Measuring the Adaptation of Military Response During the Second Seminole War Florida (1835-1842): KOCOA and The Role of a West Point Military Academy Education

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Measuring the Adaptation of Military Response During the Second Seminole War
Florida (1835-1842): KOCOA and The Role of a West Point Military Academy Education

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy
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Conflict archaeology is a fairly new discipline and is in the process of defining its methods and theories. Recently, the American Battlefield Protection Program has started requiring that grant applicants perform a KOCOA analysis. KOCOA is a modern military technique and stands for Key terrain, Obstacle, Cover and Concealment, Observation, and Avenues of Approach. However, this method was developed for modern warfare, and its adoption by the archaeological community has not yet been analyzed. I argue that this method needs a few modifications to make it more applicable to historical research and that it can be broadened to investigate more complex questions regarding decision-making processes. In its current form, KOCOA only looks at how a landscape was used during conflict based on the results of what happened. I contend we can use this method to analyze the landscape and look at the decisions that went into selecting it. Employing KOCOA in this manner will allow us to understand how militaries adapted, or failed to adapt, to a given landscape.

The Second Seminole War in Florida (1835-1842) can serve as an ideal case study. For one thing, the military had never experienced the Florida environment, and therefore adaptations to landscape utilization will be readily apparent. Also, in the early 19th-century, the military as a cultural institution indoctrinated its members through extensive training at the United States Military Academy in West Point, NY, and I propose this standardized education had a significant negative effect on the shape, direction, and outcome of the Second Seminole War due to the gap between the knowledge gained through training and the knowledge needed in the field when fighting a war with Indians in the swamps and hammocks of Florida. Using modern military
theory, the purpose of this research is to develop tools to measure how traditional European educational methods, which officers received while at the Military Academy, hindered their ability to adapt to the unique and challenging environment they encountered while trying to remove the Seminole Indians from the Florida territory.

Conflict archaeology is also well suited to investigate the more human side, such as the decision-making processes and adaptations required, moving beyond the “what” and “how” aspects of conflict to the “why.” One traditional approach to conflict archaeology is KOCOA. As used archaeologically, KOCOA employs modern cartographic information. Those participating in the conflict, however, would not have had access to this level of detail. Therefore, I propose that KOCOA be revised to incorporate the knowledge that would have been available to the decision makers at the time of the conflict. The aim of this research is to expand the methodologies of conflict archaeology to include indirect expressions of warfare and to incorporate them into a meaningful discussion of their role in the outcome of conflict. To accomplish this, I have developed a model against which hypotheses about the decision-making processes and their effectiveness can be compared.
CHAPTER 1
BEYOND KOCOA: INVESTIGATING ADAPTATION
WITHIN A MILITARIZED LANDSCAPE

To wage war, become an anthropologist. Lose the fascination with Clausewitz, and embrace culture as the way to understand conflict. Or so argue a number of strategists, historians, and officers on both sides of the Atlantic. From the academy to the Pentagon, fresh attention is being focused on the value of knowing the enemy. Those who take this view assume that different ways of life produce different ways of war (Porter 2007).

Introduction

In the last three decades, there has been a rapid increase in the study of conflict archaeology, battlefield archaeology, military sites archaeology, and the many other iterations of this field (Scott and McFeaters 2011). Equally important has been the advancement in the tools and technology available to more fully understand these unique types of landscapes. Tools such as GIS and high-resolution aerial maps easily available from the Internet, a surge in the use and sophistication of metal detectors, the use of current military theories, and many other techniques have greatly enhanced analysis. However, Doyle and Bennet (2002) contend that “despite the widespread recognition of the importance of terrain within military action, it has rarely been used as an historical tool to help deconstruct events, actions and outcomes of military engagements, yet clearly its potential to impact on our understanding of such actions is considerable.” This has begun to change in the field of archaeology. With the use of a military terrain analysis called KOCOA, a more terrain-centric analysis of past conflicts has emerged. New theory, coupled with
great advances in technology, has allowed more complex research questions to be tackled, such as my investigation of the role of education.

Since 2004, the American Battlefield Protection Program (ABPP), the leading organization for protecting and researching battlefields in the United States, has required what is known as a KOCOA analysis. KOCOA—an acronym for Key Terrain, Observations and fields of fire, Cover and Concealment, Obstacles, and Avenues of Approach—is a modern military concept. This method is used as a quick visual assessment for classifying the tactical advantages and disadvantages of a specific location (Department of Defense 2001). While KOCOA offers significant advantages for studying and preserving critically important battlefields and their associated supporting features, little scholarly attention has been given to this mandatory new methodology.

As used by the ABPP, KOCOA is to be used only where weapons fire has been exchanged (McMasters 2011). It has served mainly as an organizational tool where a variety of data sources can be collated into a set of meaningful maps, which are then used to define the core area of battlefields. Yet this method offers the potential to begin asking a broader set of questions about military sites and provide a framework upon which a more anthropological theoretical approach to conflict can be built. KOCOA can serve as a method for providing a quantifiable and unified language that allows for inter-site comparisons. The example used in this research focuses on how the military was trained and how this training could have affected the outcomes of conflict. KOCOA has the potential to shed light on landscape adaptation and learning, by comparing how officers were trained to respond and how they actually responded. To demonstrate that KOCOA can be expanded into a more flexible research tool for testing
hypotheses about training and adaptation, I will use a case study of the Second Seminole War in Florida (1835-1842).

The ABPP was founded in 1991 by Manuel Lujan, Jr., then–Secretary of the Interior, and the American Battlefield Protection Act was signed into law in 1996. This legislation has allowed for the documentation and preservation of a significant number of historic battlefields across the country. The ABPP also provides annual grant funds to help institutions locate, document, research, interpret or protect local sites of conflict. The ABPP’s website defines its mission as follows:

The American Battlefield Protection Program (ABPP) promotes the preservation of significant historic battlefields associated with wars on American soil. The goals of the program are 1) to protect battlefields and sites associated with armed conflicts that influenced the course of our history, 2) to encourage and assist all Americans in planning for the preservation, management, and interpretation of these sites, and 3) to raise awareness of the importance of preserving battlefields and related sites for future generations. The ABPP focuses primarily on land use, cultural resource and site management planning, and public education (American Battlefield Protection Program).

The ABPP’s requirement for a KOCOA analysis is clearly demonstrated by the workshop on the method that all new grant recipients are required to take. (A copy of this training packet is available from the website.) The creation of the ABPP and the funding sources it provides has greatly benefited the field of conflict archaeology.

Battlefield or conflict archaeology is a new field of historical archaeology (Scott and McFeaters 2011, Sutherland 2005) and will provide the main theoretical foundation for my analysis. Conflict archaeology emerged from an expanded understanding of battlefields, which required a more specialized skill set and new theories to fully investigate these ephemeral features of conflict (Fox and Scott 1991, Scott and McFeaters 2011, Scott and Bleed 2011, Starbuck 2011). While the field has rapidly become a scientific discipline of its own, several
areas of study still have great potential for advancement, especially by using anthropological methods to broaden the scope of research and ask more complex research questions. For example, understanding how and why a landscape becomes militarized and the effect militarization has on that landscape, and those who occupy it, warrants further development. “Militarization is a process that occurs through, and leaves its mark on societies, economies, cultures and political structures. It also operates through landscape, which it changes or maintains, in both a physical and cultural sense” (Pearson et al. 2010:3). A militarized landscape implies an antagonistic relationship between two or more groups. A methodology for fully understanding the nuanced causes and effects of this interaction has yet to be formulated.

Archaeological consideration of the organization and management of war is beginning to be investigated at sites other than battlefields that played important roles in military events, including military support facilities, camps, bases, arsenals, logistic support processes and even prisoner of war, internment and concentration camps. However, employing archaeology to assess the contextual aspects of conflict and warfare is challenging, and there is still not a fully refined archaeological vocabulary or conceptual inventory for this topic (Scott and McFeaters 2011:104).

My research focuses on (1) understanding some of the contextual aspects of conflict not explained by previous research and (2) building the framework for this new vocabulary suggested by Scott and McFeaters in the above quote. In this study, I will draw from the body of literature on interaction theories to set the stage for understanding the dynamics of war, then combine this with modern military theories that have been adapted to the specific task at hand. While the burgeoning field of conflict archaeology has greatly advanced our ability to understand and contextualize historic conflicts, there is more to be understood beyond the battlefield. Sites of conflict do not happen in isolation, and conflict archaeology is now beginning to acknowledge this by investigating the kinds of supporting features mentioned
above. However, military sites still tend to be investigated as single sites in isolation when, in reality, many relevant landscape features can influence the outcome of conflict and these features function as a complex network. Studying them individually can overlook these complex interactions. To gain a truly synthetic analysis of conflict, we will require a better understanding of war as a network rather than as a chronological list of events. Therefore, it is the broader concept of landscape that is the unit of my analysis, rather than a site-specific approach. Landscapes in this case are, as Rockman (2003) defines them, “spaces in which a group of humans actively interact with a natural environment.” This encompasses both the natural and built environments. As Thomas and David (2008:20) point out, there are three broad themes in the study of landscape: “landscapes as fields of human engagement,” “landscapes as physical environmental contexts of human behavior,” and “reflections on representations of landscape” (emphasis original). Acknowledging that landscapes are more than just physical space is a key foundation for this research.

