

## Controlled Chaos: Spatiotemporal Patterns within Missouri's Irregular Civil War

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At the Battle of Spotsylvania Courthouse in May of 1864, Private Thomas Roche witnessed a fellow Confederate “throw down his musket and pick up a hatchet. As a Federal c[ame] at him with a bayonet, he pushed it aside with his left hand, while with the hatchet in his right he brain[ed] his opponent ... the Federals shrank from the sickening scene.”<sup>1</sup> Historians who analyze tumultuous accounts such as Roche’s do so in the larger context of battle. Individually, Roche’s rendition of the fighting at Spotsylvania seems chaotic indeed. When cartographers inscribe Roche in a square labeled ‘16<sup>th</sup> Mississippi’ and place that square in a battle line on a map, Roche’s individual report melds into the overall strategy of Robert E. Lee. Geographically speaking, a map’s expansive scale allows historians to interpret evidence in different ways; Roche’s brutal actions give way to Lee’s tactical genius when viewed on a larger scale.<sup>2</sup> Guerrilla warfare requires the same spatial insight to be comprehensively understood. A typical historiographical overview of the Civil War’s irregular conflict in Missouri portrays guerrilla warfare as chaotic, disorganized, and savage. Scholars who project this view tend to use an anecdotal approach, which certainly succeeds in richly illustrating how individual civilians and Union troops experienced irregular warfare. This approach, however, fails to *make sense* of guerrilla violence; it does not consider guerrillas’ actions in relation to one another, to the Union army’s location and force, and to the terrain and time in which guerrillas operated. In short, irregular warfare has been seen as altogether *irregular*, as if there are no patterns within it.<sup>3</sup>

This essay makes two overarching claims. First, I argue that guerrilla violence was not wholly *irregular* but instead played havoc in the wake of temporary Union occupational locations. Guerrillas were opportunists, they were smart, and they chiefly targeted Union war

industries—small garrisons, Unionist militias, railroads, telegraph lines, supply trains and small outfits of Union troops. Second, I champion historians’ use of digital mapping techniques in order to make this argument. Viewing the guerrilla war through a spatiotemporal lens allows historians to reinterpret seemingly chaotic events and uncover an organized infrastructure and common enemy beneath guerrillas’ violent actions. In fact, instances of guerrilla violence were concentrated in repeated locations during specific time frames in conjunction with the presence of Unionist militias and conventional armies. My research utilizes animated maps created in ArcGIS and Neatline to illuminate patterns within guerrilla violence.<sup>4</sup> Better than text, a map can lay bare the interactions and correlations of spatial phenomena. Better than static maps, animated maps with time-sliders can help us to see patterns where once we saw chaos. My maps specifically focus on the correlation between instances of guerrilla violence and the spatial and temporal locations of the Union army in Civil War Missouri’s central counties to reveal guerrillas’ order and intent (see Figure 1).<sup>5</sup>

