Exploring Nature's Agency: An Environmental Study of the Campaign for Savannah from 1778-1779

A Monograph

by

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Abstract

Exploring Nature's Agency: An Environmental Study of the Campaign for Savannah from 1778-1779, by MAJ Robert E. Pushard, 41 pages.

The fight for Savannah during the American Revolution included two major operations: the British amphibious assault against the American defenses and the failed Franco-American siege and assault on the British defenses. This monograph explores how natural forces directly contributed to commanders' sensemaking throughout the campaign. Analyzing the sea, the terrain, and disease as actors in the campaign shows that nature did not just provide a stage for the fight to occur, but took part in the fight itself. Natural forces did not take a side; the sea, the terrain, and disease did not favor the British, Americans, or French, but each contributed into the complex system that is warfare. The way that each commander viewed himself in relation to nature directly affected the decisions that they made and the outcome of the engagements.

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Introduction

Nature has already done so much for the defence of our frontier that it requires the assistance of very little art to render it respectable.

-Lieutenant Colonel Archibald Campbell, Journal of Lieutenant Colonel Archibald Campbell

[B]ut this I know, that notwithstanding I might from military policy hold out the idea that the enemy would land there, and that it was very defensible, I really never thought so.

-General Robert Howe, Testimony at Court Martial of Robert Howe

After the British efforts of early 1778 failed to quell the colonial uprising, the Crown urged Lieutenant General Sir Henry Clinton to decisively defeat General George Washington's army or to take the war south. Unable to defeat Washington's army, Clinton set his sights on Savannah, the capital of Georgia and a significant port city. In the fall of 1778, Lieutenant General Clinton ordered Lieutenant Colonel Archibald Campbell to focus his efforts on the Southern theater and capture Savannah. The American defense of Savannah was short lived and resulted in a quick British victory and the subsequent occupation. Nine months later, a French fleet under the command of Count Charles Hector Comte d'Estaing arrived from the Caribbean to join forces with Major General Benjamin Lincoln in a Franco-American attempt to recapture the city. The final battle of the operation resulted in a devastating defeat that forced the withdrawal of the French fleet and the retreat of the American forces. The British occupied Georgia's capital until they abandoned it in July of 1782.

The speed and relative ease with which the British defeated the American defenses of Georgia, and the subsequent drawn-out failure of the combined Franco-American effort to retake the city deserve further exploration. While there exists a small number of studies analyzing the campaign, none have offered a thorough analysis of the relationship between ecology, actors, and outcomes. Chronological histories, relationship analyses, and limited environmental studies of the revolution exist, but none look specifically at the relationship between ecological forces, key

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decision makers, and the outcomes during the campaign for Savannah. Primary sources indicate that the sea, the terrain, and disease all held agency in the outcome of the fight over Savannah, and that key decision makers held varying views of their role in nature and how their forces could interact with and within the environment.

Campaign Overview

The campaign for Savannah began when British forces under Lieutenant General Sir Henry Clinton failed to decisively defeat General George Washington's army in the north. The June 1778 battle of Monmouth had been a draw, with both sides able to claim victory, but neither able to impose its will on the other. The British then embarked on a southern strategy in which they hoped to draw the support of loyalists in Georgia and the Carolinas.¹ General Clinton ordered Lieutenant Colonel Archibald Campbell to take command of an expeditionary force and "proceed with the troops embarked under your command, and by rapid movement endeavor to take possession of Savannah in the Province of Georgia."² Lieutenant Colonel Campbell's forces were to sail from New York on board ships commanded by Commodore Hyde Parker and eventually link up and fall under the command of Major General Augustine Prevost, who would be marching north from St. Augustine, Florida.³ The expeditionary forces numbered just over 3000 men consisting of the "1st and 2nd Battalions 71st Regiment of Highlanders, 2 Battalions of Hessians, and 4 Battalions of Provincials, which, with 36 Men of the Royal Artillery (a miserable proportion for so many regiments of Foot) made 3041 Rank and File.".⁴ The four provincial battalions were the 1st and 2nd battalions of Oliver De Lancey's Brigade of New York Loyalists,

¹ Scott Martin and Bernard Harris, *Savannah 1779: The British Turn South* (Oxford: Osprey, 2017), 5.

² Lieutenant Colonel Archibald Campbell Esq., Journal of An Expedition against the Rebels of Georgia in North America Under the Orders of Archibald Campbell Esquire LIEUT. COLOL of His Majesty's 71st REGIMT, ed. Colin Campbell (Darien: Ashantilly Press, 1981), 4.

³ Martin and Harris, Savannah 1779, 33-36.

⁴ Campbell, *Journal*, 4.

the 3rd Battalion of the New Jersey Volunteers (also known as Skinner's Regiment), and the New York Volunteers. The Hessian battalions were known by their commander's names: Woellwarth, and Wissenbach.⁵ They set sail from Staten Island on 12 November and commenced landing operations at Girardeau's Plantation, along the Savannah River, forty-seven days later on 29 December.



Figure 1. George Romney, *Major-General Sir Archibald Campbell*, ca. 1790, oil on canvas, National Gallery of Art, accessed 6 May 2021, https://www.nga.gov/collection/art-object-page.46055.html.

Lieutenant Colonel Campbell's force faced the defenses at Savannah commanded by Major General Robert Howe, who commanded a mix of Continental brigades from Georgia and South Carolina, as well as both state and city militia. His one brigade of artillery possessed but nine cannons. They defended the city with a total of 854 men.⁶ The battle for Savannah itself lasted less than a day. General Howe decided to lightly contest the landing with a detachment of soldiers from Colonel Samuel Elbert's Georgia Brigade. Colonel Elbert requested artillery be placed in support of the detachment and that entrenching tools be provided in order to fortify the

⁵ Campbell, Journal, 101-102.

⁶ Martin and Harris, Savannah 1779, 23.

position. Howe agreed to consider, and later informed Elbert that the entrenching tools were on the way but the artillery would not be moved.⁷ The tools never arrived, and Elbert ordered the detachment commander to hold fire until the landing party was within fifty to sixty yards of the position and to then "commence a cool, deliberate fire, and retreat up until he was either supported or forced from his ground."8 Howe ordered the defensive line to hold on the "Fair-Lawn" approximately one mile from the landing spot at the edge of fields surrounding Savannah.⁹ The battle was over in hours. The detachment at Brewton's Bluff, which overlooked the landing site, fired and retreated as ordered. Lieutenant Colonel Campbell's forces outmaneuvered General Howe's defenses and turned his right flank to the south of the city. Colonel George Walton, of the Georgia Militia, recognized the weakness in their line and convinced General Howe to allow his militiamen to defend the flank. His stand supported the retreat of the main defenses into and then out of the city, but did little to slow the advancing British troops.¹⁰ Campbell took the city while sustaining just seven killed in action and nineteen wounded. American losses numbered eighty-three killed in action and thirty-eight officers and 415 noncommissioned officers and soldiers captured. An additional thirty Americans drowned attempting to retreat through the flooded swampland.¹¹

During the following nine months, the British reinforced the garrison at Savannah with personnel, guns, and improved fortifications. The British forces, under the consolidated command of General Augustine Prevost, ventured into Georgia's interior sparring with Americans under the

⁷ Proceedings of a General Court Martial, Held at Philadelphia, in the State of Pennsylvania, by Order of His Excellency General Washington, Commander in Chief of the Army of the United States of America, for the Trial of Major General Howe (Philadelphia: Hall & Sellers, 1781), 18, accessed 6 May 2021, https://quod.lib.umich.edu/e/evans/N13495.0001.001?rgn=main;view=fulltext.

⁸ Ibid.

⁹ Ibid., 5.

¹⁰ Alexander A. Lawrence, "General Robert Howe and the British Capture of Savannah in 1778," *The Georgia Historical Quarterly* 36, no. 4 (December 1952): 318.

¹¹ Campbell, Journal, 28-29.

command of Major General Benjamin Lincoln at Beaufort, South Carolina; Kettle Creek, Georgia; Augusta, Georgia; and Stono Creek, South Carolina.¹² By the time the French and Americans attacked in October of 1779, the garrison was heavily fortified and occupied by at least 4800 men supported with eighty-four cannons.¹³

The French arrived off the coast of Savannah in early September of 1779. At the same time, General Lincoln began assembling and moving his army south from Charlestown. The French commander, Vice Admiral Henri Count d'Estaing, decided on a debarkation at Beaulieu Plantation, 12 miles south of Savannah. The French and Americans laid siege to the city beginning on 16 September. The siege was unsuccessful and the operation culminated in a failed assault on 9 October..¹⁴



Figure 2. P. Frieselhem. *Charles Henri, Comte d'Estaing,* ca. 1780, color etching and mezzotint, National Gallery of Art, accessed 6 May 2021, https://www.nga.gov/collection/art-object-page.43331.html.