My research aim is to expand the methodologies of KOCOA and conflict archaeology to include indirect expressions of warfare and incorporate them into a meaningful discussion of their role in the outcome of conflict. To accomplish this, I developed a model to broaden the scope of KOCOA that allows for investigation of hypotheses about decision-making processes and their effectiveness. This means that traditional archaeological “sites” and their often-overlooked support features have to be viewed as part of an interconnected landscape. Conflict archaeology as a discipline has been around long enough that it is ripe for developing into the next phase of analysis: moving beyond documenting sites of conflict into investigation of the more human side, such as decision-making processes and adaptation, and beyond the “what” and “how” aspects of conflict and to the “why.” Why did these conflicts carry on the way they did?
Why were forts built where they were? Why did the Seminole Wars continue for almost 50 years with no clear outcome?

The three Seminole Wars were largely unsuccessful in removing the entire population of Florida’s native inhabitants. The First Seminole War was approximately 1814-1819, the Second Seminole War was 1835-1842, and the Third Seminole War was from 1855-1858. There are many historical accounts of the events, but few have broached the subject of why the military was unsuccessful for so long. One aspect of my research is to demonstrate that the standardized training and education the officers received at the United States Military Academy (USMA), at West Point, New York, significantly reduced their ability to operate in Florida’s difficult terrain. Quantifying the effects of education archaeologically has not received much, if any, attention in the literature. I propose that an expanded use of KOCOA will allow some of these questions to be investigated.

While the focus of this research is the role of the military’s education in the successes and failures of how they operated, it should be acknowledged that the perspective of the Seminole warriors is quite different. The Seminoles were highly adapted to the Florida environment and used it to their advantage. The fact that traditional officer education was not suitable to Florida should not denigrate the successes of the Seminoles. The Seminole Wars where highly disruptive to their way of life, yet they adapted to the best of their ability. The fact that the military was not successful in removing the Seminoles sheds light on the ingenuity and bravery of the Seminole warriors (Lawres 2008). Expanding the discussion of successes of the Seminoles is beyond the scope of this research but a much more complete discussion can be found in the theses of Butler (2001) and Lawres (2008).
In the early 19th-century, the military as a cultural institution indoctrinated its members through extensive training at the USMA, and I contend that this standardized education had a significant negative effect on the shape, direction, and outcome of the Second Seminole War due to the gap between the knowledge gained through training and the knowledge needed in the field when fighting a war against Indians in the swamps and hammocks of Florida. The Second Seminole War was chosen because it was the longest of the three conflicts and saw the most concentrated conflict. Fully capturing all of the complex processes at work in during the Seminole Wars will require a shift away from descriptive, site-based archaeologies (for example, the excavations conducted at Fort Foster, with the sole objective of reconstructing the fort; see Baker 1996). These early studies, while relying on a variety of documentary and archaeological information, focused on the interpretation and chronology of a particular event or location and did not fully explore the social aspects of the behaviors that produced the artifact distributions (South 1978a) and modified the Florida landscape. Using a modern military theory such as KOCOA, the purpose of my research is to develop tools to measure how traditional European educational methods, which officers studied while at West Point, hindered their ability to adapt to the unique and challenging environment of Florida.

At that time, Florida was an unknown frontier to the majority of U.S. citizens, having only come under American control in 1819 due to the Adams-Onis Treaty (Mahon 1985). The Second Seminole War dragged on for seven years without ever coming to a decisive end, aside from a declaration by the U.S. government that the war was over and despite continuing small-scale hostilities between native groups, the military, and citizenry. While it will be demonstrated that the military was less successful in its approach to the Seminoles, the Seminoles were highly successful in repelling military advancements and defending their homes (Lawres 2008). It was
estimated to have cost 40 million dollars, and more than 1,400 troops lost their lives (Adams 1970:368). A large portion of the military was stationed in Florida throughout much of the early 1800s and built one of the largest fortification networks in the U.S. Even so, most studies of Florida have investigated this war from a single subject focus—for example, investigating a single archaeological site or a single fort, town, event, or person.

FIGURE 1. Map of Florida with the study area circled. (http://davidrumsey.com)

In this study, I link previous research to create a more comprehensive analysis of how the war functioned as a whole. Each part of the conflict landscape is connected, and to isolate one section
for analysis would ultimately change how that part is viewed. Due to time constraints, however, only a section of Central Florida along one of the only formal roads (the Fort King Road) will be analyzed (Figure 1). The Second Seminole War is an ideal test ground for broadening the use of KOCOA to include determining how the social aspects of landscape fortification during the war were shaped by (1) cultural interactions between the military and the Seminoles, (2) standardized military education, (3) landscape knowledge or lack thereof and its effect, and (4) adaptability or lack thereof and its effect. A corollary is to investigate the process of fortification and how the features of a militarized landscape function as a larger system.

Hypotheses

Investigating how the military adapted or failed to adapt during the Second Seminole War has several potential outcomes. The first is that the military adapted to the environment of Florida with a fairly rapid change in tactics for how they approached both the Seminoles and the environment. With successful adaptation, we would expect to see an evolution of methods. Since this analysis focuses on the Second Seminole War and there had been a military presence in the area for many years prior to the start of that conflict, it could be proposed that the military would have adapted by then. In that case, the types of forts built for the Second Seminole War should look different from the earlier forts. At the other extreme, perhaps the military failed to adapt. In this scenario, we would expect to see the same tactics applied over and over regardless of their success or failure. A third possibility is that the military only partially adapted. Evidence for this would be engagements and tactics similar to those employed early in the war that, over the course of seven years, had been adapted to accommodate the difficult terrain of Florida.
One factor that needs to be determined is how failure is defined. Is it a tactical defeat during conflict? Is it occupying a swamp where a large portion of the soldiers end up incapacitated by disease? Is it not relocating the Seminoles? For the purposes of my analysis, failure will be defined as any instance where the army did not meet its objective, whether it concerned a specific skirmish or, overall, the successful relocation of the Seminoles. Cohen and Gooch (1991:26) discuss three forms of failure: “failure to learn, failure to anticipate, and failure to adapt.” As will be shown, all three types figured heavily into the ultimate outcome of the Seminole Wars.

**Lines of Evidence**

Multiple lines of evidence will be utilized in this study. One primary source, maps, have long played a central role in archaeology, both as sources of information and as a means of presenting archaeological data. However, maps have a tendency to be taken at face value as a “visual representation of the ‘truth’” (Smith 2007:81). Maps are assumed to be based on science and use a standardized language of codes and symbols to accurately represent reality. The use of maps as representations of the truth can lead to some false assumptions. In reality, “it is important to recognize that visual (as well as linguistic) representations are culturally determined” (Smith 2007:81). Surveyors and mapmakers often make subjective decisions about what to include or exclude on the final map (Smith 2007). In this analysis, I approach maps critically as a subjective representation of the mapmaker’s interpretation. Mapmakers usually produce sketches based on line-of-site data. Therefore, the distances shown on the maps are often inaccurate. As a result, some maps of Florida are especially problematic because they are grossly inaccurate. Surveyors measure actual distances and elevations—but very few official survey
Maps exist for the Florida of 1835-1842, as much of the territory at that time was unexplored wilderness. Attempts to send out survey parties often met with limited success, because they were harassed and attacked by the Seminoles (Sprague 1848). More detail about which maps are used here will be presented in Chapter 7.

Maps are also important because, as Smith (2007:82) points out, they serve as a symbol of “power controlling the visual representation of space and landscape . . . [and they] are thus regarded as tools of the state and of the powerful, as a means to dominate and control the (most often colonial) landscape.” These themes of power and the symbolism of landscapes will be discussed in Chapter 5.

Other key sources for my analysis include diaries and memoirs published by soldiers who served on the Florida frontier. These provide as close to an emic perspective as possible, one hundred and seventy-five years after the fact, of what life was like then. These documents, ideally, will shed light on decision-making processes and help elucidate whether the army was able to adapt to Florida or not. The main diaries used in this study are The Florida War (Sprague 1848), the letters and journals of William S. Foster published in This Miserable Pride of a Soldier (Missal and Missal 2005), and Lt. Henry Prince’s diary, which was published as Amidst a Storm of Bullets (Laumer 1998).