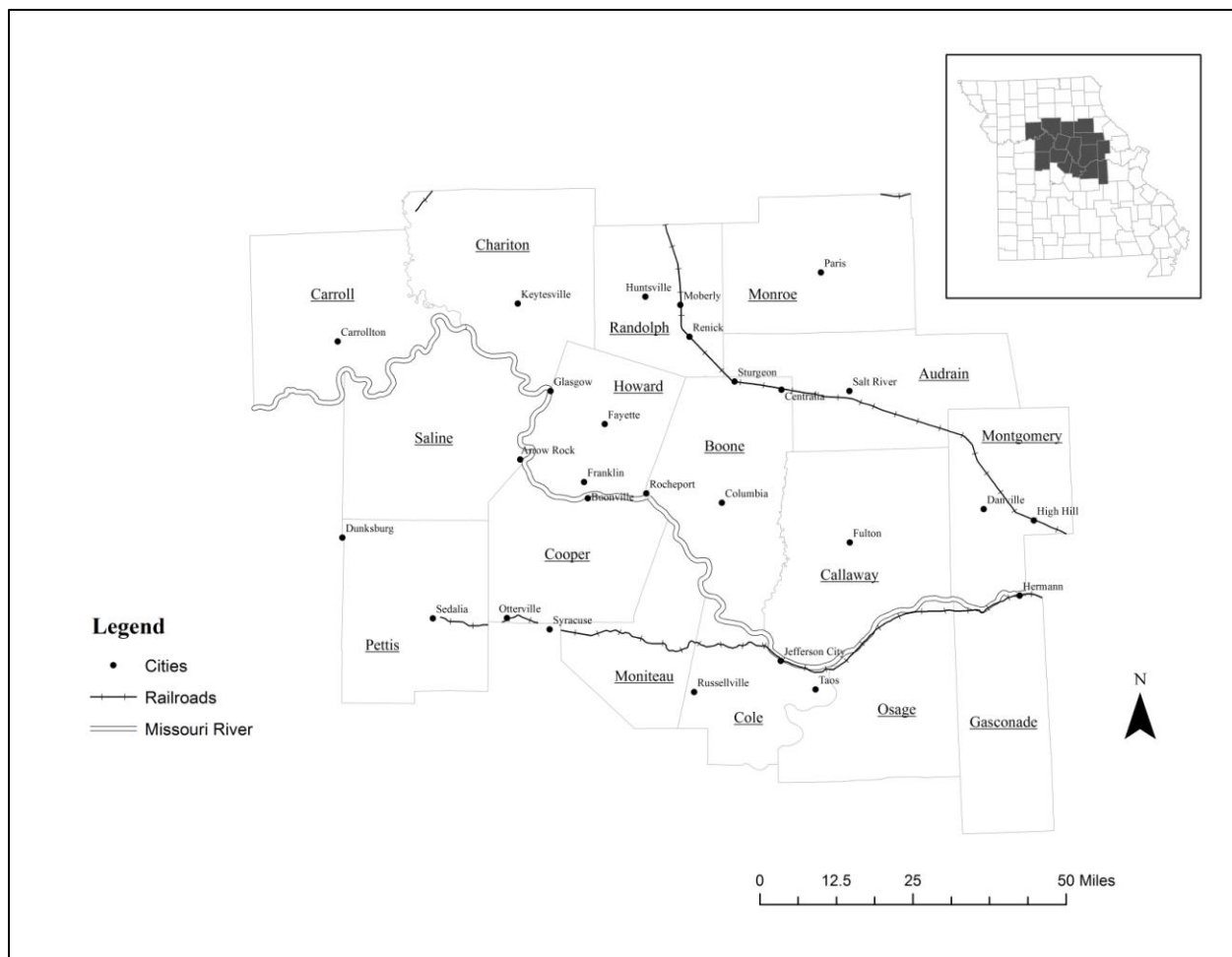


Figure 1. Central Missouri Counties

The current historiography largely portrays guerrilla violence as chaotic because historians have not placed the irregular conflict on a map. Unlike conventional battles, the guerrilla war in Missouri began in the 1850s.<sup>6</sup> Moreover, guerrilla violence did not occur on specific battlefields but throughout the entire state’s landscape. Due to the longevity and scale of guerrilla warfare in Missouri, a static map—or a series of static maps—cannot fully depict the irregular conflict. Only digital capabilities allow historians to map Missouri’s guerrilla war.<sup>7</sup>

A spatiotemporal methodology uncovers three major patterns within Missouri’s guerrilla war. First, differing Union occupational strategies foreshadowed patterns of guerrilla violence. Consistent and *stationary* occupation effectively quelled guerrilla violence. In contrast,

*temporary* occupation in the form of Federal companies, detachments, and foraging squads acted as magnets for violence and instigated guerrillas. Second, guerrillas practiced statewide interconnectivity by organizing their resources against the Union's chief threats. Last, guerrillas openly cooperated with the Confederacy's standing army and ultimately depended on the conventional war's outcome.

A comparison between the city of St. Louis and Missouri's central counties illustrates the protective effects of stationary occupation and the destructive effects of temporary occupation. The large urban center of St. Louis boasted a population of over 160,000 people and contained a federal arsenal, multiple barracks, hospitals, prisons, and a largely Unionist German-American citizenry.<sup>8</sup> In addition, the city's location at the junction of the Missouri and Mississippi rivers made it a strategic military point. The Union stationed between two and six regiments within city limits from June 12, 1861 to June 1, 1865 and never abandoned their occupation of the city. As a result, very few instances of guerrilla violence occurred in the surrounding counties and none penetrated the city's limits. Ultimately for St. Louis residents, a continual Union presence served as a zone of protection against guerrillas for the entirety of the war.<sup>9</sup>

In contrast, most civilians in Missouri's central counties suffered from violent guerrilla warfare due to temporary and inconsistent Union occupation after 1861. Central Missouri counties experienced sporadic Federal expeditions, contained no large garrison towns, and witnessed a mass exodus of Union troops beginning in 1862. The mercurial presence of Union armies in Missouri's central counties created large numbers of company-sized skeleton crews and Union supply trains that were unable to offer protection to civilians and actually became targets for guerrillas. Moreover, Missouri's location on the western frontier distanced the state from most Confederate and Union strongholds. While the Union military stationed some

regiments in towns for months on end, a majority of soldiers manned temporary locations for only days or weeks at a time and no town played host to the Union army for the entirety of the war (see Figures 2 and 3).<sup>10</sup>