¹² Dan L. Morrill, *Southern Campaigns of the American Revolution* (Baltimore: Nautical & Aviation, 1993), 205.

¹³ Martin and Harris, *Savannah 1779*, 24.

¹⁴ Ibid., 87.

Historiography

Environmental and ecological histories explore relationships between the environment, actors, and outcomes. Recognizing how historical participants viewed the environment and attempted to harness, mitigate, or ignore its effects leads to a richer understanding of their decisions and the outcomes. Lisa Brady's *War Upon the Land* provides a thorough review of the environmental literature exploring the agency of nature.¹⁵ She argues that the way nineteenth-century thinkers viewed nature shaped the strategic thinking of Civil War decision makers and that nature itself shaped their decisions. She references environmental historian Linda Nash to develop this concept, that "human agency cannot be separated from the environments in which that agency emerges," and "it is worth considering how our stories might be different if human beings appeared not as the motor of history but as partners in a conversation with the larger world."¹⁶ Brady goes on to argue that the "conversation" between nature and humans shaped the outcome of the war just as the war shaped the physical characteristics of nature.¹⁷

David C. Hsiung recognizes the uptick in environmental histories and the stark absence of environmental histories of the American Revolution in the apt analogy "Although the literature of American environmental history has grown over the past several decades like a Lake Erie algae bloom, it has largely bypassed the Revolution's shores."¹⁸ His own contribution explores the natural resources available to American colonists, specifically looking at the availability of naturally occurring nitrogen in order to produce saltpeter, one of the primary ingredients of

¹⁵ Lisa Brady, War Upon the Land: Military Strategy and the Transformation of Southern Landscapes during the American Civil War (Athens: University of Georgia Press, 2012).

¹⁶ Linda Nash, "The Agency of Nature or the Nature of Agency," *Environmental History* 10, no. 1 (January 2005): 69.

¹⁷ Brady, *War*, 6.

¹⁸ David C. Hsiung, "Environmental History and the War of Independence," in *The American Revolution Reborn*, ed. Patrick Spero and Michael Zuckerman (Philadelphia: University of Pennsylvania Press, 2016), 208.

gunpowder.¹⁹ The shortage of domestically produced gunpowder and Americans' consequent reliance on foreign supplies was a proximate cause that directly affected strategic and operational planning throughout the American War for Independence. Historian Jimmy Dick describes the situation as desperate, noting that the domestic supply could not support the revolutionaries' ambitions, and if not for the flow of French gunpowder, the Revolution would have been ultimately unsuccessful.²⁰

J.R. McNeil's *Mosquito Empires* examines the linkages between ecology, specifically the spread of disease through mosquitos, and operational level decisions and strategy in the greater Caribbean between 1620 and 1914. He argues that the British Southern campaigns were a strategic failure that led to their ultimate defeat at Yorktown, due in part to the British soldiers' greater susceptibility to malaria.²¹ McNeil does not specifically address Savannah in 1778-1779; his primary Revolutionary War history focuses on operations in Georgia and the Carolinas from 1780-1781. He does, however, make the statement that "British forces active in Georgia and South Carolina before 1780 had suffered in the ague season and tried to time operations to avoid it."²² This assertion connects Lisa Brady's two arguments (the agency of nature and the effects of the actors' views of nature) to the decision makers in the American Revolution.

In "Revolutionary Fever: Disease and War in the Lower South, 1776–1783," Peter McCandless explores the relationship between malaria and the Savannah campaign closer. He implies that General Clinton chose the time of Lieutenant Colonel Campbell's expedition based on the cooler temperatures and the "healthy" season.²³ He also notes a potential strategic effect of

¹⁹ Hsiung, "Environmental History," 205-230.

²⁰ Jimmy Dick, "The Gunpowder Shortage," *The Journal of the American Revolution*, accessed 6 May 2021, https://allthingsliberty.com/2013/09/the-gunpowder-shortage/.

²¹ J.R. McNeill, *Mosquito Empires: Ecology and War in the Greater Caribbean, 1620-1914* (New York: Cambridge University Press, 2010), 199.

²² Ibid., 212.

²³ Peter McCandless, "Revolutionary Fever: Disease and War in the Lower South, 1776–1783," *Transactions of the American Clinical and Climatological Association* 118 (2007): 230.

malaria in Savannah in reference to the death of the British officer Lieutenant Colonel John Maitland. Maitland's death from fever during the Franco-American siege of Savannah is attributed to malaria and it is noted that the loss of him in particular may have shaped the outcome of the campaign in the Carolinas.²⁴

"Contested Grounds: An Environmental History of the 1777 Philadelphia Campaign," by Blake McGready, provides an analysis of the Philadelphia campaign by analyzing the effects of nature, particularly disease, weather, and terrain, on the outcomes of the campaign. In terms of Lisa Brady's framework, his analysis focuses on the agency of nature, but not the decision makers' perceptions of nature. He concludes that while natural forces were decisive in various aspects of the campaign, the net result was neutral; neither side benefited more or less than the other. Additionally, he concludes that environmental factors provided a post-action excuse for poor performance, with many actors indicating they could have done better if not for fog, rain, wind, etc..²⁵ While he does not address it directly, these excuses provide a glimpse into the way actors viewed their relationship with nature.

A master's thesis by Jonathan T. Engel, "The Force of Nature: The Impact of Weather on Armies During the American War of Independence, 1775-1781," devotes a section to the Southern campaigns of the revolution. Specific to Savannah he notes that the combined Franco-American forces' final assault attempted to make use of the heavy morning fog, but ultimately the fog's only significant effect was to cover the forces final retreat after the unsuccessful operation. He also notes that the French felt pressured to launch the operation and force decisive action because of the impending winter storms and their potential impact on naval operations. Engel concludes that despite "no meteorological determinism…weather…was always present, subtly

²⁴ McCandless, "Revolutionary Fever," 229.

²⁵ Blake McGready, "Contested Grounds: An Environmental History of the 1777 Philadelphia Campaign," *Pennsylvania History: A Journal of Mid-Atlantic Studies* 85, no.1 (2018).

but powerfully affecting the conduct of the war."²⁶ His simply stated but powerful conclusion that weather ultimately "affects human choices" is a continuation of Linda Nash's argument that "human agency cannot be separated from the environments in which that agency emerges."²⁷

The chronological history of the capture of Savannah and the subsequent attempt at recapture has been explored by few historians in great depth. Dan Morrill's Southern Campaigns of the American Revolution dedicates a chapter each to the British occupation and the subsequent attempt at the recapture of Savannah. He concludes that a major flaw in the Southern campaign was the assumption that "Tories would rise up in great numbers and assume the major share of the burden."²⁸ Despite this miscalculation, it did not negatively affect the British seizure and defense of Savannah. Morrill's analysis identifies some key findings germane to an environmental study. First, he highlights that the patriot army of Major General Charles Lee succumbed to yellow fever and malaria in Georgia's "steamy swamps and marshes" during the summer of 1776.29, a history that was surely in the mind of General Howe and General Prevost as each occupied the Georgian capital at different times throughout the following six years. Second, Morrill largely attributes the American loss of Savannah to the ineffectual relationship between Howe and the state and local leadership that controlled Savannah. His assessment is sympathetic to Howe's decision making and he notes the difficulty in defending the ground "because there were a dozen places above and below Savannah where the redcoats could disembark."³⁰ Finally, Morrill concludes that the militiamen under command of Colonel Walton were surprised by

²⁶ Jonathan T. Engel, "The Force of Nature: The Impact of Weather on Armies during the American War of Independence, 1775-1781" (master's thesis, Florida State University, 2011), 70.

²⁷ Nash, "Agency of Nature," 69.

²⁸ Morrill, Southern Campaigns, 51.

²⁹ Ibid., 42.

³⁰ Ibid., 44.

Lieutenant Colonel Campbell's flank attack.³¹ This argues against the contention that Walton recommended defending the flank against what ended up being Campbell's main effort.

In his assessment of the Franco-American siege to recapture Savannah, Morrill concludes that the British success in defending the town was more a function of mismanagement on the parts of Count d'Estaing and General Lincoln than it was the "valor of the British defenders."³² He notes multiple areas for exploration by the environmental historian. First, he recognizes General Prevost's state of mind in the "torpid environment" of the Georgian summer where "time seems suspended in a stuporous routine of suffering."³³ He asserts that the weather lulled Prevost into a false assurance while Governor Sir James Wright, recently restored as royal governor of the province, simultaneously recognized that October would bring the end of hurricane season and would likely allow the powerful French navy to sail from the Caribbean toward the colonies' southern shores.³⁴ He notes the surprise of both when the navy made its appearance in early September.³⁵ Second, he notes the effects of natural terrain and the terrain shaping operations undertaken by the British. During the ultimate assault on the town, General Prevost anticipated the attack to come across the firm ground to the east, on his left, however D'Estaing chose to attack through the swamp on the British right believing that it would provide cover for his advancing troops.³⁶ The attack ran head on into the defenses prepared by the Chief Engineer, Captain James Moncrief, who employed techniques he had learned earlier in the war, and created abattis and additional defensive works out of sand. Morrill highlights the effectiveness by quoting a French observer who notes that the works were "more easily repaired than damaged."³⁷ Finally,

³⁴ Ibid.