In addition to maps and archival sources, I conducted preliminary archaeology at two of the four forts in the study area. Data collected include fort locations, information about what types of forts were built (shape, plan, size), and what items were imported to make the forts “livable” (i.e., comforts of home). Luxury items may shed light on whether the military adapted to Florida or, alternatively, tried to create some semblance of a “civilized” home life on the frontier. Due to Florida’s remote location at that time, along with hostile natives, difficult terrain,
and lack of easy transport, getting such goods to Florida would be costly and difficult. The quantities of materials that were imported will shed light on how important these items were in making Florida “livable” by Western standards.

Additionally, modern military theory will contribute significantly to this research paradigm, because it provides a unifying framework for investigating past military engagements. This standardized language and approach can be hugely beneficial to studies of the past. Having a common language allows studies to be comparable across times, places, and conflict types. Since conflict archaeology is a fairly new field of research, a unified language has not yet been settled on. Rather than invent new terminology specific to archaeology, a corpus of information exists that can be readily adapted to investigate past conflicts. However, several key differences must be recognized, the biggest being the level of technology available to the past groups being studied. Modern military science, for example, focuses heavily on the precise measurement of space and spatial awareness, but in the 19th-century, concepts of space were different. It is, therefore, crucial to be aware that when applying modern concepts to the past, those concepts must be relative to the information available at the time. It is false to assume that the same level of spatial awareness and instant communication would have been available for decision making in a different time period.

The final key piece of information for this study is the reference material that cadets at West Point in the early 1800s would have had access to. The best way to understand the role of education in the outcome of a military engagement is to understand how officers were trained to think in that era. Thanks to the rigid doctrine of military education, I should be able to predict what kinds of decisions should be made for a given situation. Education can be a valuable resource, since—at least theoretically—the education of officers was uniform and evolved
gradually over time. It may, therefore, serve as a point of comparison when studying different wars and determining why they were successful or not. Leone argues that it is possible to investigate ideology archaeologically (Leone 1982, 2010). In the case of this research I argue that institutionalized education is a form of ideology in that it follows Leone’s definition that “ideology is a set of masks, or illusions, which disguise the operations of daily, explicative life in capitalism that serve to reproduce society intact” (Leone 2010:65). Education, like ideology, it is something that is learned and is reproducible which means that archaeological patterns should be discernable because an entire group that has been educated in a certain way and will behave in similar fashion. Thereby making standardized education something to be investigated archaeologically.

**Conclusions & Goals:**

Although the use of KOCOA is now required by the ABPP, the primary granting agency in the U.S., and has become a new standard in the field of conflict archaeology, it has never been critically assessed by the academic community. I argue that the way KOCOA has been deployed by archaeologists is limiting and can often lead to false assumptions. Modern military theory and KOCOA can be expanded to serve more as predictive models than as individual analytical tools. The goal of this research is to provide a new approach to analysis that will allow questions of adaptation and failure to be addressed by developing a novel method that incorporates the role of officer education. These three wars dragged on with no decisive victory; I aim to provide a synthetic analysis that will elucidate some of the causes for this.

In Chapter Two I provide a brief history of Florida and the Seminole Wars. In Chapter Three, I discuss relevant current military theory and science to provide a unified vocabulary for
investigating historical examples of conflict. In Chapter Four, I demonstrate how the standardized education that many officers of the Seminole Wars received may have hindered their effectiveness in Florida. Chapter Five delves into several anthropological theories that are important for understanding how various aspects of the landscape affected and were affected by conflict. Chapter Six explains the importance of roads in understanding a militarized landscape. Chapter Seven provides a brief overview of the archaeological examples of how these methods can be applied to specific forts and features of the Florida Wars, while Chapter Eight demonstrates that even preliminary excavation data can be incorporated in a KOCOA analysis. Chapter Eight will also demonstrate how KOCOA can be broadened to be more anthropological and theoretical in nature rather than just providing locational data. Finally, in Chapter Nine, I summarize how this new framework can provide a more applied and anthropological approach to battlefield archaeology.

Understanding and interpreting past behaviors from archaeological materials—even when supplemented by historical accounts—can be difficult. By having a model such as KOCOA against which hypothesized and actual behaviors can be tested, a more complete understanding of the effectiveness of standardized education had on the ability to adapt to a unique and challenging environment. KOCOA can be expanded beyond mapping what has happened to utilizing it to ask questions such as why did these events happen, will broaden the ability of conflict archaeologists to investigate more anthropological research questions.
CHAPTER 2

BRIEF OVERVIEW OF THE HISTORY OF FLORIDA AND THE SEMINOLE WARS

But Florida, with its many advantages for Indian warfare, and its many disadvantages for the operation of our troops, I fear will make the total subjugation of the Seminoles, a work of more time and effort than persons generally suppose. There is the climate with its miasmata, which in all probability, will limit the offensive operations of our troops to the end of May. The dense hammocks, scarcely penetrable but by those who know their thoroughfares; forming secure retreats to the Indians, but almost insuperable obstacles to our troops; the unexplored state of the Southern part of the territory, making the obstacles to be encountered doubtful, and therefore the provision against them uncertain; the great abundance of the Indian’s ailment, the cocuntie root, and the ease with which it may be gathered by the women; the great difficulty of provisioning our troops, particularly in the southern part of Florida. When all these things are considered, I can scarcely believe the subjugation of the Seminoles, headed as they are by their warlike and resolute chiefs, Jumper and Oceola, will be the business of but a month or two. I have no doubt, when the Indians find they cannot withstand the troops sent against them, they will retreat to their fastness in the south; and, if they once determine to conceal themselves, it will be no ordinary search that will ferret them out. The southern part of Florida, is as yet an unexplored country; but, so far as a reconnaissance has gone, it is believed to be one unbroken extent of water, morass, and thick hammock. You will perceive, then, this is no ordinary country to operate in. Indeed, the only way, it seems to me, in which our troops, in case of the theatre of their operations being in the southern part of Florida, can be provisioned, will be, to have vessels coasting on either side, whose movements will correspond with the movements of the troops, and from which a constant supply of provisions can be had…. (Hoskin and Keith 1988:198).

The Origin of Hostilities in Florida and The First Seminole War

Florida has a very long and storied past that is often neglected by the history books. In order to critically examine KOCOA using the Second Seminole War as a case study, a brief
background is necessary. For the purposes of this very brief narrative I will begin in 1565, with the settlement of St. Augustine by the Spanish. St. Augustine was located at the northeast end of the territory. Florida at that time extended westward to the Mississippi River and was two territories: East and West Florida (Figure 2). At that time, Florida was inhabited by many native peoples, including the Apalachee, Calusa and Timucua, among many others (Milanich 1995). However, soon after the Spanish arrival, disease eliminated a large percentage of the indigenous population. It was not long before tribes from the northern states had begun moving into the sparsely populated Florida (Knetsch 2003).

Spain transferred ownership of Florida to England in 1763 at the end of the Seven Years War—or, as it was known in the colonies, the French and Indian War. However, English ownership was short lived, and by the time of the American Revolution, Spain had retaken West Florida. Spain regained the rest of the territory in 1783 with the Treaty of Paris (Fairbanks 1974).

Foreign ownership of Florida was a constant worry for the United States. Alabama and Georgia had rivers that drained into the Gulf of Mexico. This meant that goods could not easily be shipped through the gulf without traversing international boundaries, which required that taxes be paid. Aside from shipping logistics for some states, having a foreign power based so close to the newly formed United States was worrisome for other reasons; perhaps the largest and most pressing issue was slavery. For instance, escaped slaves were finding refuge behind the lines of foreign ownership. Along with the idea of western expansion fueled by the 1803 Louisiana Purchase, this intensified the desire for U.S. ownership (Mahon 1985).

In 1812, hostilities increased and the political situation became more complicated over the next few years, involving not only the U.S. and the Seminoles but the Spanish and British as well. During the Patriot War, the Spanish encouraged the Seminoles to attack the patriots (Mahon 1985). Georgia volunteers unsuccessfully retaliated and attacked the Seminoles in the Alachua Prairie. Five months later, they returned and destroyed hundreds of Seminole homes (Motte 1963). While the War of 1812 slowed American advances against the Seminoles, the Creeks were on the verge of civil war, and General Andrew Jackson was sent in amid fears of spreading Indian hostilities. On March 27, 1814, five thousand of Jackson’s men fought the Creeks at Tallapoosa River (Horseshoe Bend, Georgia) (Dickens 1977). The Treaty of Fort Jackson and the surrender of all Creek land was declared the official end of the Creek Civil War—but, in truth, it just moved farther south to Florida (Sprague 1848). Jackson used the
opportunity to invade and took Pensacola, despite having received orders not to invade.

