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Recovery of Post-Civil War Vicksburg, Mississippi

Two decisive battles came at the turning point of the American Civil War in July 1863: the Battle of Gettysburg and the Battle of Vicksburg. While Gettysburg followed the traditional mode of a short engagement between the colliding Confederate and Union armies, Vicksburg represented a military, economic, and strategic stronghold. With the topographic situation of the city, Union Major General Ulysses S. Grant initiated a prolonged siege of Vicksburg. The devastation—emotional and physical—left a lasting scar on the city, and Vicksburg did not celebrate the Fourth of July for another eighty-one years. Although Reconstruction officially ended with the Compromise of 1877, this paper examines key questions about the lasting effects of the Civil War in Vicksburg, Mississippi. This study used Historical GIS and spatial analysis to test the persistence of the siege and bombardment on urban landscape. This investigation tests the hypothesis that regions harder hit by Grant’s artillery have a lower socioeconomic level in 2017. The findings reveal a degree of correlation between the extent of shelling and the modern economic level of Vicksburg’s neighborhoods.

Vicksburg was established in 1811, and after its January 29, 1825 incorporation, quickly grew as an agricultural, commercial, and river traffic hub. By 1860, Vicksburg served as key links in railroad and steamboat chains. The railroad connected with Jackson, Mississippi, to the

2 This first celebration came after Allied victory in Europe during World War II.
4 Scholars have used GIS to study the development of Pennsylvania’s Iron Industry, Railroads and economic growth in the mid-nineteenth century Midwest, and crop production response to the 1848 Michigan and Illinois Canal.
east and Monroe, Louisiana, in the west. By 1860, with a population of 4,600, Vicksburg was the second largest city in Mississippi (after Natchez).\(^5\) Prior to and during the Civil War, the southern United States obtained mass quantities of salt, wool, butter, sweet potatoes, mules, cattle, oxen, sheep, cane sugar, and molasses via the Mississippi River port at Vicksburg—making the city, as some scholarship suggests, the “true breadbasket” of the South, not Virginia’s Shenandoah Valley.\(^6\) Vicksburg’s prominent place on the Mississippi River between New Orleans and Memphis earned its name as the “Gibraltar of the Confederacy”—a reference to Greek myth surrounding the Rock of Gibraltar at Spain’s southern tip.\(^7\) Similar to the Mediterranean, nobody (including, the Union in this case) dared sail past “the Rock.”\(^8\)

Underscoring the role of the city, Confederate President Jefferson Davis declared Vicksburg was “the nailhead that held the South’s two halves together.”\(^9\) Vicksburg represented both a military and commercial interest to the Union, and it was a pivotal operational link on the Trans-Mississippi channel. On the other side of the War, with the Union blockade of the Anaconda Plan, Vicksburg’s role in the supply chain provided necessary arms and war materials to the South.\(^10\) Understanding the strategic role of the city, President Abraham Lincoln declared that “Vicksburg is the key” because continual Confederate control of the city promised “hog and hominy without limit, fresh troops from all the states of the far South [for the Confederacy].”\(^11\)

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\(^5\) "A Photographic Tour Of Civil War Vicksburg." Vicksburg's Old Court House Museum, oldcourthouse.org/photos/civil-war-tour/.


\(^8\) "Mississippi's Rock of Gibraltar." America's Story from America's Library.


Lincoln understood that Union control of Vicksburg was paramount to constricting Confederates in the South—which accounts for the drastic measures and commitment to capturing the city.

Two years into the Civil War, in summer of 1863, Confederate control of the Mississippi River was limited to a section from Port Hudson, Louisiana, to Vicksburg, Mississippi. Vicksburg was the Confederacy’s last major stronghold on the Mississippi. The previous summer, General Grant sought vulnerabilities in the city’s defenses and attempted to bypass the city via construction of canals to the south. Both efforts failed. Instead, Grant ferried Union troops across the Mississippi and advanced towards Jackson, Mississippi. An essential railroad junction, Union control of Jackson prevented Confederate supplies and reinforcements from reaching Vicksburg during the ensuing siege. Despite Pemberton’s efforts to prevent Grant from advancing west towards Vicksburg at the battles at Champion Hill (May 16) and Black River Bridge (May 17), Grant drove the defending Confederate forces into the city by the third week of May. Afterwards, his two thwarted attempts to take the Vicksburg by storm on May 19th and 22nd shaped his decision to “‘outcamp the enemy,’ as it were, and to incur no more losses.”