³¹ Morrill, Southern Campaigns, 45.

³² Ibid., 65.

³³ Ibid., 55.

³⁵ Ibid., 56.

³⁶ Ibid., 62.

³⁷ Ibid., 61.

Morrill makes brief mention of factors on board d'Estaing's ships that were weighing on the decision maker. He notes that every day the armada was dumping between 30 and 35 corpses overboard. Scurvy and dysentery plagued the crews and the ever-possible winter storms lingered on their minds..³⁸

Alexander A. Lawrence provides the sole book-length history of the Franco-American siege in Storm over Savannah: The Story of Count d'Estaing and the Siege of the Town in 1779. It is a detailed and thoroughly researched analysis of the siege and its failure to regain the city. Lawrence's history paints a rich picture of the natural environment while focusing its attention on attitudes, relationships, and personal histories. Of interest to the environmental history, Lawrence explores in detail the events that allowed the British to be reinforced by Lieutenant Colonel John Maitland's regiment despite the French and American forces having already arrived to lay siege on the city. Maitland's forces navigated their way over land, swamp, and river, making use of local guides all the while averting French and American forces attempting to halt their movement. Both Count d'Estaing and General Lincoln understood the other to be in charge of stopping the force, and the subordinates who did attempt to intercept the reinforcements were stopped by their own understanding of the terrain.³⁹ The episode had a telling effect on the outcome of the battle and highlights how the relationships between d'Estaing, Prevost, Lincoln, and Maitland were intricately tied to their relationships with nature. Lawrence's work also highlights the urgency felt by both the Americans and the British with regard to the operations surrounding Savannah. He follows up a quote from Lord Germaine, "Should Georgia be lost I shall have little hope of recovering that province and also reducing and arming South Carolina" with his own observation

³⁸ Morrill, Southern Campaigns, 61.

³⁹ Alexander A. Lawrence, *Storm Over Savannah: The Story of Count d'Estaing and the Siege of the Town in 1779* (Athens: University of Georgia Press, 1951), 41-47.

that "Three years of cruel civil war that followed...might have been spared if Savannah had fallen to the Allies in 1779."⁴⁰

Lawrence also provides a brief history of the British capture of Savannah in "General Robert Howe and the British Capture of Savannah in 1778." He explores the controversial history of General Howe's defense of Savannah by examining the transcripts of his court martial as well as the personal histories of those involved. He notes that (at the time of the writing) General Howe was still looked at as a failure in the state of Georgia, but other histories had painted his stand in the capital with less malice. Lawrence's exploration of Howe's reasons for not defending Brewton's Bluff and for not defending his right flank, provide insight to the environmental historian by aiding in the attempt to understand General Howe's orientation to the problem at hand. Ultimately, Lawrence concludes that Howe's reasoning for not strongly defending Brewton's Bluff were backed by sound military logic, but the failure to defend the route around his right flank and through the swamp to the southeast of Savannah was an oversight. Despite this, Lawrence notes that Howe's ultimate failure was "in recognizing too late the perilous position of Savannah and in not earlier evacuating the troops and removing the stores."⁴¹

Decisions are often analyzed in relation to those who make them, those who are affected by them, and the environment in which they are made. The environment in which decisions are made is not a static entity on which human actors can impose their will, but is an actor in itself. Analyzing these events through the lenses of nature's agency and decision makers' sensemaking provides a deeper understanding of the outcomes. The organizational theorist Karl Weick described sensemaking as a retrospective and ongoing social process that is focused on extracted cues from an unfolding environment. The entire process is grounded in the individual's identity and strives for plausible over accurate results..⁴² His model provides a frame through which to

⁴⁰ Henry Clinton to George Germain, n.d., quoted in Lawrence, *Storm*, xi.

⁴¹ Lawrence, "General Robert Howe," 327.

⁴² Karl Weick, *Sensemaking in Organizations* (London: Sage, 1995), 17.

understand the role and agency of nature. The natural environment provides cues to be extracted as well as a sensible environment that is both acting and acted upon. Additionally, Weick's characteristics provide the framework through which to view how actors' identities shape their sensemaking that drives them not towards what is objectively correct, but what is cognitively possible. Frans Osinga provides a similar model in his expansion and analysis of air theorist John Boyd's "Observe, Orient, Decide, Act (OODA) Loop." Osinga's "real OODA loop" recognizes that one's orientation to a problem is influenced by the analysis and synthesis of cultural traditions, genetic heritage, new information, and previous experiences. This orientation shapes decision making and actions, which all take place within an "unfolding interaction with [the] environment."⁴³ This understanding provides a frame to analyze the campaign for Savannah.

The Sea

The majority of the conflict over Savannah occurred on land, but the sea was a major actor that shaped the operations to get there. Lieutenant Colonel Campbell, a land-based commander, viewed his interactions with the sea as a way in which to achieve an end. To him, the fleet was a one-way mode of transportation; the sea was a physical obstacle that forced him into continuous reevaluation and sensemaking. The sea's major impacts on his expedition were delay and property damage. His French counterpart, Count d'Estaing was burdened with the responsibility of a fleet; the sea was his primary means of existence. When the French tried to capture Savannah, the sea presented itself as both a physical obstacle that caused delay and destruction as well as a cognitive obstacle, constantly pulling attention away from Savannah.

The sea began to exert its influence on Lieutenant Colonel Campbell through destruction and delays immediately upon his embarkation. He embarked with Commodore Hyde Parker on 9 November 1778 from Staten Island. They were delayed off of Sandy Hook, New Jersey, the very

⁴³ Frans P.B. Osinga, *Science, Strategy, and War: The Strategic Theory of John Boyd* (London: Routledge, 2007), 231.

next day by unfavorable conditions. Campbell described the first casualty of the expedition in his journal, "this evening the fleet reached the hook, when they anchored, the weather appearing too rough to proceed. In the night the artillery transport commanded by Bryson, parted from her cables, and drove on shore upon the Hook greatly damaged."⁴⁴ The expeditionary force spent the next sixteen days contending with nature while refitting a new artillery transport and transferring to the men and stores from the grounded vessel. On 26 November they finally set sail with a new artillery transport and what Campbell described as "favorable and moderate" winds. They arrived off the coast of Cape Fear, North Carolina twenty-five days later "after being repeatedly dispersed by hard weather," and sailing against the north-flowing Gulf Stream.⁴⁵ Lieutenant Colonel Campbell recognized the efforts of Commodore Parker in battling the relentless weather, noting that his "judicious disposition of his ships, and his indefatigable exertions in collecting the transport after every storm did him the highest honour on this occasion, as an able and zealous officer."⁴⁶ They were now within striking distance of Georgia's capital. The journey, which should have taken three to four weeks, took forty-four days. In addition to the destroyed artillery ship, the fleet also lost one transport and two horse sloops. It was the force of the sea and not Americans that took a toll on the expedition (although the lost transport would later be captured by Americans in St. Helena Sound, east of Beaufort, South Carolina).⁴⁷ Two more days of favorable weather brought the fleet to the mouth of the Savannah river. From here, Commodore Parker and Lieutenant Colonel Campbell negotiated the littoral zone to mass ground forces and seize the capital.

The first forty-six days of the expedition show how influential nature, and specifically the sea, was on operations. As Lisa Brady and Linda Nash argued, it is impossible to separate the

⁴⁴ Campbell, *Journal*, 10.

⁴⁵ Ibid., 13.

⁴⁶ Ibid., 14.

⁴⁷ Ibid., 106.

agency of actors from the environment in which they act. In this case, the agency of Lieutenant Colonel Campbell must be understood in context of the environment at sea. His expedition was at the mercy of the winds and the tides as much as it was affected by his own decision making and the actions of the Americans. Using Nash's analogy, Campbell was not the "motor" of history but a partner in a larger conversation with nature in which the events unfolded. The conversation continued as Lieutenant Colonel Campbell attempted to establish a foothold to land his soldiers and attack the city.