Eventually he was forced to give Florida back to Spain (Cusick 2003).

Also around this time, the British occupied several Spanish installations. Not only was the British presence troublesome to the U.S. government, but the fact that they built a fort at Prospect Bluff in the Florida Panhandle region and distributed arms to the local Indians and escaped slaves was alarming. Additionally, the British led a failed attack on Mobile, Alabama. The defeat of the British caused their eventual departure from the area (Mahon 1985). Soon after, escaped slaves began to occupy the now-vacant fort, which was later dubbed Negro Fort. The U.S., ever fearful of a slave uprising, devised a clever way of attacking the fort without invading another country and sparking another war. Jackson had Generals Gaines and Clinch build Fort Scott upriver from Negro Fort (Figure 3) (Mahon 1985).

![FIGURE 3. Location of Fort Gadsden, circled in red, which was built over the Negro Fort. (David Rumsey Collection Image #5860001)](image-url)
To stock this new fort, supplies would have to be shipped past the slave-controlled fort. As expected, it was only a matter of time before the supply ships were attacked, giving the U.S. just cause to eradicate Negro Fort without inciting an international war (Mahon 1985).

Despite previous hostilities, the attack on Fowltown in Georgia by the U.S. is often cited as the start of the First Seminole War (Mahon 1985). General Gaines and a unit of 250 men were sent to capture Nemathla, the leader of the Mikasukis, who claimed Mikasuki ownership of the land around Fort Scott despite the treaty with the Creeks that was supposed to have ceded the land to the U.S. The Mikasuki did not recognize themselves as part of the Creeks, and did not believe that the Creeks were authorized to give away their land. Therefore, they disregarded the treaty. General Gaines was defeated on the first day of the attack, but the second day he was able to drive the Mikasukis from their land. A week later, Nemathla retaliated and attacked a boat carrying women, children, and the sick, killing nearly everyone. This caused the U.S. to invade Florida again, and Jackson was sent with several thousand men and friendly Creeks. Jackson and his men cut a swath down the Apalachicola River, burning villages and capturing forts as they went. It ended when Jackson took Pensacola and Fort Barrancas (Mahon 1985).

During his campaign two British citizens, Alexander George Arbuthnot and Robert Ambrister, were convicted by Jackson of aiding the Seminoles and executed. This further strained tensions between the United States and Britain (although the current owner of Florida was Spain) and caused problems for politicians in Washington. Three years later, in 1821, Spain ceded Florida to the United States. A much more thorough discussion of the history of Florida can be found in the following books: *History of the Second Seminole War 1835-1842* (Mahon 1985), *The Florida War* (Sprague 1848), and *Florida’s Seminole Wars: 1817-1858* (Knetsch 2003).
Who are the Seminoles?

The Seminoles’ history is unique. Prior to the era of extensive European influence, the Seminole tribe did not exist. Seminole identity was both created by and in response to external influence. Many scholarly books and articles have been written on the subject of who the Seminoles are, how they coalesced into the modern, federally recognized tribe of today, and how that transformation may have occurred (Fairbanks 1974, Weisman 1989, 1999, 2007). What follows is a brief overview of the literature.

Modern Seminole Indians have been reluctant to share their story with outsiders or researchers (Weisman 1999), although this is beginning to change. As a result of this reluctance, many of the histories written rely on historical accounts, such as travel narratives of individuals that have visited the Seminoles or documents relating to the government’s dealings with them. Because these documents were all written by non-Seminoles and their intended purpose was not an in-depth, scholarly, or unbiased rendering, they are problematic and require sifting through potential biases to untangle historical truths.

The term “Seminole” does not appear before the mid-to-late 1700s (Weisman 1999). Even through the 1800s, accounts are more likely to call them by tribe, such as Tallasees or Mikasukis, rather than Seminole. Those who are known as “the Seminoles” can trace their ancestry back to the Creeks, who in turn can trace their heritage to the prehistoric mound builders of Georgia (Weisman 1999). It is also important to note that the term “Creek”—like “Seminole”—is an English word, but one that has become so widely used that I will use it here for simplicity, with the understanding that there is significant diversity among the Creek Band. The Creeks, much like the Seminoles, changed as a direct result of historical pressures. For example, the Creek Confederacy, which is well known today, was more likely a reaction to
outside pressure and not a typical form of indigenous government (Weisman 1999). Due to the constraint of this research, a complete discussion of how the pre-contact Native’s of Florida were profoundly altered by the Spanish mission system cannot be discussed in detail. But it is important to state that through disease, religious conversion, and intermarriage, native life ways were forever changed (Stojanowski 2005). After almost 200 years of Spanish imposition, disease epidemics had so greatly reduced the population, Florida was almost devoid of its native inhabitants by the time the Seminoles came into being.

As pressure from whites moving south increased, the Native peoples in those regions responded by also moving south (Milanich 1995, 1998). With greater physical distance, cultural differences increased. The Lower Creeks who inhabited Florida were shaped by their unique experiences, such as trading with the Spanish and British, and eventually became more Seminole—or “Cimarrones,” as the Spanish referred to them (Weisman 1999). A common tie that brought the different bands together was their wariness of colonial authority. Pinning down a specific time or event when the Seminoles fractured from their Creek roots and came into their own has been controversial. Weisman (1999) suggests that it occurred when Governor Grant met with the Lower Creeks on November 18, 1765, regarding a land acquisition, as he believed the entire lower Florida Peninsula was under Lower Creek control. Being recognized by a foreign government as a distinct entity, separate from the rest of the Creeks, may have set the stage for the eventual fracture.

One of the first large and systematic studies of the Seminoles’ origins was undertaken by Charles Fairbanks for a 1957 report to the Indian Claims Section of the U.S. Department of Justice. The study was undertaken in response to a claim filed in 1950 by several Seminoles that asked the U.S. government for compensation for the loss of approximately 32 million acres they
claimed were their ancestral Florida lands (Fairbanks 1974, Weisman 1999). Fairbanks concluded that the earliest peoples that were to become Seminole were the Oconee Creeks, who had settled in the Alachua Savanna by 1738, and the Lower Creek Mikasukis, who settled near Tallahassee around the same time (Weisman 1999). Fairbanks also hypothesized that being either pro-Spanish or pro-British helped set the stage for the division between the Creeks.

British-assisted Lower Creek raids in 1702-1704 against the Spanish-Indian mission chain in north Florida effectively terminated the last of the Florida Aborigines and left the Spaniards on the Atlantic coast of Florida with an unprotected rear. Into this void came bands of Lower Creeks, whose homes had been along streams of central Georgia and in the Chattahoochee River basin to the west. Those that settled in the Tallahassee Red Hills and on the Apalachicola apparently did so at the request of the Spaniards, while others, including the Alachua band of Oconees who settled closest to Spanish St. Augustine, were decidedly pro British in sympathy. Thus the stage was set for the development of factionalism among the new Indians of Florida (Weisman 1999:7).

As Weisman (1999) points out, the difficulties with Fairbanks’ 1957 study and a later study by Craig and Peebles (1974) was that the Seminoles were seen as having become an independent group in response to outside pressures. No consideration was given to understanding the cultural change as one that occurred within the Tribe as well as a reaction to outside forces. Craig and Peebles used a biological model to explain cultural change. Their hypothesis incorporated a change in habitats due to migration, which, in turn, affected subsistence methods: As tribes were pushed deeper into the swamps, they first adopted pastoralism and then transitioned to agriculture or gardening. The studies by both Fairbanks and Craig and Peebles are based on the idea that change occurred in response to stress (Weisman 1999). William Sturtevant (1971) began to adopt a more anthropological approach to understand the development of Seminole cultural identity (Weisman 1999). He argued that the Creek settlement pattern and cultural practices were still preserved in Seminole identity; they had simply been modified and
reconfigured as the Seminoles moved into their own identity. Some of these early studies fail to recognize Seminole self-determinism and agency in shaping their own history. The Seminoles were not passive recipients that were molded by pressures from outside, but instead adapted quite successfully to the difficult situations they found themselves in (Wickman 2006). Regardless, the ethnogenesis of the Seminoles is beyond the scope of this research.

Leading up to the Second Seminole War

Even though no official war had been declared, the time between the First and Second Seminole Wars was not entirely peaceful. One unique aspect of those wars was the rather artificial nature of the start and end dates given for them: A war would be declared over, yet in many cases, hostilities continued. In fact, the Second Seminole War had been declared to have ended twice before the official date later listed—on Feb. 21, 1837, Washington’s *Daily National Intelligencer* claimed that “the war has terminated” (Laumer 1998), and the war was again considered over in March of 1837 with the signing of the Treaty of Fort Dade (Motte 1963). The start of the wars happened in much the same way, with hostilities increasing until a tipping point had been reached and war was officially declared, thus allowing more troops and money to be dispatched to Florida.