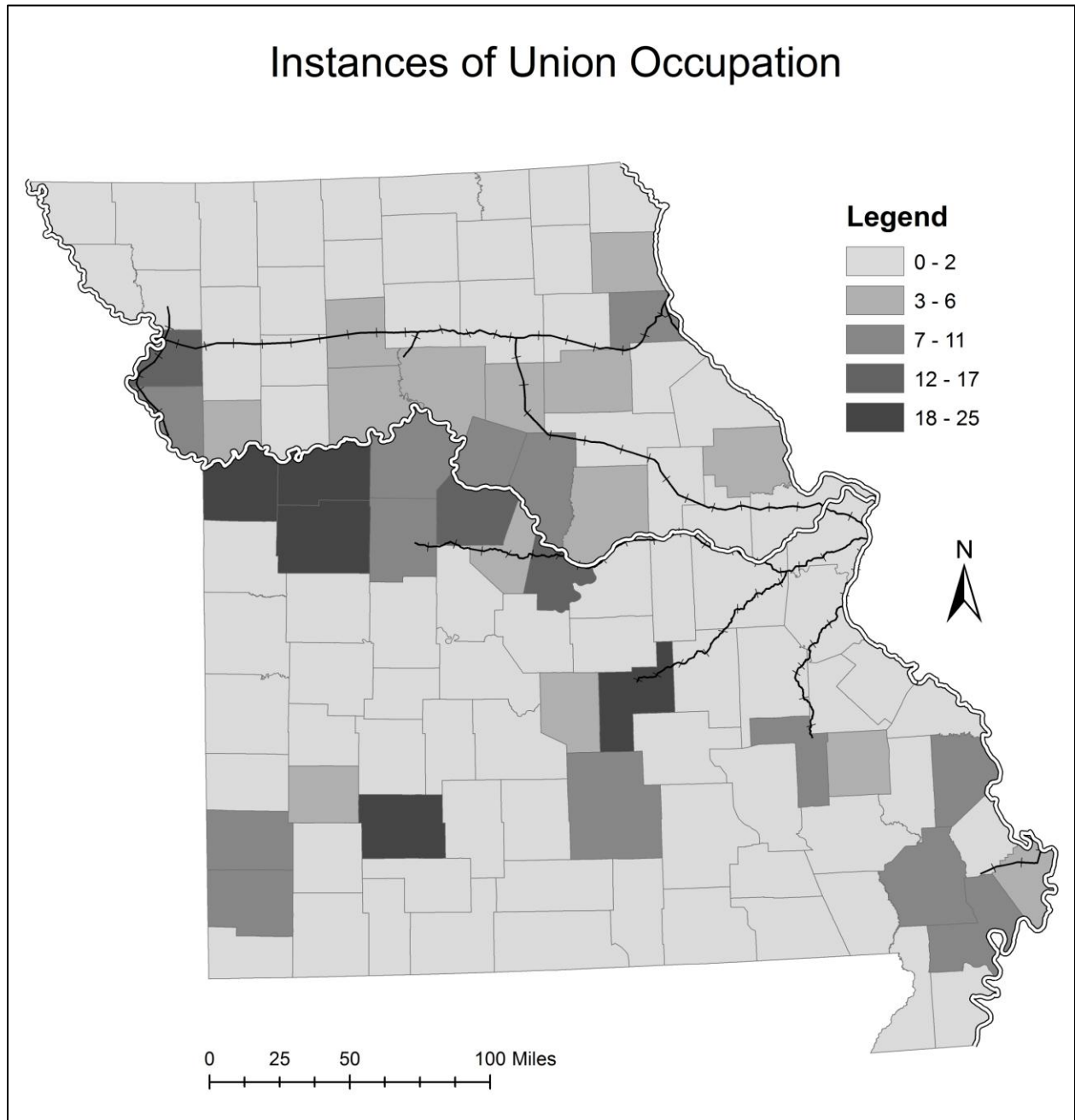
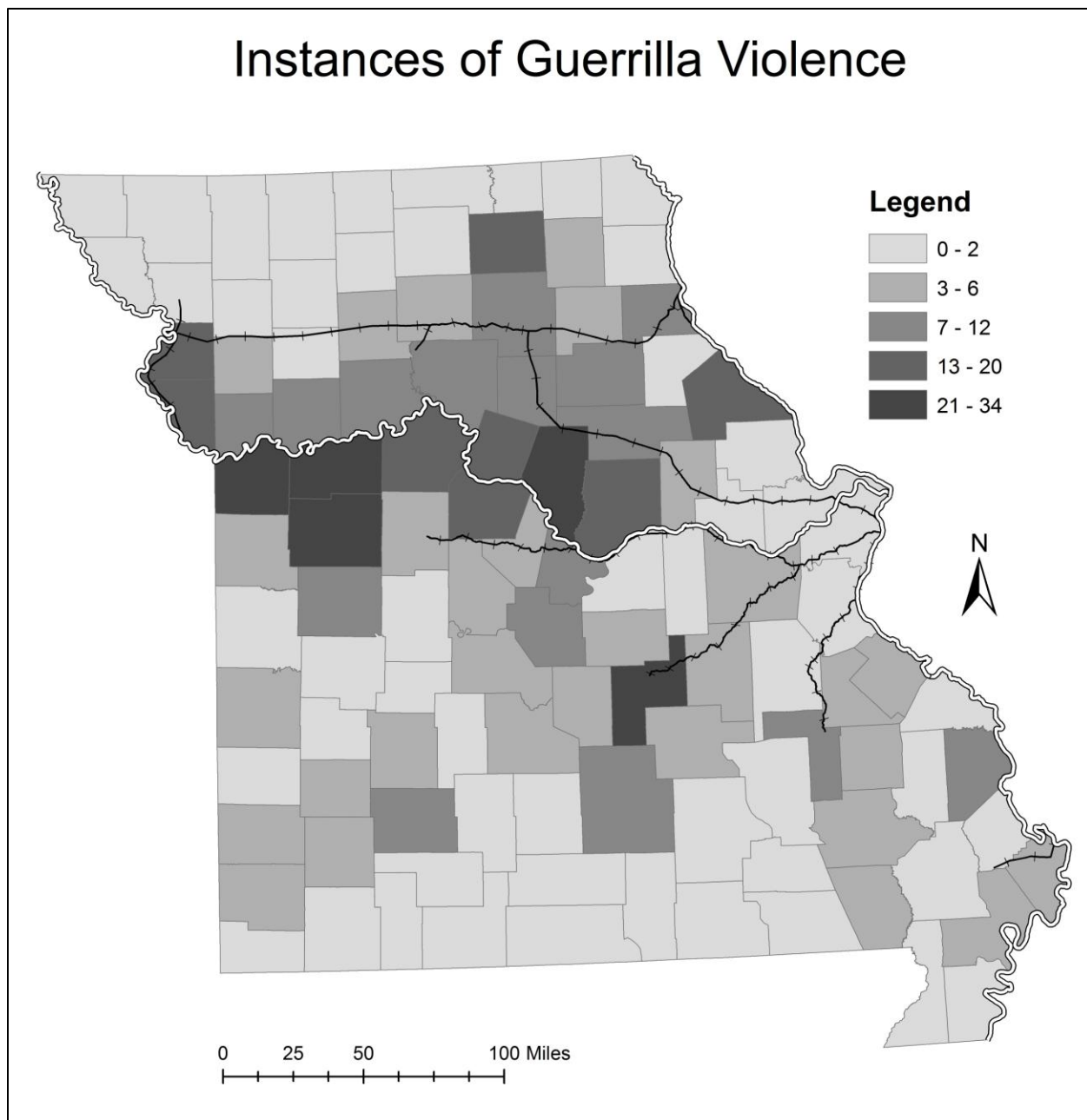