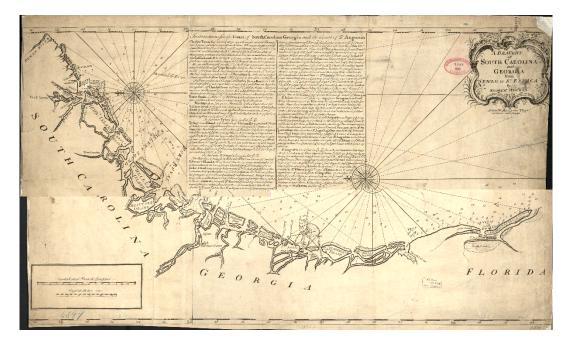


Figure 3. Andrew Hughes, *A Draught of South Carolina and Georgia from Sewee to St. Estaca*, ca. 1778, map, Library of Congress, accessed 6 May 2021, https://www.loc.gov/item/74692766/.

Natural forces continued to compel Lieutenant Colonel Campbell to bend to their power. The entrance to the Savannah river is guarded by a naturally occurring sandbar that, at low tide, prevents large ships from entry. John Richardson, a British privateer on board *Vengeance* described the harbor as "the best bar harbour in America having over it at low water at least three fathoms."⁴⁸ Commodore Parker expressed similar sentiments when he described the harbor as "a

⁴⁸ John Richardson to John Porteous, March 15, 1779, quoted in Henry Howland, "A British Privateer in the American Revolution," *The American Historical Review* 7, no. 2 (1902), 293-294.

fine harbour for ships not drawing more than seventeen feet draught of water, and I think a fit port for the cruising frigates, from two and thirty guns downwards."⁴⁹ The irony of the "fine harbor" was that the very bar that protected it from rough seas also made it difficult to access by ship. On 24 December the fleet managed to get most of the ships into the harbor, but eleven ships, including *Vigilant*, a converted transport, were unable to make it over the bar.⁵⁰ The following morning, Christmas 1778, the eleven ships were driven out to sea. Their attempts to gain entry into the harbor prevented them from setting anchor before the tides shifted. The ebbing tide and a night of "boisterous" weather pushed the ships seaward.⁵¹

That evening, Lieutenant Colonel Campbell dispatched a company of Highland light infantry to reconnoiter "for the purpose of ascertaining the state, disposition, and strength of the rebels at the town of Savannah."⁵² It returned with a slave and overseer reporting 1800 men in the garrison, more reinforcements expected, and perhaps most importantly that, "on account of the marshes, there was no landing place nearer than Sheridoe's [Girardeau's] Plantation...one mile in a direct line from the town of Savannah."⁵³ Campbell wrote in his journal that upon conferring with Commodore Parker they agreed that the available troops should attack immediately and secure a foothold at Girardeau's Plantation..⁵⁴ The remainder of the army would join the next day should the conditions allow. Despite their agreement and no American intervention, they were unable to attack. Campbell noted that "The night proved so boisterous, and the wind so contrary, it was impossible to execute this service.".⁵⁵ Commodore Parker recalled the situation slightly

⁵² Ibid.

⁴⁹ Hyde Parker to Phillip Stephens, January 14, 1779, in *The Naval Chronical*, vol. 5 (London: Bunney and Gold Shoelane, 1801), 290-291.

⁵⁰ Campbell, Journal, 18.

⁵¹ Ibid., 20.

⁵³ Ibid., 21.

⁵⁴ Girardeau's Plantation, which sat below Brewton's Hill.

⁵⁵ Campbell, *Journal*, 21.

differently. He wrote that no operations would be able to take place because *Vigilant* and the transports were unable to cross the bar. He then noted that both he and Lieutenant Colonel Campbell agreed that "no time was to be lost, therefore the moment the *Vigilant* was ready, which was the 28th, she was ordered to proceed up the river."⁵⁶ Ultimately, crossing the bar required the right tide state and the right weather conditions, and neither were present on the night of 24 December.

Foul weather and the ebb tide prevented a movement up the river, but the difference in reported history highlights differences in the sensemaking of the naval commodore and of the army lieutenant colonel. Lieutenant Colonel Campbell assessed the risk associated with the reported enemy disposition and his ability to attack the enemy despite not all his troops being available. His conclusion was that he needed to attack at once to secure a foothold. Commodore Parker received the same intelligence report. Interestingly, in his recollection he first noted the "two row galleys in the mouth of the Augustine creek" and the shore batteries that were "out of repair" before mentioning anything about the troops garrisoned in the capital.⁵⁷ His sensemaking revolved around the preservation of his fleet. His attention was drawn to what he considered important. It is possible that both men ended their conversation with each other thinking that the other understood the situation the same as they did. Commodore Parker did not plan on going up the river without *Vigilant*; Lieutenant Colonel Campbell wanted to get his men ashore as quickly as possible. This glimpse into the two commander's decision making illuminates the work of Karl Weick, John Boyd, and Linda Nash. Specifically, the sensemaking of the two commanders was grounded in their social identities and service backgrounds, focused on extracted cues, and driven by plausibility instead of absolute accuracy. They both executed their agency while relying on the same extracted cues, that due to their internal orientations and based on identity, were understood

⁵⁶ Parker to Stephens, 288.

⁵⁷ Ibid.

differently. None of this agency can be taken out of the context that was provided by the natural environment that was unfolding around them.

Once over the bar and into the Savannah anchorage at Five Fathom Hole, Lieutenant Colonel Campbell faced the terrain of Savannah and the American forces, both attempting to keep him out and push him back to sea. The littoral zone continued the sea's work by delaying him once again. The assault began on 28 December "on the setting of the tide" with Parker and Campbell leading the assault from onboard the *Alert* sloop.⁵⁸ The attack began slowly, and owing to what Campbell described as a "slackened" wind and tide, it took two hours to come within range of the American forces. Once within range, the superior British guns quickly dispersed the American galleys, but not in time to beat the tide. With the wind gone, the tide pushed the forces seaward, and a number of the transports grounded four miles below the intended disembarkation point. Campbell was again forced to wait; his forces made landfall the following morning. The perpetual optimist, he noted the benefits of "having the day before me, and the hope of being able to land my whole force in a short time, and bring the enemy to a general action.".⁵⁹

The sea delayed the British and forced them to continuously refine their plan. It also exacted physical damage and casualties on their force; but to Lieutenant Colonel Campbell, the sea was just an obstacle to overcome on the way to the objective. Because Campbell's force was not assigned to the fleet, and Commodore Parker had no need to stay with the army after the landing, they were both free to make appropriate decisions that centered on their orientations as land-based or sea-based commanders. Commodore Parker's focus on fleet preservation and Lieutenant Colonel Campbell's focus on land operations foreshadowed the two competing orientations that the French commander and commodore Count d'Estaing would need to contend

⁵⁸ Campbell, *Journal*, 21.

⁵⁹ Ibid., 22.

with when he tried to seize Savannah, as both the naval and land-based commander in one, the following year.

The same month that Lieutenant Colonel Campbell and his force sailed toward Georgia, the French commander, Count d'Estaing, aborted an amphibious operation in Rhode Island. The first combined Franco-American operation was cut short, and unsuccessful. Severe weather, common for that time of year, along with a superior British fleet, forced the count and his fleet to sea.⁶⁰ The retreat was certainly on the Frenchman's mind when he returned eleven months later to join forces with Major General Lincoln and attempt to retake Georgia's capital. The story of the Franco-American siege of Savannah is a story of competing priorities, missed opportunities, and constant antagonization from the sea. Ultimately, the British defenders capitalized on Count d'Estaing's failure to balance his amphibious operation with the ever-present threat that the sea held over his fleet.

Count d'Estaing's attack on the Georgia capital began in the same way that Lieutenant Colonel Campbell's had eleven months earlier: delayed. The French fleet departed the Windward Islands of the Caribbean on 23 August 1779 and anchored off the coast of Georgia on 1 September 1779. They spent the next four days fighting the wind and sea, unable to approach land. A French officer described their situation in his journal, "the sea very rough. The winds veering from east to south compelled a part of the squadron, which had lost both cables and anchors, to put to sea."⁶¹ The rough seas during the first week of September prevented the French from landing, but they did not prevent the British from observing the fleet. The garrison at Savannah recognized the French fleet on 3 September 1779 as noted by in an English journal of the siege, "on Friday, the third of September last, several large ships were seen off our bar…they

⁶⁰ Martin and Harris, Savannah 1779, 12.

⁶¹ "French Officer's Journal," in *The Siege of Savannah, in 1779, As Described in Two Contemporaneous Journals of French Officers in The Fleet of Count D'Estaing*, ed. Charles C. Jones Jr. (Albany: Arno Press, 1874), 12.

were plainly discovered to be French."⁶² Over the following week the British observed the French as they probed the area, landed on Tybee Island, and eventually settled on a beachhead south of the harbor near Ossabaw Island.