One major catalyst for hostilities occurred on September 18, 1823, when the Treaty of Fort Moultrie was signed by the governor of Florida and several commissioners, along with thirty-two of the leading Seminole chiefs (Mahon 1962a). This treaty stipulated that the Seminoles (with the exception of six leading chiefs and their followers) would move onto a reservation in the center of South Florida (Figure 4). The treaty was also supposed to provide the Seminoles with rations, supplies, animals, and money for the transition, plus an annual annuity of
six thousand dollars for twenty years (Sprague 1848). However, the treaty placed them on unfertile lands, where starvation and resource deprivation were very real threats (Mahon 1962b).

![1831 map of the Seminole reservation (circled).](David Rumsey Collection Image Number 0285031)

Another significant event in Florida’s history was Jackson’s election as President in 1828. His long history with the Seminoles greatly influenced his presidency. One of his first messages as President was to suggest that the Indians be moved west despite the treaty (Mahon 1985). Failure to comply with the relocation would put the Native Americans “under the harsh
jurisdiction of the states” (Mahon 1985). Removal was touted as the more humane means of
divesting Florida of its “Indian problem.” This suggestion eventually became law with Jackson’s
Indian Removal Act, which narrowly passed on May 28, 1830 (Mahon 1985).

Second Seminole War: Background

The Seminoles themselves were divided between those who were pro-emigration and
those who were against it; occasionally, hostilities would erupt between the two factions. On
November 26, 1835, Charley Emathla, a Seminole chief, was killed by Osceola, a young warrior,
for being pro-emigration (Mahon 1985). Events escalated further when a large organized attack
against the U.S. military occurred on December 28, 1835. A column of eight officers and one
hundred enlisted men under Major Dade’s command was ambushed by a band of Seminoles, and
all but three soldiers were killed (Mahon 1985) (Figure 5). On the same day, General Wiley
Thompson, the Indian agent in Ocala, was killed because he had previously put Osceola in
chains for six days for protesting when the gunpowder supply was cut off. This initial attack
against the U.S. is thought to have been planned over the course of a year (Robbins 2006). The
carefully orchestrated maneuvers were a two-part strike designed to cause the greatest fear
among the white population of Florida. The attack on Dade and his men was strategically timed
to maximize the Seminoles’ advantage. The place of attack was specifically selected so that the
Seminoles could wait “in crescent-shaped formation with interlocking fields of fire” (Robbins
2006:38). This attack has been acknowledged as the beginning of a seven-year campaign to
relocate the Seminoles to present-day Oklahoma.
The Second Seminole War consisted of a series of small skirmishes and was a
reoccurring strategy throughout the war. The Battle of the Withlacoochee was one of the larger
skirmishes, taking place on December 31, 1835 (Bittle 1966). Generals Clinch and Call led a
force of 250 regulars and 500 Florida volunteers into the Cove of the Withlacoochee (Laumer
1968). Various complications worked against this plan, however, ranging from the march’s
taking longer than expected, which meant losing the element of surprise; not having an adequate
means to cross the river, except for one leaky canoe; and the volunteers’ term of service expiring
the next day. When the army was ambushed, their forces were divided between the two sides of

the river. In the end, the troops were forced to return to Fort Drane, and numerous arguments broke out over who and what was to blame (Mahon 1967). The skirmish was crucial, however, in demonstrating how serious the conflict was going to become.

By early 1836 many plantations had been raided or destroyed, and many other settlements in Florida were in danger due to a severe lack of personnel and supplies (Robbins 2006). Personal rivalries between various commanding officers, most notably between Major General Winfield Scott and Brevet Major General Edmund Gaines, exacerbated the early difficulties encountered in the Florida War. Scott was preparing a complicated maneuver to surround the Seminoles in the Cove of the Withlacoochee, and had arranged for three columns to travel independently from different directions and converge on the cove on the same day. Without significant knowledge of the environment and terrain, however, the plan was doomed from the start (Mahon 1985), as will be discussed in more detail below.

At the same time, Gaines had heard of the fighting in Florida and took it upon himself to assist, disregarding orders to head to Texas to take command of a fort on the border with Mexico. As Gaines headed from Fort Brooke (present-day Tampa) to Fort King (present-day Ocala, approximately 90 miles north of Tampa), his command was the first to encounter the remains of Dade’s soldiers, which Gaines ordered buried. Throughout Gaines’ travels through Florida, none of the troops or supplies he repeatedly requested were provided. On his return to Fort Brooke, he decided to take a shorter route that would bring him through the former site of the Battle of the Withlacoochee. This would prove to be disastrous: Before the troops could cross the river, they were ambushed by the Seminoles. Gaines’ men hastily constructed a log breastwork 250 yards square, and Gaines sent letters to Clinch telling him that he had drawn out the whole force of the Seminoles and would keep them there until Clinch could arrive and attack.
Gaines and his men were pinned down at what became known as Camp Izard for eight days until Clinch could determine whether he had permission to assist (Mahon 1985). When he did arrive, Gaines and the Seminoles had begun to negotiate and the Seminoles scattered.

Meanwhile, after much trouble, General Scott’s grand campaign was underway, with each of the three columns ordered to head to their assigned starting position; on a specified day, they were to begin their march into the cove. The center wing was supposed to flush the Seminoles out into the waiting forces of the left and right wings. However, with no accurate maps of the areas (Figure 6) the march proved to be longer and harder than imagined, especially for the left wing. Accounts by soldiers on the march declared that the plan was too complicated and the terrain too harsh (Mahon 1960:311). Without adequate supplies, means of communication, or knowledge of the environment, all of the wings failed to meet their objectives and returned to their bases after having fought only minor skirmishes (Mahon 1985). As Robbins (2006) points out “The conflict quickly fell into a pattern. Columns would march into the wilderness in search of the enemy, without a good idea where they were going. They thus presented an ideal target for the Seminoles, who usually had set up ambushes”.

FIGURE 6. Theater of military operations in Florida 1837.

The text in the upper right reads: “This Map has been lithographed in order that Officers who shall receive copies of it, may make such additions thereto as they may, by their knowledge of the Country, be enabled to. Officer will, therefore, add any information they may obtain as to the Topography of the Country and send the map, thus added to, to the Adjutant General, that, from the general information thus obtained, a correct map of the seat of War in Florida may be drawn for the use of the War Department. Head Quarters of the Army, Washington, September 1837.”
On June 21, 1836, newly appointed Governor Richard Keith Call was given command of the war in Florida in addition to being governor. Call quickly encountered many of the same difficulties: lack of troops, lack of supplies, and much personal infighting between officers. Call, however, began a campaign of sending troops out to sweep the landscape for the Seminoles with varying success. Call suffered a serious setback in the Cove of the Withlacoochee when he came under fire and then failed to cross the river and subdue the Seminoles. Command was then transferred to Brevet Major General Thomas Sidney Jesup at the end of 1836, but Call remained the territorial governor until 1839 (Mahon 1985). Jesup also was ordered to drive the Seminoles from their stronghold around the Withlacoochee River. After a series of small skirmishes, Jesup was able to arrange for a negotiation with some of the Seminole leaders at Fort Dade. On March 6, 1836, an agreement called “Capitulation of the Seminole nation of Indians and their allies by Jumper, Holatoochee, or Davy, and Yaholooche, representing the principal chief Micanopy” was reached (Mahon 1985:200). This agreement stipulated that all hostilities had ended, that the Seminoles would migrate, and it was agreed that they (and their allies, including “their Negros”) would be supplied with food and support until one year after they had reached their new homes (Mahon 1985). Allowing the slaves to stay with the Seminoles caused great controversy and delay. Finally, as the Seminoles gathered in Tampa to emigrate, they were abducted by a band of other Seminoles who opposed migration. Jessup wrote:

Our cunning enemy has again foiled us, and has shown himself as successful in the cabinet as in the field. During their protracted negotiations, they were enabled to supply themselves with provisions, clothing, and ammunition; they brought in large droves of cattle, the captured property of our citizens, which they sold to the government, and received certificates therefore at a certain valuation: these were taken by traders as so much money, and they were enabled to purchase supplies. They obtained ammunition from the Creek volunteers, who received it from the ordnance officers, for the purpose of hunting (Motte 1963:268).
The failure to relocate this group of Natives restarted hostilities, and an effort to locate and remove the Seminoles was once again undertaken. The status of the Negroes became a central feature during the remainder of the War. Jesup tried various tactics to lure them or take them from the Seminoles. Most of his plans stirred up controversy, such as offering freedom to any Negroes who came in; allowing troops to keep any items they recovered from Seminoles they defeated, including slaves; and trying to purchase Negroes from either the Seminoles or Creeks who had captured them (Mahon 1985:251). These tactics were largely unsuccessful as well. Jesup’s command did see some successful campaigns and captures, however, largely with the aid of Negro guides. Other notable Seminole leaders were captured when they came in to talk under a flag of truce. This soon became almost standard operating procedure for capturing the leaders and this was how the famed leader Osceola was captured, despite public distaste for those methods (Mahon 1967).

