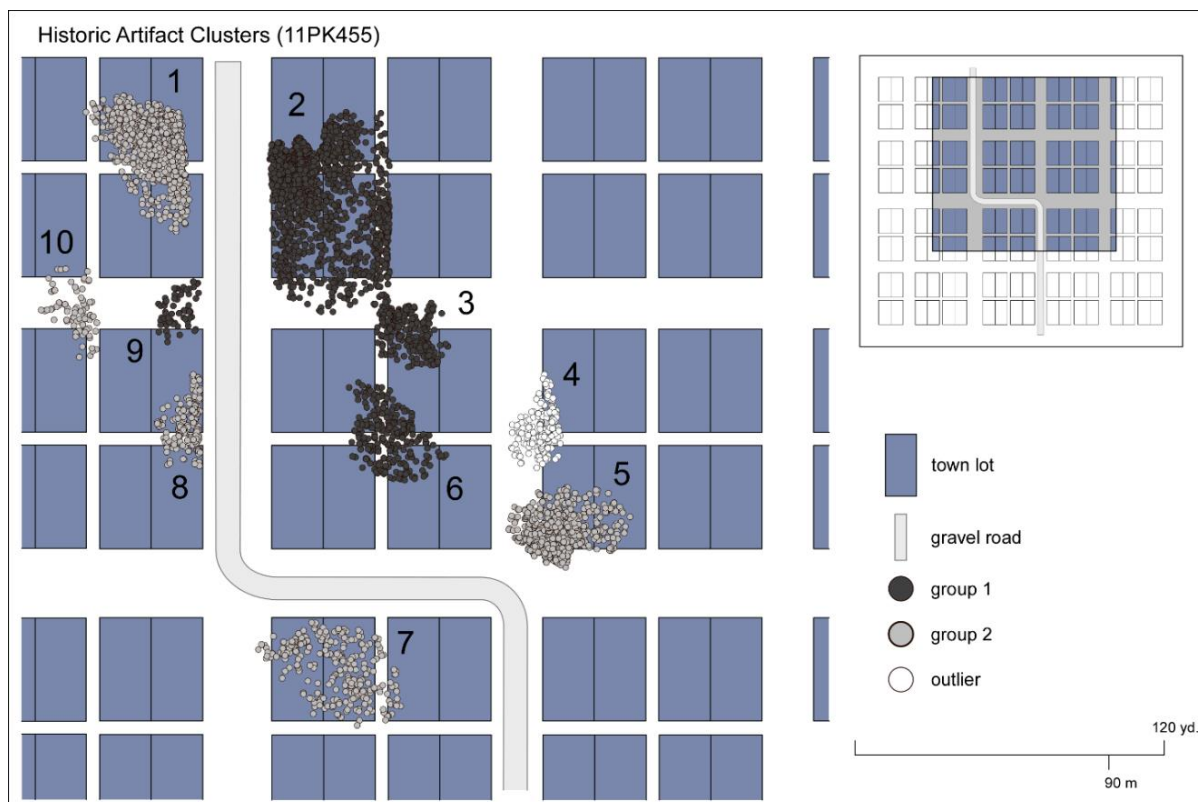


Figure E.10. Historic Artifact Clusters Shown as Groups and Numbered (11PK455).