Figure 2. Instances of Union Occupation



*Figure 3. Instances of Guerrilla Violence*

Missourians’ personal recollections and official reports detailing Union operatives shed light on the effects of temporary Union occupancy. Numerous civilians—with Unionist and southern sympathies—claimed that Federal forces were “dreaded even by loyal men nearly as much as bushwhackers, as their officers seem[ed] to exercise but little control over them.”

Primary evidence affirms this assessment of the Union military’s draconian practices against

civilians in areas of guerrilla activity. Correspondence between Missouri's top military officials in the case of J. W. Terman confirms that the Union army covered up multiple occurrences of murder, robbery, larceny, and arson among its "detectives" who utilized guerrilla tactics against civilians.<sup>11</sup> It is safe to assume that some Union troops who temporarily occupied towns in central Missouri conducted themselves in a similar manner.<sup>12</sup>

To further illustrate how the Union army's spatial locations in the early years of the war prefigured a pattern of guerrilla violence, we can overlay the previous two maps and include data at the city-level (see Figure 4). Furthermore, a quick quantitative analysis demonstrates how the nature of guerrilla warfare in central Missouri directly reflected changes in the nature and size of Union occupation. In 1861, stationary Union posts outnumbered temporary ones by a ratio of two to one and *no* instances of guerrilla violence appear in the sample of provost marshal records. The nature of Union occupation in central Missouri steadily changed from stationary to temporary as the war progressed into its second year. Beginning in March 1862, Union occupational strategy relocated thousands of troops to other states and subsequently assigned insufficient numbers of troops to short stints in small communities as opposed to long, stationary positions at well-manned fortifications. Consequently, temporary Union expeditions outnumbered stationary duties at a seven-to-two clip for the remainder of the year. Not surprisingly, the first provost marshal papers documenting guerrillas' actions in central Missouri began in March 1862. By 1864, temporary Union actions outnumbered stationary activity by a five to one ratio. As a result, guerrilla violence in central Missouri exploded in 1864.<sup>13</sup> During the Civil War's last summer, Missouri's guerrillas violently engaged the Union army and Unionist civilians ten times more frequently than in the first three years *combined* and a vast majority of guerrilla violence—including the irregular conflict's most atrocious acts—occurred

in those towns previously associated with temporary Union occupation. For example, the Union army burned the city of Rocheport to the ground on September 26 because its citizens aided and abetted guerrillas. The very next day, guerrillas under Bill Anderson ambushed and mutilated 123 Union troops in Centralia. This evidence clearly shows the correlative nature of Union occupational strategy and guerrilla violence.