On May 15, 1838, Jesup was allowed to turn his command over to Brigadier General Zachary Taylor. Taylor’s plan of attack was to divide Florida into squares that were 20 miles to a side and post a garrison of 20 men in the center to patrol each allotted territory. Meanwhile, General Macomb, who had newly arrived to assist Taylor, staged an elaborate talk with the Seminoles and an agreement was reached that would allow the Seminoles to remain in a specified area in the interior of Florida until “further arrangements were made” (Mahon 1985). After much public outcry and additional murders, this short-lived peace agreement ended and the usual skirmishing became the norm. Brevet Brigadier General Walker Keith Armistead succeeded Taylor on May 5, 1840. Armistead’s tactics centered on bribery; he offered the Seminoles significant amounts of money to migrate. Eventually, Armistead asked to be relieved, and Commander William Jenkins Worth succeeded him.
At first, Worth tried to flush the Seminoles from the Withlacoochee, as earlier campaigns had done. He then attempted to drive the Seminoles out by encouraging settlers to move back into the territory and aiding them in building forts and supplying rations (Mahon 1967). Further campaigns were launched to round up the remaining Seminoles when, on May 10, 1842, Worth was given permission to end the war in any way possible, even if it meant allowing the remaining Seminoles to stay (Covington 1961). This declaration did not cause a sudden end, but hostilities slowly decreased over the course of the next year. The passage of the Armed Occupation Act on August 4, 1842, was meant to stimulate the settlement of Florida by citizens who would continue to defend against the Seminoles without military intervention, and signaled the end of the Second Seminole War (Covington 1961).

The Third Seminole War

The Third Seminole War was no more successful than the first two; however, it was a much shorter war, lasting only two and a half years (1855-1858). There were still Seminoles in Florida at the war’s end, although many had emigrated. Yet from a military strategy standpoint, this was a very interesting war. The army had finally started thinking outside of their classical training by employing more nontraditional methods, which proved to be more successful than some of their previous ideas. Following the Second Seminole War, there had been roughly seven years of tentative peace, and Florida officially gained statehood on May 3, 1845, along with Iowa. But by July 1849, that relative calm had been broken by a group of five Seminoles who murdered several white settlers. This caused a panic among the general public, who thought the Indians were rebelling again. Settlers took refuge within the confines of the state’s forts despite the Armed Homestead Occupation Act, under which they were supposed to help defend the
territory in return for land (Covington 1981). The militia was quickly dispatched to deal with the situation. Billy Bowlegs, a Seminole leader, realized the gravity of the situation and was able to capture three of those responsible and turn them over to the military. This temporarily restored peace.

The passages of The Swamp and Overflowed Land Act in 1850 (Covington 1981) finally upset the fragile peace in the region. This act required that all federal lands more than half covered with water be given to the states to be drained. With Florida’s extensive swampland, speculators eagerly hoped to make their fortunes. However, this was the very land that the Seminoles had recently been calling home. The pressure to remove the last remaining Indians mounted. “In his 1853 inaugural address, Governor James E. Broome declared: ‘The Indians are a blight to our prosperity and their presence prevents the influx of population and retards the sale of large acres of land. The state will never submit to any policy short of removal’” (Covington 1981:26). Florida then passed a law making it illegal for any Seminole to reside in Florida (Covington 1981). Forts were erected in the Big Cypress Swamp, and survey parties were sent out in the hope that with enough passive pressure, the Seminoles would submit to removal. While the survey parties did apply pressure, it provoked the wrong kind of response. In December 1855, a survey party under Lt. George Hartsuff was killed, and the rumor was they were killed in retaliation because the men took bananas from—or destroyed a grove of banana trees owned by—Billy Bowlegs (Hammond 1969:188). True or not, the conflict started all over again.

Throughout the three-year campaign of the Third Seminole War, the Seminoles struck randomly throughout Florida, creating panic among homesteaders. Most of the conflict took place in South Florida and the swamps of the Everglades. Eventually, boats were purchased and
stores stockpiled near the Seminole stronghold to facilitate the military’s ability to strike back. General William S. Harney, a veteran of the previous Seminole Wars, took command at the end of 1856 (Fox 1993). His goal was to keep the Seminoles on the move to prevent them from resting or growing crops to sustain their population. Despite his efforts and small successes, he was eventually reassigned to deal with Brigham Young and his followers out west. Command now fell to Colonel Gustavis Loomis, a West Point graduate of the class of 1811. His strategy was to bring another delegation back from the western reservation to convince the Florida Seminoles to emigrate, but this was not successful. More boat companies were deployed successfully, and the militia became more efficient at finding and harassing the Seminoles (Covington 1981). At the end of 1856, the Seminoles were finally granted their own reservation that was not under Creek rule, which led to Billy Bowlegs’ agreeing to move in March of 1858 (Porter 1967). Despite the declared end of the war, hostilities were not entirely over; not all of Billy’s followers had emigrated.

In the Seven years of the Second Seminole War, the Army lost 1,446 dead, 328 of them killed in action, most of the rest to disease. With 10,169 soldiers serving in Florida, the death rate was 14 percent, making it by far the deadliest of any of American’s wars. The losses included 74 officers dead and 20 killed in action; 13 of the dead were Academy graduates. The conflict cost between $10 and $40 million, depending on who was doing the estimate (Robbins 2006:52).

The Seminole Perspective

While this abbreviated history provides a brief background of the Florida Wars, it does so from the military’s perspective. Because my research focus is on military adaptation, a more thorough understanding of the military’s history is necessary. Nevertheless, it must be acknowledged that these wars would were profoundly different for the Seminole. The military
argued that since the Seminoles were only recent arrivals in the Florida Territory, they had no ancestral claim to the land.

Obviously, the Seminoles saw things differently. The Creeks had begun settling in Florida in the early 1700s, and Weisman (1999) hypothesizes that a meeting in 1765 set the stage for the Florida Creeks to fracture and begin the process of becoming Seminole. By the Second Seminole War, several generations had passed in Florida, which solidified their ties to the land. Since so little documentation exists that sheds light on Seminole history, and in the past Seminoles have been reluctant to share their stories, it can be difficult for researchers to flush out the Seminole half of the Florida narrative. The Seminoles—and especially the Mikasuki Seminoles—were seen as formidable warriors fighting for their homes and their way of life (West 1998). Wickman’s (2006) account of Osceola’s life paints a compelling picture of how different groups were forced together in untraditional ways and were provoked and taken advantage of by white settlers. Such depredations only strengthened the Seminoles’ resolve to resist and to fight for their ancestral lands. Many Seminole leaders rose to prominence; one of the most famous outside the Seminole community was Osceola (Wickman 2006).

As I will discuss in more detail throughout the dissertation, the Seminoles were significantly more adaptable than the military, and devised new strategies to maximize their effectiveness against often superior numbers. In addition to being much more familiar with the terrain than the military, the Seminoles were also quick to discover the military’s strategies and weaknesses and wage effective, guerrilla-type warfare. For example Wickman describes how Oseola’s mentor teaching him to gather information at military installations by entering under pretext of selling fish (Wickman 2006). This rouse allowed him to gain intelligence about the military without attracting attention. This is just one small example, which demonstrates the
cunning, and strategy the Seminoles approached the conflict with the military. Histories of these events, often written from the white perspective, fail to recognize the strategies employed by the Seminoles and instead paint their actions as strictly reactionary and defensive, when clearly they were not. A more thorough discussion of Seminole planning and strategy can be found in Lawre’s master’s thesis where he investigates Seminole and Creek combat behaviors (Lawres 2008).

_The Bigger Picture_

Throughout the entire conflict, several major problematic themes become apparent. One was the gap between the citizen soldier/militia and enlisted men: terms of service for militia were sometimes too short (not to exceed 3 months) for them to be of any use (Sprague 1848:103), getting enough volunteers was difficult, and pay was extremely low (about six dollars a month) (Schene 1976). Volunteers viewed the professional soldier as pompous and coming from an aristocratic upper class. Another major problem was the shortage of supplies; small sums of money were constantly being appropriated, rather than one large amount that might the war quickly. Legislators in Washington were so far removed from the environment of Florida that there was little comprehension of what was needed. This caused the war to be dragged out while troops waited for the supplies they needed.