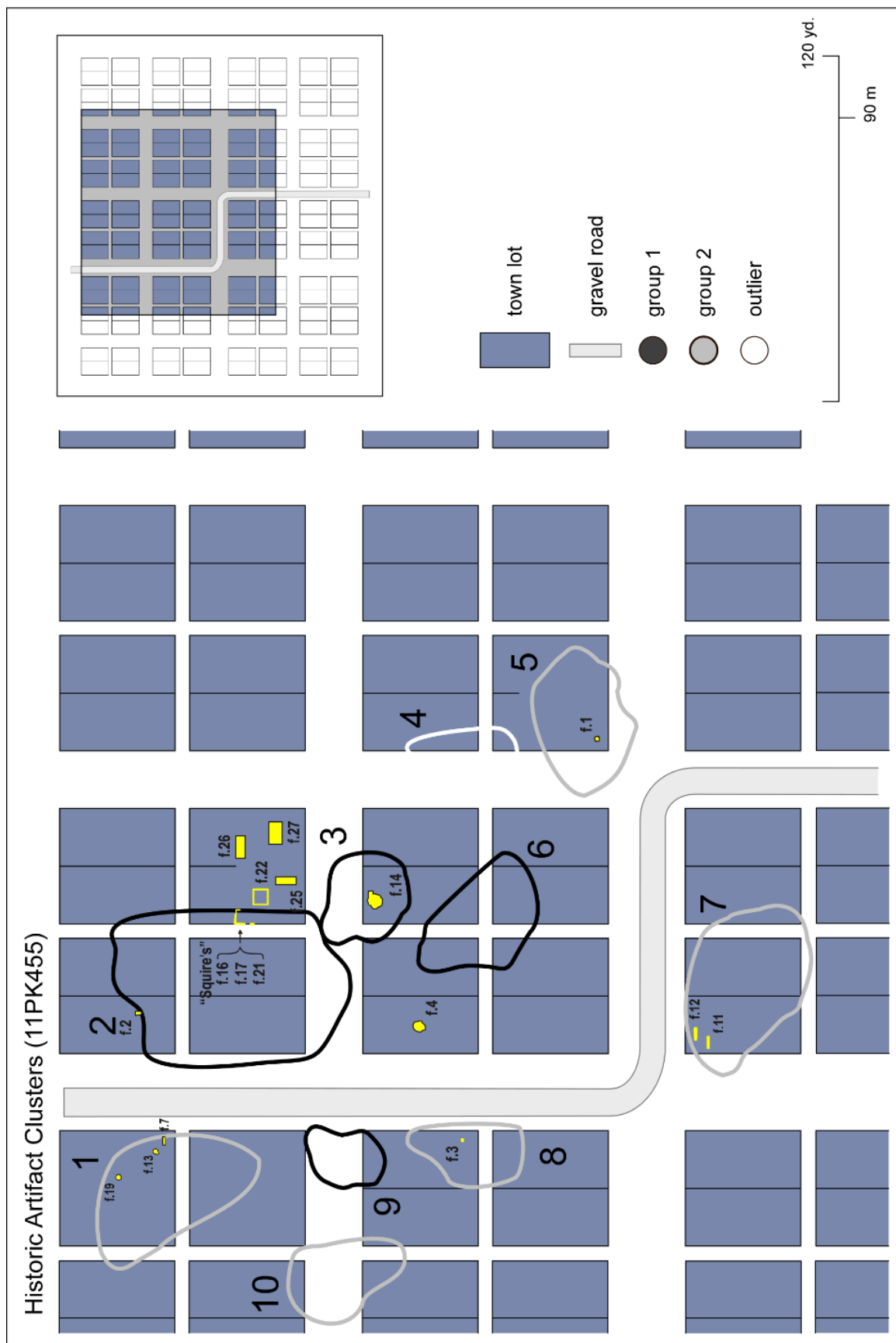