Count d'Estaing's forces continued to face delays. The British restricted access to the Savannah River by intentionally scuttling ships and overwatching the obstacles with armed galleys and shore batteries. An English journal noted the effectiveness of the technique, "One of the enemy's gallies, which came up as far as the *Rose* man-of-war, (sunk on the garden bank), was soon obliged by the fire from this battery to be towed off to her former station."⁶³ Unlike the previous capture of Savannah, the British defense of the river itself created a shortage of landing opportunities close to the city. The admiral determined his best landing point was near the mouth of the Ogeechee River, a spot called Beaulieu, thirteen miles south of Savannah. On 11

The landing went unopposed by the British, but it was far from easy. The operations inflicted great mental and physical strain on the French forces. Count d'Estaing described the operation as "infinitely dangerous" and noted a serious risk of the entire landing force drowning.⁶⁵ The French had no knowledge of the reefs or the seemingly endless creeks that flowed off the main channel of the Little Ogeechee River.⁶⁶ They finally made it to their intended beachhead off the Vernon River, a tributary of the Little Ogeechee, just before a heavy storm made landfall. The transports were sent back to gather troops for a second landing, but not in time

⁶⁵ Lawrence, Storm, 29.

⁶² "Journal of the Siege of Savannah, from Rivington's Royal Gazette, No. 334, Dec. 11, 1779" in *The Siege of Savannah by the Combined American and French Forces Under the Command of General Lincoln and the Count D'Estaing in the Autumn of 1779*, ed. Franklin B. Hough (Spartanburg: Reprint Company Publishers, 1975), 25.

⁶³ Ibid., 34.

⁶⁴ "French Officer's Journal," 16.

⁶⁶ Meyronnet De Saint-Marc, "Meyronnet De Saint-Marc's Journal of the Operations of the French Army Under D'Estaing at the Siege of Savannah, September 1779," ed. Roberta Leighton, *The New York Historical Society Quarterly* XXXVI (July 1952): 264.

to beat the arriving storm. Lieutenant Meyronnet de Saint-Marc of the French navy described the events in his journal, "all small boats received orders to sail down the river again...to take on troops for the second landing. Several of them tried to drop anchor, but the wind, then blowing northeast, was very strong, and the bar at the entrance of the river was difficult to pass. They were in the greatest danger, and some perished.".⁶⁷ An English observer noted that at least one of the landing vessels was overtaken by "a swell of the sea, filled with water, by which means she sunk, and all on board perished.".⁶⁸

The weather wreaked havoc on the troops and the fleet. A French officer described the events in his journal, "several vessels were severely injured, and the ship *La Blanche* was at one time on the eve of cutting away her mizzen-mast.".⁶⁹ The French lost two of their long boats, used for landing the troops and supplies, during the storm. The rest were unable to return to the anchored fleet until 15 September, the pilots, crews, and troops forced to endure the storm in their open vessels until the winds started to calm.⁷⁰ Another French officer described how the weather forced the fleet forced out to sea, "nearly all the vessels, moored on the open coast, were forced to set sail and go far out to sea to escape destruction.".⁷¹

The French eventually completed the landing operations, and then shifted their base of operations north to Bonaventure Plantation and Thunderbolt, located on the Wilmington River, and about four miles east of Savannah, and contacted the American force under General Lincoln. They shifted into siege warfare that lasted into the second week of October. The sea continued to drastically affect Count d'Estaing's decision making. On 8 October he concluded that he must

⁷⁰ Ibid.

⁶⁷ Saint-Marc, "Meyronnet De Saint-Marc's Journal," 266-268.

⁶⁸ "Journal of the Siege," 51.

⁶⁹ "French Officer's Journal," 16.

⁷¹ "Extract from the Journal of a Naval Officer in the Fleet of Count D'Estaing 1782," in *The Siege of Savannah, in 1779, As Described in Two Contemporaneous Journals of French Officers in The Fleet of Count D'Estaing*, ed. Charles C. Jones Jr. (Albany, NY: Arno Press, 1874), 59.

attack. An unnamed subordinate recalled, "The length of time requisite for the operations of a siege, the exhaustion of the supplies of the fleet, and the pressing dangers resulting from our insecure anchorage decide the General to take this step.".⁷² Another noted the "pitiable condition" of the fleet, "anchored in a position...where, by the admission of the prisoners, an English squadron had never dared to remain for eight hours even in the most beautiful weather.".⁷³

Ultimately the sea favored no one but exerted its influence on everyone. The sea's natural forces of tides and currents, coupled with wind and rain, caused tangible effects to both Lieutenant Colonel Campbell's expedition and Count d'Estaing's fleet. The sea caused death, destruction, and delays. Lieutenant Colonel Campbell negotiated the sea as a one-time obstacle. Count d'Estaing also negotiated the sea as an obstacle, but the sea's potential to destroy his fleet continued to weigh on his decision making as he attempted to capture the city.

The Terrain

The terrain of Savannah presented challenges to defenders and attackers alike. Rice cultivation along the river's edge combined with forests and marshes to create a complex environment. The terrain directly contributed to the commanders' sensemaking and each one came to different conclusions regarding Savannah. Three anecdotes highlight the relationships between commanders and the terrain of Savannah: Lieutenant Colonel Campbell's seizure of Brewton's Bluff, Lieutenant Colonel John Maitland's march from Beaufort, South Carolina to Savannah, and the failed Franco-American assault.

Early historian Hugh McCall described the three approaches to Savannah in his contemporaneous history of Georgia, "from the high ground of Brewton's hill and Thunderbolt, on the east...from the south, by the road from white bluff, on Vernon river...and from the

⁷² "French Officer's Journal," 27.

⁷³ "Extract from the Journal of a Naval Officer," 64.

westward, by a road and causeway over the deep swamps of Musgroves creek."⁷⁴ On 28 December 1778, the Americans at Savannah observed Lieutenant Colonel Campbell's force anchor in the Savannah river opposite of Girardeau's Plantation.⁷⁵ Many believed that this observation should have confirmed in General Howe's mind which of the three approaches the enemy would take. Colonel George Walton noted, "Upon that occasion I understood that it was judged that the enemy would land there, and that works were to be thrown up in the night, and the causeway defended, but it was not done."⁷⁶ General Howe chose to let the landing occur unopposed, to marginally defend the approach from Brewton's Bluff, and to position his main defenses closer to the town.

When General Howe looked at the terrain of Savannah, he saw multiple approaches within reach of a cunning enemy. He described his thoughts, with added contempt for Colonel Walton, during his court martial. "From the stations the enemy's vessels took, some appeared of an intention to land at Girardeau's; but this court need not be told, though it may be informed to Mr. Walton, that it is customary in war to look one way and act another."⁷⁷ Howe went on to describe how he viewed the situation as one in which Girardeau's Plantation was only a single option among many that were available to Lieutenant Colonel Campbell. Of particular concern to General Howe were potential landing locations above the city of Savannah that would cut off the lines of communication and his ability to retreat..⁷⁸ Multiple witnesses supported the assertion of additional landing sites. The army's inspector general, present at the battle, Lieutenant Colonel Jean Baptiste Ternant, testified that, "there were several places above and below the town, whose names have partly escaped my memory, but which rendered every position that could be taken

⁷⁴ Hugh McCall, *The History of Georgia Containing Brief Sketches of the Most Remarkable Events Up to the Present Day (1784)* (Atlanta, GA: Cherokee Publishing, 1909), 376-377.

⁷⁵ Proceedings of a General Court Martial, 10.

⁷⁶ Ibid.

⁷⁷ Ibid., 26.

⁷⁸ Ibid.

with an inferior force in the vicinity of the town, for the purpose of defending it, exceedingly precarious."⁷⁹ General Howe saw multiple dilemmas and no good solutions to stop the landing; therefore, he decided to concentrate his defense around the city instead of opposing the landing itself.

Not only did General Howe see Girardeau's Plantation as one of many possible landing sites, he also saw Brewton's Bluff, which overlooked the site, as less defendable than his contemporaries did. While Lieutenant Colonel Campbell and Colonel Walton both described the terrain as restrictive and canalizing, General Howe testified that he saw options for maneuver around his flank. "I had walked over all its causeways, and through many parts of its rice-fields, and found...not only the causeways, but the fields themselves, would admit the approach of troops to the high land.".⁸⁰ Howe determined that even if he knew the British would land at Girardeau's Plantation, defending Brewton's Bluff would have been an invitation for a flank attack. "The enemy...might, had I fixed myself there, have doubled either flank, or embraced both. Any maneuver like this would have made our retiring necessary... and by that means have reassumed our main position at fair-lawn.".⁸¹ He supported his belief by citing the deceased commander of his artillery, Colonel Owen Roberts, who "expressed himself in the strongest terms against" defending the bluff.⁸²

Lieutenant Colonel Campbell's expedition began landing operations at Girardeau's Plantation on 29 December, 1778. He immediately began analyzing the terrain and quickly concluded that Savannah was a natural citadel, but due to his superior forces and a lack of preparation from the Americans he could successfully capture the city. Campbell recognized Brewton's Bluff above Girardeau's Plantation as key terrain. He described the scene in detail,

⁷⁹ Proceedings of a General Court Martial, 23.