# Union Occupation and Guerrilla Violence

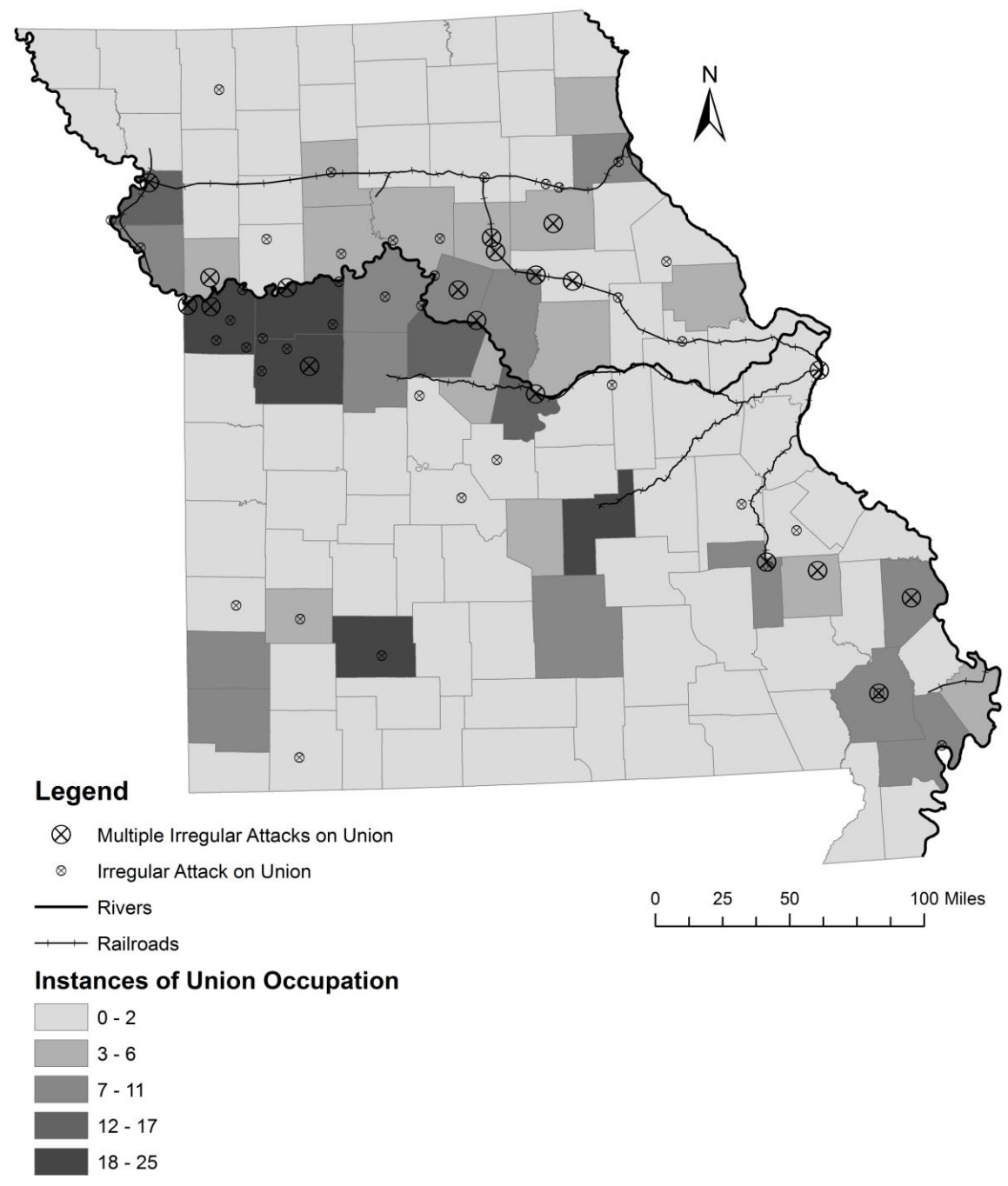


Figure 4. Instances of Union Occupation and Guerrilla Violence

My next contention is that the location of irregular violence in 1863 demonstrated guerrillas' organizational abilities. Very few Union detachments or guerrilla bands roamed central Missouri for the entire year because the Union army's presence in western Missouri attracted most guerrillas to the Kansas-Missouri border. In the spring of 1863, Brigadier General Thomas Ewing, Jr. vowed to root out the bushwhacker problem in Missouri and targeted guerrillas' female family members to achieve this goal. A Kansas City jail holding female relatives of well-known guerrillas collapsed on August 13, fatally crushing four women and severely injuring eight others. To make matters worse, Ewing also signed into law General Orders No. 10 which called for "the forced removal of bushwhacker families and friends and their exile from west Missouri." Before Union troops could even carry out these orders, Missouri's guerrillas responded to Ewing's actions brutally and swiftly. Leaving central Missouri vacant, 450 bushwhackers infamously sacked Lawrence, Kansas to "have revenge" for Ewing's punitive policies. Afterwards, most guerrillas fled to Texas for the 1863-1864 winter while General Ewing issued General Orders No. 11 on August 25 which forced "[a]pproximately 20,000 people [in western Missouri] to evacuate their homes, almost all of which then were burned."<sup>14</sup>

Guerrillas' collaboration in 1863 unveils their hidden organizational network throughout the state. In central and western Missouri, violence was not random but carefully orchestrated against guerrillas' chief threats. The absence of sources depicting guerrilla violence in central Missouri coupled with the noted increase of regular and irregular violence in western Missouri during 1863 illustrates guerrillas' priority in opposing the Union army.