Grant’s siege of Vicksburg lasted from May 22 to July 4, 1863. His strategy utilized the city’s isolation (no connection to reinforcements and supplies) and included plans to tunnel underneath the Confederate garrison with black powder charges to raze their fortifications. Frequent inaccuracies in Union artillery fire regularly battered buildings within Vicksburg. Civilians moved into subterranean caves during the forty-seven-day siege for protection. Mary Jane Bitterman recalled how during “a fierce firing and bombardment it became urgently necessary for us [her family] to seek the shelter of our cave” and as they left their home “that

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night a shell whizzed by immediately above our heads, and striking in the midst of the mules killed four of them.”  

By July, both Confederate civilians and troops alike were starving—eating animals and rats in the city to survive. William W. Lord Jr. later reported the “the city was threatened with starvation” and the army ordered “that all government mules be butchered and served to the men as an extra ration to prevent scurvy and starvation.” Pemberton’s surrender to Grant on July 4th split the Confederacy in half, and President Lincoln proclaimed, “The Father of Waters again goes unvexed to the sea,” meaning the Mississippi (the “Father of Waters”) was once more under Union control and open to the long-distance shipping that built Vicksburg’s economy.

After President Abraham Lincoln’s assassination in April 1865, his wishes to reunite the Union with understanding and forgiveness died with him, and Civil War Reconstruction was left to the next generation of presidents. Despite earlier Northern efforts to stabilize local economies in the former Confederate states, stories of “bankruptcy, devastation, [and] internal strife under reconstruction governments” were seemingly ubiquitous. While Reconstruction across the South officially ended in 1877, debate surrounds the timing of full economic recovery—or even if it has ever fully occurred. Questions are left regarding the nature and extent of the impact of Union bombardment of Southern cities into the twenty-first century.

Despite general hardships across the South during Reconstruction, Vicksburg advanced its rehabilitation efforts. When the Army Corp of Engineers returned after the Civil War, they

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14 Ibid.  
rebuilt the vital levee system. Citizens began working farm land on the city’s periphery again and shipped their harvests via railway and river exchange routes. The steamboat industry’s revival served an essential role in Vicksburg’s initial recovery.\textsuperscript{17} However, these efforts slowed after 1876 when the Mississippi River flooded to cross the DeSoto peninsula, rerouting the Mississippi River away from Vicksburg and leaving the river port city without a river.

In the last century, the economic impact of the Civil War has been a fierce debate amongst both historical and economic scholars. Early in the twentieth century, Charles Beard claimed that the Civil War made “vast changes – in the course of industrial development.”\textsuperscript{18} In 1940, Louis Hacker added that the war’s “striking achievement was the triumph of industrial capitalism.”\textsuperscript{19} This “Beard-Hacker” Thesis became the dominant interpretation until after World War II. In 1955, a new interpretation of the Civil War’s lasting economic impact emerged. Ross Robertson contended that “persistent, fundamental forces were at work to forge the economic system and not even the catastrophes of internecine strife could greatly affect the outcome.”\textsuperscript{20} For the first half of the twentieth century, the prevailing view remained that the American economy grew and expanded after the Civil War.

Thomas Cochran became one of the first to challenge this viewpoint in 1961 when he alleged quantitative data proved the rate of America’s industrial growth slowed after the Civil War. Stanley Engerman concurred with Cochran in his 1961 attack on the Beard-Hacker Thesis.\textsuperscript{21} Engerman disagreed that political changes accelerated overall economic growth in the

\textsuperscript{17} "History of Vicksburg." Vicksburg, Mississippi, 2017, www.vicksburg.org/history?showall=1&limitstart=.
\textsuperscript{18} Ransom, Roger L. "The Economics of the Civil War." Economic History Association.
\textsuperscript{19} Ibid.
\textsuperscript{20} Ibid.
\textsuperscript{21} Ibid.
nation. While the instant study does not consider the United States or Vicksburg as a whole, it does suggest that the Civil War had a limiting effect on the economic development of individual regions in the city.

Because Vicksburg experienced an extended siege—instead of a short battle—analysis with geographic information systems (GIS) provides new insight into the socioeconomic development of Vicksburg after the Civil War to the modern day. By analyzing the spatial distribution of Union land and naval artillery ranges with relative economic distribution across time in Vicksburg, this study presents new evidence for the lasting economic impacts of the siege of Vicksburg.