The command in Florida partially met Cohen and Gooch’s three areas for failure: the failure to learn, anticipate, or adapt (Cohen and Gooch 1991). For example, officers on the ground in Florida were ill equipped to navigate Florida’s unique environment. With high turnover among commanders, the war was doomed to repeat ineffective tactics over and over, which demonstrated a failure to learn. Then there was the lack of adaptation to local conditions
and to the guerrilla-warfare style of fighting. It could be argued that this was also a failure to anticipate, because the same mistakes tended to be repeated. For example, “because the Indians were unencumbered and could retreat in several directions at once, and Army columns were limited by their baggage trains and supply lines, there was no way to exploit a victory” (Robbins 2006:40). It was not until nearly the end of the conflict that the army started to find new methods of attacking the Seminoles, such as the boat companies during the Third Seminole War, which shows that learning and adaptation took place, albeit slowly. The Seminoles, however, were quicker to adapt and developed a successful method, which involved setting an ambush with a rapid round of fire and then quickly retreating. They used this method throughout the wars (Covington 1981). Other small gains were made, such as learning that horses were ineffectual during the rainy season and boats could be of more use, but again, it was not until the third war that this was really implemented with success (Covington 1981).

While it is easy to dismiss the military as having failed completely in Florida, this is not entirely the case. As will be shown in the following chapters, the U.S. was unsuccessful in relocating all of the Seminoles as planned, which could be seen as a failure. However, there were many Seminoles who were relocated, which demonstrates that the military had limited success. The Seminoles who wished to stay, however, were more successful in their resistance strategies than the military was in their combat strategies. The Seminole Wars, like any conflict, cannot be viewed in clear-cut terms such as success or failure. Instead there is a continuum of outcomes along this spectrum of success. While some engagements are seen as an immediate failure to meet an objective, the lack of success in one instance may lead to learning and a change in tactics, which could eventually lead to success down the road.
The Cultural and Historical Impact of the Indian Wars

The Seminole Wars were unique in many aspects, with the most profound being the multifaceted layers of causes. Unlike many conflicts, it is difficult to point to one clear cause and effect for the start of the war, especially since it dragged on for so long, spanning approximately 40 years and three separate wars.

The causes of the difficulties in Florida must be apparent to the minds of careful and intelligent readers; causes not springing up in a day, but nourished for years, aggravated as opportunities offered to enrich adventurers, who had the temerity to hazard the scalping-knife and rifle, and were regardless of individual rights or of law. It must be remembered that Florida, at the period referred to, was an Indian border, the resort of a large number of persons, more properly temporary inhabitants of the Territory than citizens, who sought the outskirts of civilization to perpetuate deeds which would have been promptly and severely punished if committed within the limits of a well regulated community. This is the case on all frontiers. It is unavoidable until well disposed citizens become so numerous as to exert the supremacy of law, when the innocent but too often suffer with the guilty. These temporary inhabitants of Florida, rather than its citizens, have had an active participation in the events that have transpired within her limits for twenty years past. They provoked the Indians to aggression, and upon the breaking out of war ignominiously fled, or sought employment in the service of the General Government, and clandestinely contributed to its continuance. (Sprague 1848:5)

Each round of violence had specific triggers, but a few trends can be seen as encouraging war. These themes, discussed briefly below, are: manifest destiny, slavery, speculators, and, very tangentially, cattle.

The Indian Wars were unique for the U.S., and played a large role in shaping U.S.-Indian policy and relationships. Unlike more traditional wars against an invading or neighboring sovereign nation, the Indians posed an interesting conundrum. They were seen as possessing land that the government wanted, yet at the same time seen as not deserving to possess that land due to the uncivilized nature of these “poor wretches” (Potter 1836). This cultural dynamic made the conflict about much more than land. It set the stage for the U.S.’s initiative of Manifest Destiny.
and Western ideas of progress to crystallize. Manifest Destiny is arguably one of the most compelling of those themes. According to Robert Utley (1984:34), “The idea of progress focused on the Indian in two ways. First, he was a central feature of the wilderness, and by definition conquest of the wilderness entailed conquest of the Indian. Second, he was living confirmation of the very idea of progress itself. Progress came to be seen as rise from savagery to civilization”. This idea of progress and civilization gave rise to a new phenomenon as well, the “Frontier”—that borderland between the civilized and uncivilized.

The Jeffersonian answer to the recurring bloodshed was removal: Remove the Indians of the East to the West, to lands not inhabited by whites or included within the boundaries of any state. Give them new lands in the unorganized territory beyond the ninety-fifth meridian. Protect them there from white encroachment either on their domain or their way of life. In this officially designated ‘Indian Country’, separated from the rest of the nation by a ‘Permanent Indian Frontier’, the Indians could dwell in free and happy isolation from their tormentors, absorbing civilization at their own pace or rejecting it altogether if they wished. Under Presidents James Monroe and Andrew Jackson, removal became the dominant feature of the U.S. Indian Policy. Throughout the 1830s and 1840s the eastern Indians were uprooted and moved westward. Some fifty thousand people made the trek, many at great cost in suffering, hardship, and impoverishment. They yielded 100 million acres of eastern homeland in return for 32 million western acres and 68 million dollars in annuity pledges (Utley 1984:37).

The policy of isolation and containment became a dominant theme in American culture at this time. However, in practice it was not so easy. Many Native peoples were reluctant to hand over their ancestral homelands, or what little was left of it, and be herded off to some unknown and unfamiliar landscape—thus leading to an entirely different form of warfare, one that the U.S. found difficult to master. “Accustomed to the European manner of combat, most colonists were appalled by Indian tactics. The deliberate killing of women and children was unconscionable to many settlers. So, too, was the natives’ guerrilla style of fighting” (Ferling 1980). As Starkey (1998:14) points out, “Commanders’ disregard of costly lessons is one of the disturbing features
of the warfare of this period. . . . This suggests, even to a very traditional military historian, the importance of multicultural studies as an agent of humanity in war.”

The second most compelling—yet often not overtly discussed as a cause—theme was slavery. Having as a neighbor a country that not only gave refuge to runaway slaves but often allowed them to arm themselves was seen as an enormous risk. It both encouraged enslaved peoples from the surrounding states to seek refuge and had the potential to incite a revolt within the slave communities in the south. Pressure from slaveholders was a driving force behind the United States’ decision to engage in the Second Seminole War (Howe 2007); Jesup wrote, “This, you may be assured is a negro and not an Indian War” (Howe 2007:516).

Newspaper accounts of the time also discuss the concerns of land speculators regarding Indian relations in Florida (Howe 2007). Once the territory of Florida had come under U.S. control, eagerness to make a fortune in land speculation became rampant. Others saw “the treaty as ‘a clever administration ploy to expedite Indian removal by opening the door to white speculation in Creek lands’” (Howe 2007:417). Despite the fact that there were few people willing to settle in Florida after such long and protracted wars, land speculators pushed hard to remove the Seminoles so that more land could be purchased. Potter (1836) wrote, “The soil of the hammock lands is of the most luxuriant character, and hence the desire of speculators to drive the Seminoles off, whose reserved lands are principally of this description.” Finally, cattle ownership also played a partial role in the Second Seminole War. Since Florida was a state where cattle roamed free, the Seminoles were often victims of cattle thefts—when they reclaimed their cattle, they were punished for stealing or leaving their reservation (Potter 1836). This tension over cattle ownership was a constant source of friction between homesteaders and the Seminoles.
However, the settlement of Florida did not happen as the politicians in Washington might have hoped. The Armed Occupation Act of 1842 could only be counted as a marginal success, and the constant threat of attack meant that few people were brave enough to occupy such a formidable environment. The act stipulated that in return for one hundred sixty acres of land, the head of the household was required to bear arms to defend the property, live on the land in a house for five consecutive years, and cultivate at least five acres (Covington 1981). Yet these early homesteaders were often unprepared for this wilderness lifestyle, lacked knowledge about farming, and, in some cases, did not even own a weapon to defend their property with. The military complained bitterly about them because at the first hint of even a single Indian in the area, they would flock to the nearest fortification for protection, consuming valuable rations while they were there (Covington 1981). One account, signed “Actual Settler,” states the following:

At the cessation of Indian hostilities, the settlers under the Armed Occupation Act located for the most part on or near the main routes through the interior of the country south of the line designated for such settlers, and the few who turned towards the coast and rivers sought rather for places for towns, healthy residence, islands, etc., than for rich hammock land. To verify this, I need only to mention the fact that there is one hammock of fifty square miles without a permit on it; another of thirty, and yet another of fifteen square miles within the limits herein above mentioned. It is true there were some permits taken out upon the Crystal River, Homossassa, Cheesahowitska, Wekiwachee Rivers, but this may be accounted for by the fact that they were upon one of the routes of travel south. These settlers were, however, of the class who had no experience in planting, no intention of making a permanent settlement and soon abandoned their places (Covington 1981:5).