Finally, guerrilla activity in Missouri developed in the context of the larger war; the fate of Missouri's southern-sympathizing civilians was inextricably tied to that of the Confederate

army. Guerrillas understood that the ultimate protection of their households and slave society from Federal force rested with the presence of a regular Confederate army. Confederate General Sterling Price's 1864 raid through Missouri shaped guerrillas' actions for the remainder of the war. Sterling Price believed "tens of thousands of Missourians springing up from the land to join him in his crusade" would swell his force of 12,000 men enough to capture St. Louis.<sup>15</sup> However, sporadic engagements with Union troops and Price's mishandling of enthusiastic guerrilla support undermined his efforts. Instead of combining forces with Missouri's guerrillas, he ordered them to operate as partisan rangers and to cut railroad and telegraph lines far in advance of his army. His defeat at the Battle of Westport on October 23 effectively ended his Missouri campaign and more importantly, eased the widespread guerrilla violence throughout the state despite the continuation of the regular war for six months after his retreat.<sup>16</sup> It is no coincidence that most guerrilla activity in Missouri abruptly ceased after Price's exit. Widely considered the last hope for a Confederate Missouri by its civilians, Price's failed attempt to take St. Louis registered defeat in the eyes of a vast majority of guerrillas. After Price's retreat, from November 1 to the end of the war, only two instances of guerrilla violence appear in the sample of provost marshal records. Beginning in April 1865, most guerrillas surrendered to Federal authorities or simply laid down their arms and returned home.

Comparing spatiotemporal analyses of St. Louis, western, and central Missouri complicates our understanding of the Civil War's irregular conflict. Most importantly, obvious patterns of guerrilla violence existed within the state. Violence regularly appeared in towns that experienced temporary Union occupation while violence rarely appeared in towns that experienced consistent occupation throughout the war. The presence of Union and Confederate armies directly influenced the presence of guerrilla warfare in Civil War Missouri. Guerrillas

carefully selected the towns and people they assaulted in direct relation to Union occupation and orchestrated attacks with Confederates forces when possible. Temporary Union detachments and official policies affecting guerrillas' female family members elicited brutal retaliation from guerrillas while permanent Union regiments created spheres of relative peace. These findings challenge historians' current definition of guerrilla warfare by adding aim, intent, and purpose to guerrillas' violent actions and by demonstrating the capabilities of digital maps.

Historians' employment of this developing methodology remains problematic for several reasons. First and foremost among these is the use of technology when combined with more traditional historical methods. The uncertainty, ambiguity, and human condition of historical sources do not easily wed with computer software's calculated and rigid code. Datasets and spreadsheets allow little room for diverse psychological motives, controversial definitions, cryptic messages, and incomplete evidence. Historians who attempt to quantify, measure, and map subjective evidence open the door for criticism and dissent. Therefore, scholars need to incorporate digital methods' advantages within their already effective social, cultural, and gendered approaches to better understanding the past.<sup>17</sup>

By discovering where instances of violence occurred in relation to the people present in the built and natural environment, we can highlight patterns within guerrilla warfare, see a clearer picture of the irregular conflict, and better explain why law-abiding citizens resort to savagery in certain locations and time periods. To debate whether or not it was, in nineteenth-century societal terms, or is more acceptable to lose 20,000 lives on a predetermined field under a national flag than for a band of guerrillas to kill a teenager and burn down a house would be to miss the point of this essay. Instead, we try to understand that chaos and brutality characterized America's Civil War not because of guerrillas but because all war is hell whether it takes place

in the bush of Missouri, the trenches at Spotsylvania Courthouse, the beaches at Normandy, the jungles of Vietnam, or the mountains of Afghanistan.

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<sup>1</sup> Thomas T. Roche, "The Bloody Angle: A Participant's Description of the Fiercest Combat of the War," *Philadelphia Weekly Times*, September 3, 1881.

<sup>2</sup> The most popular Civil War narratives in existence heavily lean on battle maps to better illustrate instances of violence. For example, Shelby Foote, *The Civil War: A Narrative, Fort Sumter to Perryville* (New York: Vintage Books, 1958) contains forty-four battle maps and features a full-color map of the United States on the front end paper. Bruce Catton, *Terrible Swift Sword* (New York: Doubleday & Company, 1963) uses fifteen battle maps and also features a full-color map on the front and back end paper. More recently, James McPherson, *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988) uses twenty-three battle maps.

<sup>3</sup> Some classic titles emphasizing this viewpoint include Richard S. Brownlee, *Gray Ghosts of the Confederacy: Guerrilla Warfare in the West, 1861 - 1865* (Baton Rouge: Louisiana State University Press, 1958); and Michael Fellman, *Inside War: The Guerrilla Conflict in Missouri During the American Civil War* (New York: Oxford University Press, 1989). More current examples include Albert Castel and Tom Goodrich, *Bloody Bill Anderson: The Short, Savage Life of a Civil War Guerrilla* (Lawrence: University Press of Kansas, 1998); Robert R. Mackey, *The Uncivil War: Irregular Warfare in the Upper South, 1861-1865* (Norman: University of Oklahoma Press, 2004); Clay Mountcastle, *Punitive War: Confederate Guerrillas and Union Reprisals* (Lawrence: University Press of Kansas, 2009); and Daniel E. Sutherland, *A Savage Conflict: The Decisive Role of Guerrillas in the American Civil War* (Chapel Hill: The University of North Carolina Press, 2009). For the best historiographical review of guerrilla studies, see Daniel E. Sutherland, "Sideshow No Longer: A Historiographical Review of the Guerrilla War," *Civil War History* 46, no. 1 (March 2000): 5-23.