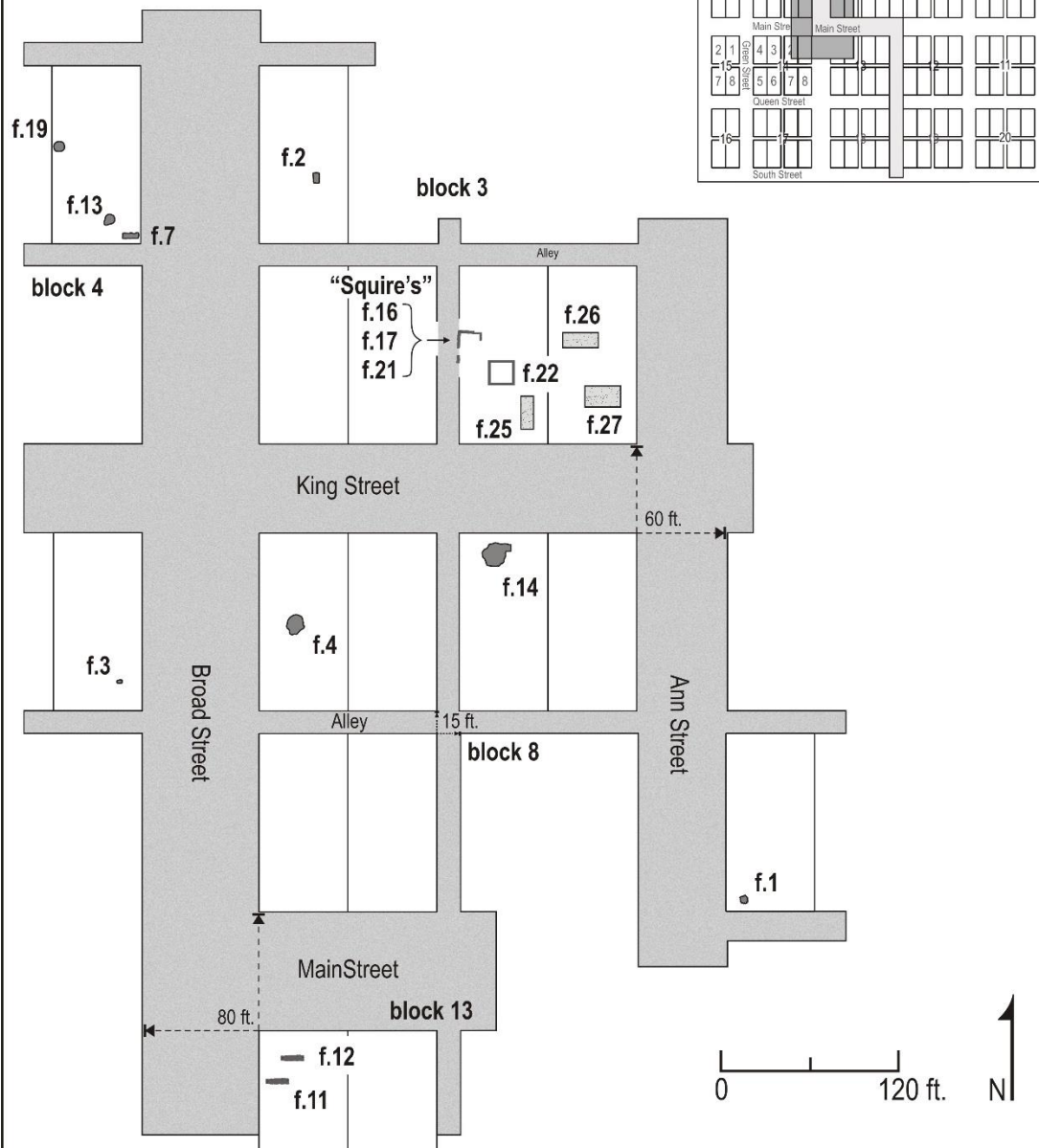