⁸⁰ Ibid., 26.

⁸¹ Ibid.

⁸² Ibid.

"the road on which the troops landed being new and extremely irregular in its form, only admitted of two men to draw up across it. This road with a deep ditch on each side, directed its course at right angles from the river for 600 yards, through a rice swamp to Sheridoe's [Brewton's] Bluff, which was about 40 feet in height above the level of the rice swamps."⁸³ He understood that his force faced an entrenched enemy, along canalizing terrain, up a forty-foot bluff and that time was not improving his situation. Lieutenant Colonel Campbell joined Captain Cameron's light infantry company and assaulted the position. The engagement was over in three minutes. The outpost of Americans held their fire until the British were within one-hundred yards, but they could not stop the rush of the light infantry. The British lost three soldiers and the company commander..⁸⁴

The episode at Girardeau's Plantation is a key anecdote in the relationship between terrain and actors because it lies at the intersection of General Howe, Lieutenant Colonel Campbell, and the terrain. Lieutenant Colonel Campbell understood that success at Girardeau's Plantation was crucial to the success of his campaign, describing the engagement as "a favourable presage of our future success."⁸⁵ He also recognized that the American force missed an opportunity to use the terrain at their disposal, noting that "had the rebels stationed four pieces of cannon on this bluff with 500 men for its defense, it is more than probable they would have destroyed the greatest part of this division of our little army in their progress to the bluff."⁸⁶ With the foothold secured, Campbell could land forces unopposed, and there was little the Americans could do to stop the assault. The British captured Savannah before sunset; the battle itself lasted less than a day. The American forces suffered eighty-three killed in the engagement, with an

- ⁸⁵ Ibid.
- ⁸⁶ Ibid.

⁸³ Campbell, *Journal*, 23.

⁸⁴ Ibid., 24.

additional thirty-eight officers and 415 soldiers taken prisoner. The British suffered a total of seven killed and nineteen wounded.⁸⁷

General Howe received an onslaught of criticism for his decision to not oppose the landing at Girardeau's Plantation. Both Colonel Elbert of the Georgia brigade and Colonel Walton of the Georgia militia testified at General Howe's court martial that it was known that the British would attack from Girardeau's Plantation. A French observer noted that the bluff was so steep that one needed to crawl to get up it and that a few cannon would have secured the route against 10,000 men.⁸⁸ Historians such as Charles C. Jones use these criticisms to draw the conclusion that Howe lacked the intelligence required to command. Jones goes so far as to say that "there was no positions more apt for defense" and that General Howe acted with "surprising stupidity.".⁸⁹ Others, such as Major General William Moultrie, argued that Howe should have immediately retreated from Savannah to link up with General Lincoln's forces. He concludes that the majority opinion of General Howe's war council, to defend Savannah, was the "most ill-advised, rash opinion that possibly could be given.".⁹⁰

Despite the criticism, General Howe's orientation toward the terrain was just one of many factors that contributed to the loss of Savannah. Another major factor was the ineffectual relationship between Howe and Governor John Houstoun who refused to turn over operational control of the Georgia militia until the evening before the British assault.⁹¹ General Howe's court martial exonerated him of "sacrificing by his conduct the capital of the state of Georgia,".⁹² but, ultimately his orientation to the defense was part of the failure. His relationships with the state

⁸⁷ Campbell, Journal, 28-29.

⁸⁸ Lawrence, "General Robert Howe," 310.

⁸⁹ Charles C. Jones Jr., *The History of Georgia*, vol. 2, *Revolutionary Epoch* (Boston: Houghton, Mifflin, 1883), 318.

⁹⁰ William Moultrie, Memoirs of the American Revolution, So Far as it Related to the States of North and South Carolina, and Georgia (New York: David Longworth, 1802), 253.

⁹¹ McCall, *History*, 372-374.

⁹² Proceedings of a General Court Martial, 4.

leadership, the militia, the enemy, and the terrain all contributed to his sensemaking and ultimately to his decision to defend against a superior enemy on ground that could not make up for the qualitative and quantitative differences in forces.

On 30 December, the day following the attack, Lieutenant Colonel Campbell surveyed the extent of the town and surrounding area. His detailed journal describes the town in terms of distances and directions, noting where there were gentle slopes, swamps, and woods. He concludes his journal entry with the poignant statement, "In short one side of the town was secured by the river; the two ends were shut up by the rice swamps, and the fourth side was encircled by an extensive wood of lofty pines, the whole very capable of being fortified with advantage."⁹³ He viewed the terrain of Savannah as a natural citadel that was essentially undefended.

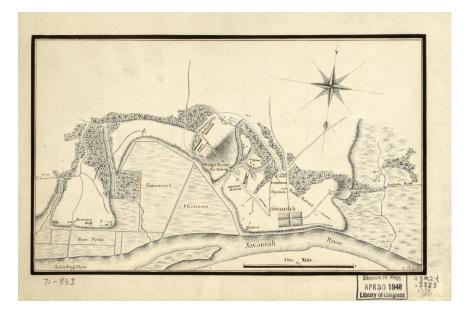


Figure 4. René Phelipeau, *Taking of Savannah in De.*, ca. 1778, map, Library of Congress, accessed 6 May 2021, https://www.loc.gov/item/gm71000863/.

When Count d'Estaing attempted to seize Savannah the following year, he penned a

summons to General Augustine Prevost demanding that he "surrender himself to the Arms of the

⁹³ Campbell, *Journal*, 30.

Majesty the King of France.".⁹⁴ General Prevost's response, whether intentionally or not, bought time for his reinforcements to make a forced march through restrictive terrain and alter the outcome of the engagement. "The business we have had in hand being of importance," wrote Prevost, "there being various interests to discuss, a just time is absolutely necessary to deliberate. I am therefore to propose that a cessation of hostilities shall take place for twenty-four hours from this date.".⁹⁵ The time that Count d'Estaing granted the defenders of Savannah allowed both the 11st and 2nd battalions of Lieutenant Colonel John Maitland's 71st Regiment of Foot (Fraser's Highlanders) to finish their march from Beaufort, South Carolina. Lieutenant Colonel Maitland's march to Savannah was a major intersection of the British, the Americans, the French, and the terrain. Ultimately Lieutenant Colonel Maitland made his way through terrain that neither the French naval assets nor the American army could defend.

Both General Lincoln and Count d'Estaing were aware of the reinforcements at Beaufort. Lincoln wrote to d'Estaing about Lieutenant Colonel Maitland's force on 5 September, prompting the count to order the French officer d'Albert de Rions to sail up the Broad River to prevent the garrison from reinforcing Savannah. He understood that General Lincoln would also cut off the land routes. ⁹⁶ Sagittaire, a fifty-gun ship of the line, never made it into the Broad River. The pilot refused to attempt crossing over the bar. Lieutenant Colonel Maitland and his force made their way to within twenty miles of Savannah but were faced with the swamps that General Lincoln was sure were impenetrable. In a stroke of serendipity, a fisherman offered to guide the force through a hand dug canal known as Wall's Cut. The canal allowed Lieutenant Colonel

⁹⁴ Count d'Estaing to General Augustine Prevost, September 15, 1779, in *The Siege of Savannah* by the Combined American and French Forces Under the Command of General Lincoln and the Count D'Estaing in the Autumn of 1779, ed. Franklin B. Hough (Spartanburg: Reprint Company Publishers, 1975), 89.

⁹⁵ Prevost to d'Estaing, September, 16, 1779, Ibid., 130.

⁹⁶ Lawrence, *Storm*, 42.

Maitland to make use of the creeks and lead his force to a point in the Savannah river above the furthest French vessels.⁹⁷

On the morning of 18 September, General Lincoln and Count d'Estaing sat on top of Brewton's Bluff, the same hill that Lieutenant Colonel Campbell's forces rushed the previous year. The two commanders watched as the last reinforcements of Maitland's regiment entered the city.⁹⁸ The arrival of the reinforcements brought the garrison to 2,360 defenders against the allies combined forces of 5,500 men.⁹⁹ The failure to stop the reinforcements was directly related to the commanders' understanding of the terrain. General Lincoln believed that French control of the sea was the key to preventing the juncture of Lieutenant Colonel Maitland's and General Prevost's forces.¹⁰⁰ He believed that by ordering de Rions up the Broad River, Count d'Estaing had assumed responsibility for blocking the reinforcements and that there was no feasible land route for Maitland to take. Count d'Estaing, however, viewed the primary mission as one of the land forces. He saw de Rion's mission as a supporting effort in the interdiction attempt. Both commanders failed to contemplate a plausible reality in which their domain could be used to get the reinforcement through. For his part, Lieutenant Colonel Maitland refused to recognize the terrain as impassable and made use of the creeks, the river, and the land to weave his way through restrictive terrain and the two enemy forces.