<sup>4</sup> ArcGIS and Neatline are two software programs that allow users to build digital maps. For more information see, ESRI Software Products, "ArcGIS," ESRI, <http://www.esri.com/software/arcgis> (accessed December 27, 2013); and Scholars' Lab, "Neatline: Plot Your Course in Space and Time," University of Virginia Library, <http://neatline.org/about/> (accessed October 23, 2012).

<sup>5</sup> Research for this essay was derived from my master's thesis: Andrew William Fialka, "Reassessing Guerrillas: A Spatial and Temporal Analysis of Missouri's Civil War" (master's thesis, West Virginia University, 2013). "Reassessing Guerrillas" takes into account instances of guerrilla violence, the Union army, and the women heading southern-sympathizing households which comprised guerrillas' domestic supply line to argue that guerrilla warfare was carefully organized along a web of rebel households *and* in the wake of temporary Union occupational locations. "Reassessing Guerrillas" tracks Missouri guerrillas who sympathized with the Confederacy and does not explore the no-less important role of Union-sympathizing guerrillas. For example, Kansas 'jayhawkers' commonly raided Missouri using guerrilla tactics and contributed to instances of guerrilla violence within the state. Union-sympathizing guerrillas deserve further scholarly attention. Moreover, my focus on central Missouri in this essay does not depict nuanced trends of guerrilla violence throughout the state's different regions.

<sup>6</sup> For examples of the guerrilla conflict before and after the Civil War, see Albert Castel, *Civil War Kansas: Reaping the Whirlwind* (Lawrence: University Press of Kansas, 1997); and Fellman, *Inside War*, 3-22 & 231-266.

<sup>7</sup> To locate instances of guerrilla violence, my map uses data from the Missouri Digital Heritage project's Missouri Provost Marshal Database and selected personal diaries and secondary sources. The Missouri Provost Marshal Database "contains over 72,000 entries" of citizen complaints, petitions, investigations, and loyalty documentation. I used a sample of these records which included only entries with complete spatial information and those containing the words 'guerrilla' or 'bushwhacker.' Missouri's Union Provost Marshal Papers are still an imperfect source because they are incomplete and disorganized. Many of the papers omit locations and dates from their record. Moreover, provost marshals existed in a limited number of cities. Some citizens who made a report had to travel to a central location in order to do so, calling into question the validity of the recorded dates and locations. For a thorough description of Missouri's Union Provost Marshal Papers and to view the online database, see The State Historical Society of Missouri, "Missouri's Union Provost Marshal Papers: 1861-1865," Missouri State Library, [www.sos.mo.gov/archives/provost](http://www.sos.mo.gov/archives/provost) (accessed December 5, 2012). I also drew spatial information from personal

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diaries and secondary sources in regards to Missouri's most notorious guerrillas: William Quantrill, "Bloody" Bill Anderson, and Samuel S. Hildebrand. Those that included the best spatial information include, O.S. Barton, *Three Years with Quantrell: A True Story Told by his Scout John McCorkle* (New York: Buffalo-Head Press, 1966); Samuel S. Hildebrand, James W. Evans, and Abraham Wendell Keith, *Autobiography of Samuel S. Hildebrand, the renowned Missouri "bushwhacker"* (Jefferson City: State Times Printing House, 1870); and Castel and Goodrich, *Bloody Bill Anderson*. To discover the Union army's location, I utilized a digitized version of Frederick H. Dyer's *Compendium of the War of the Rebellion*, the most comprehensive description of the entire Union army's spatial location throughout the war. Frederick H. Dyer, *A Compendium of the War of the Rebellion* (New York: Sagamore Press, 1908). Known and unknown errors exist in Dyer's *Compendium*. Dyer worked at the regimental level and did not include many company level movements in his work. This poses a problem as the Union military sent many companies on search and destroy missions targeting guerrillas in Missouri. Dyer drew much of his evidence from *The War of the Rebellion: A Compilation of the Official Records of the Union and the Confederate Army* (Hereinafter, *O.R.*), 130 vols. (Washington, D.C., 1880-1902), any errors or omissions in that source transmitted to Dyer's work. A large amount of guerrilla violence enacted against civilians targeted members of local Unionist militia companies. Dyer does not account for local Home Guards or civilian militias. This omission further leads historians to assume that guerrillas attacked civilians randomly. Most importantly, Dyer was a Union veteran and Union subjectivity must be taken into account. For example, Andrew William Fialka, "Captain Harry Truman: A Case Study of the Union Military's Use of Guerrilla Tactics Against the Civilian Population in Civil War Missouri" (honor's thesis, University of Missouri-Columbia, 2010) argues that the Union military funded "detectives" and indirectly ordered them to murder guerrillas and their supporters. Such "detectives" do not show up in Dyer's *Compendium* and their actual numbers are unknown. Scholars at Tufts University's Perseus Digital Library digitized Dyer's *Compendium* and allow users to download it as an XML file. The University of Richmond's Scott Nesbit wrote the necessary code to organize this XML file in a format compatible with ArcGIS. Gregory R. Crane, "Perseus Digital Library," Tufts University, <http://www.perseus.tufts.edu/hopper/> (accessed December 6, 2012). I am especially grateful to Scott Nesbit for his expertise and insight concerning data manipulation and available resources for digital historians.

<sup>8</sup> William C. Winter, *The Civil War in St. Louis* (St. Louis: Missouri Historical Society Press, 1994).