Figure E.11. Historic Artifact Clusters Over Feature Plan Views (11PK455).

New Philadelphia
site plan view
2004–2006



Key for significant features

f.1. subfloor cellar pit	f.12. cellar wall foundation	f.21. fieldstone foundation (east)
f.2. lime slaking pit	f.13. well	f.22. fieldstone foundation
f.3. fieldstone foundation	f.14. subfloor cellar pit	f.25. concrete aggregate foundation
f.4. well	f.16. fieldstone foundation (north)	f.26. concrete aggregate foundation
f.7. subfloor cellar pit	f.17. fieldstone foundation (west)	f.27. concrete foundation
f.11. fieldstone foundation	f.19. subsurface storage/privy	

Figure E.12. New Philadelphia Site Plan View.

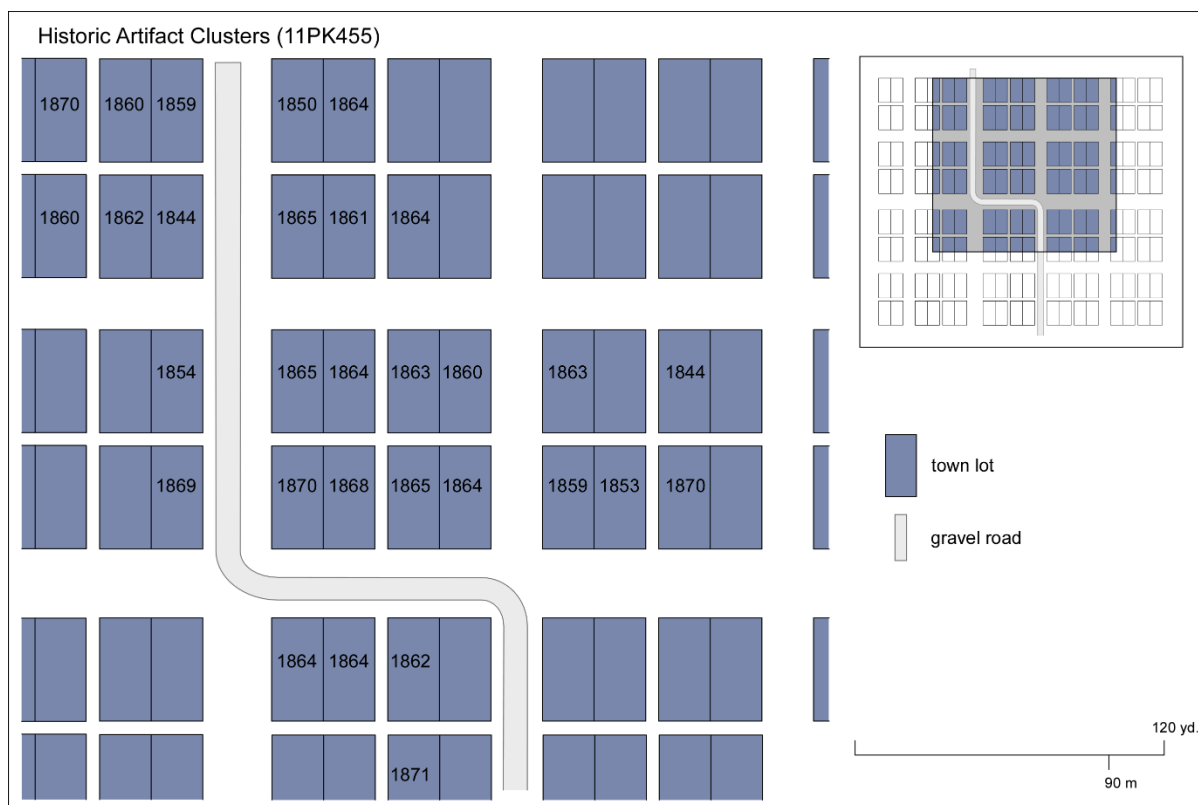


Figure E.13. Mean Ceramic Dates from Walkover Survey (11PK455).