Despite his numerical advantage, the nagging nuisance of bad weather, and an exposed fleet, Count d'Estaing decided to lay siege to Savannah. On 23 September the French dug their first parallel 300 yards from the British lines. The British attacked the following morning, "when a thick fog which arose at daylight had disappeared, the enemy perceived our works and made a

⁹⁷ Lawrence, *Storm*, 44.

⁹⁸ Ibid., 46.

⁹⁹ Ibid., 48-49.

¹⁰⁰ Ibid., 43.

sortie with six hundred men to attack us."¹⁰¹ The French repelled the attack with minimal losses and settled into a siege that provided the garrison even more time to solidify its defenses.

The British transformed the landscape surrounding Savannah during the time between their initial observation of the French fleet and the pre-assault bombardment that started on 3 October. While they neglected fortification efforts for nearly a year, the recognition of the French attack spurred the British to action. Continuing in the spirit of Lieutenant Colonel Campbell's initial observations, General Prevost and his chief engineer, Captain George Moncrief, tied in abattis and artillery works with natural obstacles to fortify the city. A royalist in Savannah during the siege noted the efforts in his journal, "but now the greatest and most extraordinary exertions were made by Captain Moncrief, Chief Engineer, and which he continued during the whole siege with unremitting ardor.".¹⁰²



Figure 5. Pierre Ozanne, *Vue de la ville de Savannah, du camp, des tranchées et de l'attaque Octobre 1779*, ca. 1780, drawing, Library of Congress, accessed 6 May 2021, https://www.loc.gov/item/2004670078/.

The bombardment ripped apart the city and set it on fire at least three times.¹⁰³ The

French soon realized their relentless shelling was not achieving the desired effect. A French

¹⁰¹ "French Officer's Journal," 22.

¹⁰² "Journal of the Siege," 28.

¹⁰³ "French Officer's Journal," 26.

officer noted, "we began to lose confidence upon discovering that all this heavy firing will not render the assault less difficult."¹⁰⁴ The eventual attack failed in what can be simplified as too little and too late. The time that Count d'Estaing gave to the British allowed them to fortify the garrison to an extent that made it nearly impenetrable. Charles Stedman's history of the siege notes that when the French arrived there were "not more than ten or twelve pieces of artillery" but by the end of the engagement "near one hundred pieces of cannon were mounted."¹⁰⁵ This account is corroborated by Major General Henry Lee's history of the siege that asserts "on the approach of the French, few guns were mounted" but by the time of the attack "nearly one hundred different calibers were in full array."¹⁰⁶

Count d'Estaing planned to make use of the morning fog and to attack via the one piece of terrain that both he and British knew was the weakest sector of their defense. The Spring Hill Redoubt lay at the south-western corner of Savannah. It was the least fortified position and was flanked by a forested marshland that allowed the French to move to within striking distance before alerting the defenders. Count d'Estaing reasoned that there was enough room between the redoubt and the marsh to allow his columns to maneuver around the British right..¹⁰⁷ His plan called for a feint attack on the British center and left while the main effort, consisting of two French and one American column attacked the right. An advanced guard was to attack the redoubt itself while the columns swung between the redoubt and the swamps to attack the main entrenchments..¹⁰⁸

¹⁰⁴ "French Officer's Journal," 26.

¹⁰⁵ Charles Stedman, *The History of the Origin, Progress, and Termination of the American War*, vol. 4 (London: J. Murray, 1794), 128.

¹⁰⁶ Henry Lee, *Memoirs of The War in the Southern Department of the United States* (Washington: Peter Force, 1827), 56.

¹⁰⁷ Lawrence, Storm, 83.

¹⁰⁸ Ibid., 88.

The failures began before the first contact. Many factors delayed the linkup between the French and American camps, including the terrain itself. The forest that the attackers had hoped would mask their movement also disoriented the formations.¹⁰⁹ The French got lost traveling through the woods in the dark between the French and American camps. Count d'Estaing blamed the American guides.¹¹⁰ It was nearly 0530, an hour and a half past the intended attack time, and more importantly, past the break of the dawn, when the assault began. The assault on the redoubt was cursed with initial success. They took the high ground too quickly, but were not reinforced in time to consolidate the success. The advanced guard fell back while the two main columns swung far to the left. The right most column struck the entrenchments with only part of its force, the rest were stuck in the knee-deep swampland.¹¹¹ d'Estaing rallied his troops and charged the works. Hand-to-hand combat ensued within and around the abattis. Again, the French saw limited success but were unable to rally the remainder of the formation that was stuck in the swamp. One officer noted the absence of the second wave that was, "entangled in the swamp mowed down by the enemy's artillery, in the face of which it could not advance."¹¹² Count d'Estaing ordered the retreat just an hour after the assault began. The battle was one of the bloodiest of the war. The French suffered 521 casualties along with 231 American casualties. The British sustained just fifty-seven.¹¹³

¹⁰⁹ Lawrence, *Storm*, 93.

¹¹⁰ Ibid., 92.

¹¹¹ Ibid., 97.

¹¹² "Extract from the Journal of a Naval Officer," 65.

¹¹³ Lawrence, *Storm*, 107.



Figure 6. Pierre Ozanne, Siège de Savannah fait par les troupes françoises aux ordres du général d'Estaing vice-amiral de France, en 7.bre, et 8.bre. 1779, ca. 1779, map, Library of Congress, accessed 6 May 2021, https://www.loc.gov/item/75695821/.

The British saw the terrain of Savannah as an easily defendable natural fortress, but the Americans saw an undefendable target at the center of multiple approaches. The marshland, shaped by years of rice cultivation, presented both an obstacle and a potential avenue of approach. The littoral zone baffled both the French and the Americans, while the British forced their way through to reinforce the defense. Unlike the sea, the terrain was a relatively static actor in the fight for Savannah. Its influence was both physical, in slowing movements and aiding defense, and cognitive, in how commanders' sensemaking created plausible interpretations of what the terrain offered. The terrain represented just one factor in the fight for Savannah, but ultimately the British made better use of it both on the offense and the defense.

Disease

Disease ravaged all sides and spared no one during the campaigns for Savannah. Malnutrition along with Georgia's inhospitable weather, and the mosquito rich lowlands combined to make a ground ripe for sickness and made life on ships, in trenches, and in town miserable. Disease associated with the Southern summer, most likely malaria, dictated the timing of the British campaign to take Savannah and then continued to impart suffering on the forces that defended it. In addition to malaria, the sailors and soldiers embarked on both sides faced difficulties associated with scurvy and malnutrition.

The British had already experienced the diseases rampant in the Southern colonies when they entered the campaign for Savannah. The Southern campaign of 1776 convinced General Clinton that the Southern climate was apt to destroy his force, prompting him to move his army north as quickly as possible following his unsuccessful attempt to seize Charleston in June of 1776..¹¹⁴ He ordered that the return to Savannah would occur during the "healthy season" avoiding the summer onslaught of fever..¹¹⁵ J.R. McNeil found that what the British were truly avoiding during the "ague season" was the malaria present in the mosquito's that inhabited the rice plantations of Georgia's low country..¹¹⁶ The timing of the operation saved the British formations from malaria in 1778, but the disease caught up with them the following summer. The British garrison at Savannah suffered from a pervasive sickness throughout the summer of 1779. In addition to the garrisoned troops, the reinforcements that made their way to Savannah under Lieutenant Colonel Maitland were infected as well. Maitland himself was sick with what was diagnosed as "bilious fever."¹¹⁷ The fever, most likely malaria, took Colonel Maitland's life just weeks after the defense at Savannah..¹¹⁸ A Hessian soldier wrote home describing the situation, "The variable cold, and then suddenly the excessive hot weather, together with the numerous

¹¹⁴ McCandless, "Revolutionary Fever," 227.

¹¹⁵ Ibid., 230.

¹¹⁶ McNeil, *Mosquito Empires*, 212.

¹¹⁷ Greg Brooking, "Of Material Importance: Governor James Wright and the Siege of Savannah," *The Georgia Historical Quarterly* 98, no. 4 (Winter 2014): 281.

¹¹⁸ McCandless, "Revolutionary Fever," 229.

morasses and stagnant water, are the cause of many diseases, especially fevers." ¹¹⁹ General Prevost noted the effect on operations in a letter to General Clinton, "the sickness that prevailed to a great degree amongst the troops left for the defenses of Georgia and the excessive heat of the weather, having put a stop to the active operation of the army." ¹²⁰ General Prevost himself had requested that he be returned to England on account of his incessant sickness. ¹²¹ McNeil argues that malaria had a long term strategic effect on the outcome of the war, noting that the American forces were more resistant due to repeated exposure. ¹²² During the campaign for Savannah itself, American immunity did not drastically help the revolutionaries. Malaria did not tip the balance in anyone's favor but it was present and a factor in commander's decision making.