<sup>9</sup> Analyzing the Union occupation of St. Louis from a wide, spatial scope simplifies the complex divisions and dissension present within the city. For an example of the Union's difficult management of St. Louis civilians, see LeeAnn Whites, "'Corresponding with the Enemy': Mobilizing the Relational Field of Battle in St. Louis," eds. LeeAnn Whites and Alecia P. Long, eds., *Occupied Women: Gender, Military Occupation, and the American Civil War* (Baton Rouge: Louisiana State University Press, 2009), 103-116; and LeeAnn Whites, "Home Guards and Home Traitors: Loyalty and Prostitution in Civil War St. Louis," in LeeAnn Whites, *Gender Matters: Civil War, Reconstruction, and the Making of the New South* (New York: Palgrave Macmillan, 2005), 65-83.

<sup>10</sup> This ratio steadily changed in favor of temporary occupation throughout the war at yearly intervals of 18:10, 10:13, 3:9, and 6:17. Using Dyer's *Compendium*, I categorized Federal regiments as "stationary" or "temporary" based on the amount of time they spent in a given location *and* the words Dyer used to describe their actions. Any troops who remained in one location for over a month are "stationary," while those staying under a month are "temporary." Moreover, soldiers permanently 'moved,' those on 'campaign,' 'duty,' or 'relief,' and those 'stationed' and 'organized' classify as "stationary." Those on 'guard,' on an 'expedition,' 'scout,' 'operations,' or 'reconnaissance' and those involved in a 'skirmish' or 'actions' classify as "temporary." Unfortunately, these ambiguous descriptors depicting the Union army's activities are typical in Dyer's *Compendium* and highlight the gap between official Union policy and Union troops' actions *on the ground*.

<sup>11</sup> Assistant Provost Marshal Charles D. Ludwig to Lieutenant A. J. Harding, Fulton, September 2, 1864. See, *O.R.*, Series 1, Vol. 41, Part 3, 35; Fellman, *Inside War*, 123; Mountcastle, *Punitive War*, 1; and *Washington D. C. National Archives*, Series: Court Martial Case Files, compiled 12/1800 – 10/1894, Case against J. W. Terman (Hereinafter *Truman's Military Commission Case*), 226-228.

<sup>12</sup> Mark Grimsley provides abundant examples of Union troops who abused their orders to forage and targeted civilians. Although Grimsley posits that this was the exception to the rule, Union actions in Missouri stand in contrast to his argument. Moreover, Grimsley credits the orders of Union generals for practicing restraint and ignores the difference between official orders and Union troops' actions *on the ground*. See, Mark Grimsley, *The Hard Hand of War: Union Military Policy Toward Southern Civilians, 1861-1865* (New York: Cambridge University Press, 1995). Also see, Stephen V. Ash, *When the Yankees Came: Conflict & Chaos in the Occupied South, 1861-1865* (Chapel Hill: The University of North Carolina Press, 1995), 76-107; and Phillip Shaw Paludan, *A*

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*People's Contest: The Union & Civil War, 1861-1865* (Lawrence: University Press of Kansas, 1988), 76-84. For examples of Union actions in Missouri see, Fellman, *Inside War*, 29-37.

<sup>13</sup> From 1861 to 1864, the ratio of stationary versus temporary Union occupation consistently changed from 2:1, 2:7, 0:2, to 1:5.

<sup>14</sup> Thomas Goodrich, *Bloody Dawn: The Story of the Lawrence Massacre* (Kent: The Kent State University Press, 1991), 20-25; Castel and Goodrich, *Bloody Bill Anderson*, 26-27; O.S. Barton, *Three Years with Quantrell*, 78-79; Brownlee, *Gray Ghosts of the Confederacy*, 124; Sutherland, *A Savage Conflict*, 194; and Fellman, *Inside War*, 95.

<sup>15</sup> Jay Monaghan, *Civil War on the Western Border, 1854-1865* (New York: Bonanza Books, 1955), 112.

<sup>16</sup> For information on Sterling Price's exploits in Missouri see, Monaghan, *Civil War on the Western Border*, 307-345.

<sup>17</sup> For an excellent example of scholars who are re-engaging the possibilities of technology and humanities scholarship, see, David J. Bodenhamer, John Corrigan, and Trevor M. Harris, eds., *The Spatial Humanities: GIS and the Future of Humanities Scholarship* (Bloomington: Indiana University Press, 2010). To see how historians use spatiotemporal methods to revisit old historical problems and the challenges to digital scholarship, see, William G. Thomas III and Edward L. Ayers, "An Overview: The Differences Slavery Made: A Close Analysis of Two American Communities," *American Historical Review* 108, no. 5 (December 2003): 1299-1307. For examples of how historians have attempted to wed a digital and textual argument, see, Anne Kelly Knowles, *Past Time, Past Place: GIS for History* (Redlands: ESRI press, 2002); William G. Thomas III, *The Iron Way: Railroads, the Civil War, and the Making of Modern America* (New Haven: Yale University Press, 2011); and Digital Scholarship Lab, "Visualizing Emancipation," The University of Richmond, <http://dsl.richmond.edu/emancipation/> (accessed July 28, 2013).