The first task of this investigation included construction of Civil War-era Vicksburg and its relatively dramatic wealth distribution. A wartime map of Union and Confederate lines depicted approximately 392 structures near the city-center in 1863. Contemporary sketches of Vicksburg show the more prominent structures towards the north of the city and farther inland from the river—towards Vicksburg’s city hall. The city appears to have been sharply divided spatially along socioeconomic lines, for there were “long, drab rows of warehouses alternated with rough shacks of Irish laborers beside the river banks” and the nicer homes were “farther east or obscured in the low ground beneath the rises.” First-hand accounts of Antebellum Vicksburg corroborate these images, as Lucy McRae Bell, the daughter of a well-to-do merchant and a

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22 Historians have used Historical GIS to reassess the Dust Bowl, the growth of American working-class suburbs, and segregation. Spatial analysis with GIS systems allows historians to visualize the location of past trends and events, see where they regionally overlap, and utilize available sources to verify past assumptions or reach new conclusions.


24 Schell, Frederick B. Vicksburg as seen from DeSoto Peninsula, across the river. 11 July 1863. Frank Leslie's Illustrated Newspaper.

young girl at the time of the 1863 siege, recalled this “better side” of Vicksburg was a “place of culture, education, and luxury.” Bell’s own childhood home, which survived the 1863 siege and stands today, stood in this this affluent region of the city (see Figure 1). At the beginning of the siege in 1863, the prosperity of the north and east sections of the city contrasted with its river-lining west and southern sides.

The second phase of the project involved mapping the distribution of the Union’s average artillery range. From the river, the Union navy had six Thirteen-inch Seacoast Mortar (a massive gun with a range of 4,325 yards) mounted on rafts that fired over seven thousand rounds into Vicksburg during the forty-seven-day siege. From Grant’s land-based forces in the east, the frequently-produced Ten-pounder Parrott rifle had a maximum range of 1,900 yards. Spatial examination of the artillery ranges with GIS viewshed analysis revealed the hardest-hit regions of downtown Vicksburg during Grant’s siege and assaults to be to the south and west along the river (see Figure 2).27

Union ground and naval bombardment produced the most destruction towards the poorer areas towards the west and south of Vicksburg. Outside the city’s densely populated areas, Union bombardment struck Confederate defense lines on the outskirts of the city, and residents of lower socioeconomic status populated these neighborhoods.

Many of the structures that survived the Civil War (e.g. the McRae home) were in the wealthier northern region of the city (see point A on Figure 1 and Figure 2). While many

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27 The GIS viewshed analysis is effective for line-of-sight artillery (such as the 10-pounder Parrott rifles). The naval mortars could lob shells over the bluffs, but they likely had to contend with well-entrenched CSA shore batteries (such as their 42-pounder Seacoast guns). A buffer around the naval line-of-sight artillery regions accounts for the areas of Vicksburg most susceptible to mortar shells.
Figure 1
Buildings in Vicksburg, Mississippi, in 1860

Key
- Catholic Church
- Episcopal Church
- McRae Residence
- Vicksburg Buildings in 1860

Legend:

Sources provided by Ancestry, the Library of Congress, and Mississippians in the Confederate Army
Map Prepared by Mikayla Knutson
Figure 2

Union and Confederate Defenses with Artillery Ranges
surviving buildings were in this region, they were not exempt from damage created by artillery on Union gunboats. Lucy McRae Bell recalled how “Mrs. Gamble who lived on the edge of town was killed just as she was leaving her gate.” Christ Episcopal Church, located a few streets east of the McRae home, survived the war, but it was significantly damaged. The blows to the rectory on the church’s western side necessitated that it be torn down and rebuilt after the Civil War.

While the suffering of the citizens of Vicksburg from starvation and exposure crossed social and economic barriers, affecting all inhabitants under siege, the physical damage to structures within the city do not appear to have been as evenly distributed. Those areas of the city inhabited by those on the lower rungs of society likely bore more than their fair share of the destructive force of Union artillery bombardment (see point B on Figure 1 and Figure 2). The third phase of the project then involved addressing the socioeconomic distribution across the city in the twenty-first century to assess whether there are causal connections between the post-siege Vicksburg and contemporary Vicksburg.