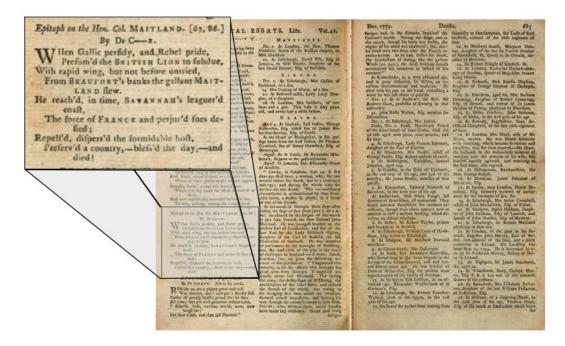


Figure 7. "Epitaph on the Hon. Col. Maitland," The Scots Magazine 41 (1799): 684.

¹¹⁹ "Letter from Savannah," in *Letters of Brunswick and Hessian Officers During the American Revolution*, trans. William B. Stone (Albany, NY: Joel Munsell's Sons, 1891), 237.

¹²⁰ Prevost to Henry Clinton, July 30, 1779, quoted in, Rita Folse Elliott and Daniel T. Elliot, *Savannah Under Fire, 1779: Expanding the Boundaries* (Savannah, GA: Coastal Heritage Society, 2011), 45.

¹²¹ Elliott and Elliot, *Savannah Under Fire*, 45.

¹²² McNeil, Mosquito Empires, 199-200.

Diseases due to malnutrition plagued those forced to endure long voyages at sea. French accounts are wrought with examples of the hardships faced by the soldiers and sailors. The British fared better while at sea, but Hessian accounts show they were not free from the effects of disease and malnutrition. Lieutenant Colonel Campbell was well aware of the dangers that cramped, damp, stifling living spaces and poor nutrition could exact on his fighting force. In his General Orders given at the beginning of the voyage from New York, he outlined rules to protect his men. "The men's betths are to be regularly swept and cleaned by 9 o'clock in the morning, and the bedding brought upon deck to be aired as often as the weather will permit; on which occasions, as many of the men can conveniently stand upon deck will be ordered up, to remain there as long as possible for the benefit of the fresh air."¹²³ His orders went on to demand that strict allowances of food and water be followed. He also dictated that those "seized with disorders of an infectious nature" would not be treated locally, but would be quarantined to the hospital ship..¹²⁴ While the orders appear to have kept the majority of the crew in good health, there were some exceptions. A Hessian officer noted in a letter to his commander that upon arrival in Savannah, "30 had to be taken to the hospital with scurvy and rashes."¹²⁵

The French faced far worse health conditions. Scurvy and dysentery were eating away at those onboard. They were underprepared for the conditions they faced. Many lacked proper clothing to protect them from the elements. Their food supplies were dwindling and what was left was of extremely poor quality. A French officer described the carnage in his journal, "Back on the ships things were in a terrible state. Even animals refused to eat the two-year old bread... There was much sickness and little medicine. Scurvy and dysentery took a heavy toll. Thirty to

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¹²³ Campbell, *Journal*, 9.

¹²⁴ Ibid.

¹²⁵ Friedrich von Porbeck to von Jungkenn, 1782, quoted in, Elliot and Elliot, *Savannah Under Fire*, 45.

thirty-five dead were being thrown overboard every day.".¹²⁶ Those on land were not in any better condition. The French lieutenant Meyronnet De Saint-Marc described the state of the army in his journal, "To the inconveniences at sea were added those on land. Sickness progressed rapidly in the army. Nearly every one of the soldiers, overworked in a climate where the heat is intense during the day and the nights are freezing cold, fell sick.".¹²⁷ Count d'Estaing did not escape the effects either. He came down with a bout of dysentery days before the final assault. ¹²⁸ Deserters spilled into Savannah. An English journal described the deserters as "very sickly.".¹²⁹ Another noted that "their numbers of seamen so much reduced that they could not hand more than one sail at a time.".¹³⁰ Lieutenant Meyronnet described how disease forced the French toward culmination, "Our situation, meanwhile, grew more critical every day. It was risky for the squadron to stay such a long time at anchorage out at sea near the coast in a season considered dangerous in this region. Great mortality spread on board nearly all the vessels. Scurvy and dysentery...became general and daily carried away many people.".¹³¹ Disease did not defeat the French forces, but it was another actor slowly dissipating the fleet and forcing Count d'Estaing into the decision to attack.

Conclusion

Savannah lies at the intersection of the land and the sea. Its natural orientation makes it a fitting case study to highlight the complex relationship that existed between natural factors and

¹²⁶ Lawrence, *Storm*, 79.

¹²⁷ Saint-Marc, "Meyronnet De Saint-Marc's Journal," 280.

¹²⁸ Lawrence, Storm, 80.

¹²⁹ "Another Journal of the Siege of Savannah, from Rivington's Royal Gazette, No. 335, Dec. 15, 1779" in *The Siege of Savannah by the Combined American and French Forces Under the Command of General Lincoln and the Count D'Estaing in the Autumn of 1779*, ed. Franklin B. Hough (Spartanburg: Reprint Company Publishers, 1975), 77.

¹³⁰ "Royal Gazette, December 18, 1779" in *The Siege of Savannah by the Combined American and French Forces Under the Command of General Lincoln and the Count D'Estaing in the Autumn of 1779*, ed. Franklin B. Hough (Spartanburg: Reprint Company Publishers, 1975), 101.

¹³¹ Saint-Marc, "Meyronnet De Saint-Marc's Journal," 279.

commanders as they tried to impart their will on each other. Traditional histories focus on the relationship between human actors as they operate on a stage that is set by the natural environment. Considering natural factors as actors themselves highlights how enemy forces are only one element, and at times not the most influential element, in the overall system. The campaign for Savannah offers a case study that highlights the agency of the sea, the terrain, and disease in the complex system that is warfare.

The sea was the most dynamic natural actor in the fight for Savannah. When the British attacked, Lieutenant Colonel Campbell was able to separate his interactions with the sea and his interactions with the land and the enemy because he was a land-based commander and not burdened with the responsibility of the fleet. Regardless of his ability to compartmentalize, the sea still had a significant impact on him and caused delays, destruction, and death. When the French attempted to seize Savannah, Count d'Estaing was not blessed with the ability to partition his thoughts. The sea furnished him with a constant irritant that pounded his vessels and weighed on his mind, eventually playing into his calculations when he determined to raise the siege and attack.

The terrain played a more static actor in the campaign for Savannah. Commanders' understanding of it shaped their attack and defense plans and despite its invariable nature, the terrain played an active role in the battles. Overall, the British tended to view their relationship with the terrain as more flexible and indeterminate. They shaped the terrain to defend the city and used the terrain to maneuver around the American and French forces. The Americans viewed the terrain as more deterministic. General Howe could not successfully shape the terrain to aid in his defense, and General Lincoln saw the littoral zone as impassable. Both were outmaneuvered by a British force that was much more successful at utilizing the terrain to their advantage.

Finally, disease had tangible and cognitive impacts on the campaign for Savannah. The British avoided attacking into Georgia in the summer months in order to avoid the unhealthy season. Their timing likely preserved combat power, but malaria caught up with them and

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eventually killed the hero of their defensive stand, Lieutenant Colonel Maitland. There is no record of the number of French sailors and soldiers who died of diseases, only various accounts of the dozens of corpses being thrown overboard daily. These deaths had both a physical impact, limiting the capabilities of the remaining crew to sail the vessels, as well as a cognitive impact on Count d'Estaing as he attempted to lay siege to the city. His army on land was no better off and suffered from the effects of malnutrition, drastic temperature swings, and no shelter.

Natural factors continuously forced commanders into repetitive sensemaking. Their orientation to the problems at hand shaped how they viewed themselves in relation to their surroundings and therefore how they interacted with nature. Natural factors didn't take sides in the conflict, but to say they were neutral would be a misrepresentation. The agency of natural actors is an agency that doesn't correspond to human intentions, but instead continues to push towards a natural order. Planners of modern military operations should heed these lessons and consider both the agency of natural forces in future operations and how friendly and enemy commanders view themselves in relation to the environment. This is particularly important when considering new domains of warfare. For example, commanders' orientation to the cyber domain and the resulting effects is an area that should be explored. Russian military theorists tend to view cyber warfare as a way to access the information domain while Americans tend to view cyber as a domain in itself. The distinction is similar to the difference in Lieutenant Colonel Campbell's and Count d'Estaing's understanding of the sea. Just as their orientations shaped their sensemaking, so will the orientations of commanders in the cyber domain and in all domains of the future operating environment.

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