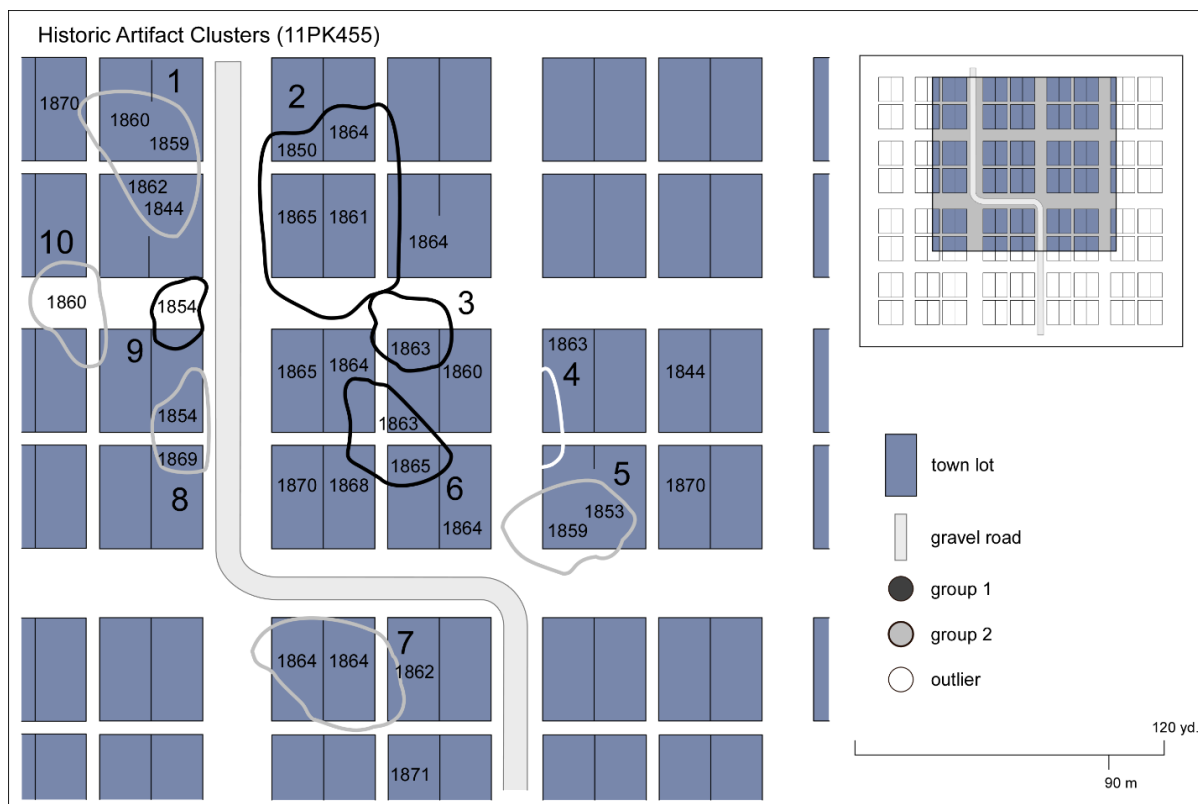


Figure E.14. Historic Artifact Clusters Over Mean Ceramic Dates from Walkover Survey.

Table E.1. Definitions for Artifact Categories.

Market function	Object name	Market function	Object name	Market function	Object name
Home use	Ammunition, Cartridge	Improvements	Plumbing, Pipe, Sewer	Storage	Container, Vial
Home use	Clothing	Improvements	Unidentified, Flat Glass	Storage	Food Preparation, Cooking Pot
Home use	Communication, Slate Pencil	Improvements	Unidentified, Sheet Metal	Storage	Tableware, Drinking Glass
Home use	Electrical, Connector	Improvements	Unidentified, Slate	Storage	Tableware, Hollowware
Home use	Fauna	Production	Agricultural, Blade	Storage	Tableware, Other
Home use	Furniture, Other	Production	Agricultural, Plow Share	Storage	Tableware, Vessel
Home use	Lighting, Unidentified	Production	Electrical, Battery, Carbon Rod	Storage	Unidentified, Vessel
Home use	Military, Button	Production	Hardware, Bolt	Storage	Utilitarian, Bottle / Jug
Home use	Mineral, Coal	Production	Hardware, Bracket	Storage	Utilitarian, Crock
Home use	Mineral, Unidentified	Production	Hardware, Eye	Storage	Utilitarian, Hollowware
Home use	Personal, Bead	Production	Hardware, Hook	Storage	Utilitarian, Hollowware
Home use	Personal, Mirror	Production	Hardware, Nut	Storage	Utilitarian, Jar
Home use	Personal, Unidentified	Production	Hardware, Other	Storage	Utilitarian, Vessel
Home Use	Religious Item, Rosary Bead	Production	Hardware, Ring	Tableware	Tableware, Bowl
Home Use	Tobacco	Production	Hardware, Staple, Fence	Tableware	Tableware, Cup
Home use	Toy	Production	Hardware, Strap	Tableware	Tableware, Flatware
Improvements	Architectural, Brick	Production	Hardware, Unidentified	Tableware	Tableware, Hollowware
Improvements	Architectural, Concrete	Production	Hardware, Washer	Tableware	Tableware, Plate
Improvements	Architectural, Mortar	Production	Hardware, Wire	Tableware	Tableware, Spoon
Improvements	Architectural, Plaster	Production	Harness Hardware, Horseshoe	Tableware	Tableware, Vessel

Table E.1. (cont'd)

Market function	Object name	Market function	Object name	Market function	Object name
Improvements	Architectural, Tile, Roofing	Production	Household Accessory, Unidentified	Unidentified	Fauna, Deer
Improvements	Electrical, Insulator	Production	Machinery, Other	Unidentified	Fauna, Mammal, Large
Improvements	Hardware, Door Knob	Production	Tool, Hoe	Unidentified	Fauna, Mussel
Improvements	Hardware, Hinge	Storage	Container, Bottle, Beverage	Unidentified	Fauna, Rabbit
Improvements	Hardware, Nail, Common	Storage	Container, Bottle, Medicinal	Unidentified	Fauna, Unidentified
Improvements	Hardware, Nail, Finishing	Storage	Container, Bottle, Unidentified	Unidentified	Unidentified, Ceramic
Improvements	Hardware, Nail, Unidentified	Storage	Container, Can, Other	Unidentified	Unidentified, Glass
Improvements	Hardware, Screw, Wood	Storage	Container, Jar, Lid Liner	Unidentified	Unidentified, Object
Improvements	Hardware, Spike	Storage	Container, Jar, Unidentified		
Improvements	Plumbing, Pipe	Storage	Container, Unidentified		

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BIBLIOGRAPHY

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