Multiple analyses of socioeconomic status in twenty-first century Vicksburg’s neighborhoods provide a complex picture of Civil War bombardment’s potential lasting impact on the city. First, frequently-used mapping indexes utilize the locations of various types of churches to suggest the relative economic status of the surrounding neighborhoods; Baptist churches generally signal poorer regions of a city. In modern Vicksburg, Baptist churches outnumber the other Protestant sects present. Most of these congregations meet in the southern region of the city, and the others primarily lie towards the periphery of old downtown Vicksburg.

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(see Figure 3). Using this index, the prominence of Baptist churches in the historically poorer regions of the city indicates a continuation of Antebellum socioeconomic distribution within Vicksburg. With the prominence of Baptist churches in the southern part of the city, it also suggests lower economic status in areas that were hardest-hit by Union bombardment during the 1863 Battle of Vicksburg. Because the modern economic distribution of Vicksburg mirrors past distribution and matches areas of bombardment, another mode of analysis is necessary to decipher the complex combination of both conditions.

A second analysis of modern Vicksburg’s economic distribution provides evidence for the impact of Civil War bombardment on the reconstruction of Vicksburg. Figure 4 depicts neighborhoods with the highest-appreciating property values since the turn of the twenty-first century. This data is on a smaller scale, and while it does not account for conditions within smaller neighborhoods, it visualizes the economic relationship of six of Vicksburg’s neighborhoods (See Figure 4). (Only the six regions closest to Civil War-era Vicksburg were mapped, because the remaining neighborhoods were too far from the nineteenth-century city limits to be relevant.) The average level of property value appreciation relative to the other neighborhoods is assumed to be equitable to their comparative socioeconomic statuses. This map supports Figure 3’s finding that the City Center, the modern neighborhood that encompasses the more affluent and less-impacted region of Vicksburg, remains wealthier compared to the neighborhood immediately to the south (which was of a lower economic status and more intensely affected by 1863 bombardment). However, this data also includes an additional area—the neighborhood of Beechwood. Confederate Avenue and Highway 80 intersect modern Beechwood. Confederate Avenue follows the original Confederate ramparts and Highway 80 borders the Union siege lines. The Beechwood area was less developed in 1863, and, being along
Figure 3

Types of Churches in Vicksburg, Mississippi, 2017

Types of Churches
- Other Sects
- Presbyterian
- Methodist
- Episcopal
- Baptist

Vicksburg

Sources: ESRI, HERE, DeLorme, IntelliMap, Inc., OpenStreetMap, NRCAN, NR Can, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), MapmyIndia, ©OpenStreetMap contributors, and the GIS User

Prepared by Mikayla Knutson, 2017
Confederate defense lines, sustained some of the most destructive shelling. Beechwood is at the lowest socioeconomic level of the six neighborhoods, which suggests that the bombardment retarded development in this area (possibly in favor of devoting reconstruction resources to areas closer to the city center), leaving a lasting effect on this Vicksburg neighborhood. If this is the case, then other neighborhoods of the lowest rungs of society, disproportionately impacted by bombardment, may have also required such reconstruction efforts. Their lack of resources might have prevented improvement of their socioeconomic standing in the city.

Neither the data for the location of various Protestant sects or the neighborhood property appreciation in Vicksburg alone are conclusive in suggesting whether the Civil War impacted
later development, but they are useful when their respective trends are combined. Both Figure 3 and Figure 4 depict the northern regions of Vicksburg as continuing their historical trend of being the most affluent—with the part of the city immediately south having a lower economic status. This relationship between economic wealth and altitude stemmed from natural phenomena.\textsuperscript{30} Wealthier citizens of hilly cities moved into areas of higher elevation—leaving lower-income individuals to neighborhoods more susceptible to floods and natural disasters. This “basic tenet of urban geography” existed in Vicksburg and continues today.\textsuperscript{31,32} The level of the siege’s physical impact on these regions correlates with this economic status (northern areas less impacted remain wealthier). Figure 4’s border between these two neighborhoods corresponds with church distribution in Figure 3. The northern section of Vicksburg in Figure 3 has a wider variety of churches—with some Baptist. However, all but three of the churches in the southern neighborhood are Baptist. Each of these two distinct data sets corroborates the other.

The spatial and historical conditions of Vicksburg’s Beechwood neighborhood provide evidence that the degree of bombardment in Vicksburg’s neighborhoods impacted later development. In Figure 4, Beechwood has the lowest socioeconomic level of the six neighborhoods, and it was among the most-impacted regions of the Vicksburg area during the Civil War. The neighborhood of Washington Street/Old Highway 80 has the third highest appreciation rate (behind the two northernmost in the city), but it is farther south (traditionally a mark of less affluence) than Beechwood. Because Beechwood is farther north (and thus closer to the neighborhoods with a higher socioeconomic status) and experienced a higher level of

\textsuperscript{31} Ibid.
bombardment than Washington Street/Old Highway 80, the comparison between these neighborhoods provides the best insight into the effect of the Civil War. If the directional trends of Figure 3 continued, Washington Street/Old Highway 80 would be expected to have a lower socioeconomic level than Beechwood (because it is farther south). Instead, the economic differentiation follows the hypothesis that regions harder-hit by Grant’s artillery would have a lower status. The primary difficulty with Figure 3 and Figure 4 is discovering whether Antebellum economic trends or artillery bombardment had a greater lasting impact on Vicksburg. When analyzed together, in addition to substantiating prior findings, both maps offer new conclusions.

While the data supports the hypothesis that the Civil War may have had a lasting impact on the development of Vicksburg, there are several relevant outside factors that the data cannot take into consideration. First, the sources have limits. The primary map used for Figure 1 was a contemporary outline of Union and Confederate defenses in the Vicksburg region.33 The map shows the built area of each block but does not denote the type of building (save a few churches), the separation between buildings, or the source used to map the built area. Often, the cartographer depicted a line of structures on a block that appeared to all be connected, but there were varying depths in the structure down the street. For blocks with this shading, each section with a different depth was treated as a separate building (under the assumption that the front of the building could be connected but used for different purposes by various individuals). To corroborate first-hand records and Figure 1’s suggestions about Antebellum economic distribution, this study used period illustrations and photographs. While these gave the map more

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validity, there were only photos for a few blocks, and the sketch merely represents what the artist observed of the city from the DeSoto Peninsula.

There are also drawbacks in the written records of Civil War conditions in Vicksburg. Even though primary source records of the siege are the best authorities when creating a narrative of the event, it is near impossible to determine which details from the accounts are correct, but GIS allows us to check the spatial validity of these sources. There are multiple cases where individuals who appear on the 1860 Vicksburg city directory do not appear in that year’s census, or vice versa. Both records are incomplete, which makes it especially difficult to track citizens of lower socioeconomic status in the city. Even when individuals were recorded in both, the records can be incorrect. The 1860 city directory lists the home of William McRae, Lucy McRae Bell’s father, as being on a different block from where the building currently stands (it survived the siege). In response, GIS allows us to check the built area of each block with these accounts to confirm the city’s socioeconomic distribution. Further, there are some inconsistencies in the first-hand accounts of the siege. The death of a Mrs. Gamble was recorded by Bell as having taken place on her front porch, but Mrs. Richard Groome recalled that Mrs. Gamble was killed by a shell near the cemetery.\textsuperscript{34} The GIS viewshed analysis visualizes which areas were most susceptible to Union shells, and, thus, which primary sources are likely most reliable.

Despite better recordkeeping in the twenty-first century, there are still constraints to this data. Records that list the location and types of churches in Vicksburg are often not up-to-date or correct. For several of the congregations listed on the Vicksburg church directory, they no longer

meet, there was no provided address, the provided address did not exist, or the current name of the church differed from the name on the directory. In some cases, the churches listed on Google Maps conflicted with those named on the Vicksburg directory. Because of the nature of the available data and the sheer number of churches listed, creating a complete list of all practicing churches is unlikely. In addition, analysis of the socioeconomic levels of the six Vicksburg neighborhoods only takes into consideration the average appreciation of the entire area, which removes heterogeneity.

Beyond the sheer inhibitions of the sources, there are several outside historical factors that the data do not reflect. From a geological standpoint, the viewshed analysis in Figure 1 uses modern topography, but the geography of Vicksburg changed since the Civil War. These changes may affect which regions appear to have been vulnerable to Union mortar shells. As a result, there may be areas incorrectly included or excluded from analysis that are fundamental to the conclusion.

The story of Vicksburg often comes with a discussion of its role, with Gettysburg, as a turning point of the Civil War in summer of 1863. While the siege of Vicksburg is seldom recognized for its lasting impact on the city’s economic development, comparisons between pre-siege socioeconomic level and degree of bombardment with modern economic distribution suggest time could not fully erase the damage of Grant’s forty-seven-day siege.