Public Perception of the Florida Wars

Despite the fact that modern history has largely forgotten these long and complicated wars, they left an indelible stamp on American history. Much of Jackson’s career was shaped by his early military encounters with the Seminoles; the wars ended in passage of the Indian
Removal Act, which ultimately affected all Native peoples in the United States. Yet not all of the American public thought the war with the Seminoles was necessary or just. Some passionate accounts describe the Seminoles as being similar to the founding fathers in fighting for their lives. At one point during the Third Seminole War, bloodhounds were used to track the Seminoles through the swamps. There was an enormous public backlash against this, because it was seen as inhumane (Robbins 2006). Even after a compromise had been reached that the dogs would be muzzled and unable to attack, the public looked down on the tactic.

Yet the majority of public newspapers of the era paint the Seminoles as violent and inhuman (Figure 7). The inflammatory language used to recount events is fairly consistent with contemporaneous public thought on the “savage nature” of Indians. Across the country, stories were often reprinted word for word weeks and even months after original publication. Here is just a sampling of the typical portrayal of the Seminole people in American newspapers.

FIGURE 7. Newspaper image depicting the Dade Massacre. (http://www.csulb.edu/~aisstudy/nae/chapter_2/001_002_2.43.jpg)

Seminole War. —Since the engagement on the Withlacoochee, no intelligence has been had of the main body of the Indians. The situation of the inhabitants east of the St. Johns and south of St. Augustine, is truly deplorable. New Smyrna has been burnt and all the fine plantations in that neighborhood are broken up. Many of the negroes have been carried off, or have joined the savages. The Indians are
dispersed in small parties, and when pursued they take refuge in the thickets which abound everywhere, and fight with desperation until they are dead, no matter what numbers they may be assailed. It is literally a war of extermination, and no hope is entertained of putting an end to it, but by the most vigorous measures (1836).

The information that we get from Florida is of the most appalling description, and leads us to fear, that before the necessary aid can be given to the people of that devoted Territory, the whole region will be at the mercy of a band of warlike savages. The Seminoles have already secured an accession of strength not to be derided, by an union that has been effected between them and the Creek Indians. The force combined is unusually strong for a border war; ..... Beside the (?) of the Creeks, the Seminoles are aided by a band of run a-way and captive negroes, who are represented to be far more ferocious in their butcheries than the Indians themselves. These miserable and abandoned creatures are urged onward by that blood spirit of revenge that never tires...(1836).

Studying Conflict

Studying wars archaeologically and anthropologically is a recent phenomenon, especially in North America. Only forty years ago, Ivor Noel Hume (1969:188) stated that “little can usefully be said about battlefield sites . . . [where] . . . the salvage of relics becomes the be all and end all.” Warfare has previously fallen under the purview of military historians, who relied primarily on literary sources. Yet military history alone is not sufficient to fully understand past conflicts. Accounts can be biased (written by victors, revisionist, etc.), incomplete (a single soldier can only accurately relate the small part of the battle he participated in, and details can be forgotten), or inaccurate (e.g., secondhand accounts based on faulty information) (Fox 1993). Therefore, by adding archaeology to the study of historical sources, a more well-rounded picture can be gained. As Fox (1993) writes, “Archaeology reveals the skeleton, which history then clothes.” Much of the conflict archaeology literature has yet to be synthesized into a concise history of this burgeoning field, and even the best name for it is being contested: Should it be
called “conflict archaeology,” “battlefield archaeology,” “archaeology of battle,” or “military sites archaeology”?

One point of agreement is that new technologies (metal detectors, GIS, GPR, total stations, satellite imaging, etc.) have greatly enhanced the quality and level of detail possible for research. One of the first sites to receive this treatment was the Battle of Little Bighorn by Scott and Fox in the early 1980s (Drexler 2003). Volunteer metal detectorists were used to locate artifacts from many areas of the battle. Using modern forensic science to analyze unique firing-pin markings on shell casings and rifling signatures on bullets, the movement of individual guns around the field of battle could be mapped accurately. This allowed for a more complete picture of how the battle progressed than had been previously possible. Despite the newness of this aspect of archaeology, great strides have been made to advance the field with journals and conferences dedicated to its study.

The artifacts of war leave a distinctive mark on the landscape that archaeologists are able to interpret and use to deduce behaviors. “Combat behavior is, from the archaeological perspective, no more and no less susceptible to analyses than any other form of human endeavor” (Fox 1993). Stanley South coined the phrase “Revolutionary War Military Battle Pattern” when discussing the patterns of deposition relating to Revolutionary War sites, and he broadened his hypothesis to include “supply lines, logistic bases, military supply, types of arms available, etc.” (Fox 1993:4).

Battlefield archaeology has been described as “perhaps the most historical in orientation and the least theoretical in interpretation” (Drexler 2003). I argue that this does not need to be the case. Many theoretical perspectives can be applied to the study of battlefields and conflicts. For example, Fox (1993) uses a stability/disintegration model to investigate the Battle of Little
Bighorn. In this dissertation, I will draw on the theory of culture contact/interregional interaction, military theories such as KOCOA, and the role of standardized education.
CHAPTER 3:

THE EDUCATIONAL BAGGAGE OF A WEST POINT EDUCATION IN THE SECOND SEMINOLE WAR

Legends of West Point.

Methinks Mr. Editor I can already see a smile lighting up your countenance at the idea of legends at West Point. Of all Places in the world this is certainly the last in which one would expect to be entertained by a traditionary tale. The principles of Vauban and Cormontaigne, together with the various methods, analytical and synthetical, of demonstration philosophical, are sufficient to banish from the minds of those who are within sight or hearing of the academy all idea of things which cannot be measured by feet and inches or subjected to some philosophical experiment. Indeed I know from my own experience that the two first years are alone quite sufficient to unhinge every idea previously conceived, unless mathematically supported, and to lead to the rejection of every other which is not backed by lines, triangles, or some other mathematical authority. So accustomed does the mind here become to demonstration, and so confirmed in the habit of inquiring into the manner of proof, that all subjects, without distinction of kind, run the risk of being subjected to the same process. I recollect giving a hint to my chum on one occasion by saying: My dear fellow, you’ve got a hole in your breeches. His reply was in the usual form, “How will you prove it?”(Army and Navy Chronicle 1836:123).

Doctrine is not only an idealized description of how things are done but also an attempt to inculcate habits of mind and action that change organizational culture and behavior (Kilcullen 2010:20).

Introduction

I chose to use the phrase “educational baggage” for this chapter title because I propose that not only did education hinder the success of the military during the Second Seminole war, but that its approach to war—literally, its large baggage trains (as just one example)—presented a logistical nightmare that the U.S. Army had to learn to deal with. Also, French military
influences resulted in an educational and logistical heritage, which, I argue, significantly shaped how the war in Florida progressed. These are just two instances of how environmental knowledge and military training intersect with the landscape. The Second Seminole War provides a unique opportunity to critically assess the many assumptions we bring to a historical event because of the unique set of circumstances the military had to deal with. Through the use of GIS modeling, I investigated how this classical military training was brought to bear on the Florida landscape and what, if any, compromises had to be made to allow those traditional methods to work in a subtropical, frontier setting.

The first formal training of American soldiers occurred at Valley Forge, Pennsylvania during the winter of 1777–1778. By December 19, 1777, the American troops had begun arriving (Pruitt 2012), and French arms arrived the following spring. The key figure in the training was Friedrich Wilhelm August Heinrich Ferdinand von Steuben, better known as the Baron von Steuben. He defined the proper layout of a military encampment (Whitehorne 2006:30-35). More importantly, he taught the troops at Valley Forge how to march as a single unit and fire in two ranks (von Steuben 1985:28-29). The soldiers were trained how to use the new French muskets and bayonets as a single fighting unit that would stand up to a British charge (von Steuben 1985:23-25,55-56). However, General George Washington did not forget the importance of using guerilla tactics. When the British left Philadelphia in June 1778, Washington sent Colonel Daniel Morgan and his Virginia riflemen to harass the British and slow down their march so that the American army could catch up and engage them. Morgan was a veteran Indian fighter skilled in the arts of concealment and hit-and-move tactics (Smith 1964:6).

On June 28, 1778, the Continental Army and the Crown forces clashed at Monmouth Courthouse in New Jersey. For the most part, the newly trained American troops followed von
Steuben's training and stood their ground against advancing enemy columns. However, guerrilla tactics were again employed. Colonel Joseph Cilley handpicked a platoon of skilled riflemen who took positions in a wood-line and heavily sniped at the Second Battalion, British 42nd Highland Regiment of Foot, successfully forcing the Highlanders into a retreat (Martin 1988:129-131, Stone et al. 1996).

After the Battle of Monmouth, the British moved the war to the southern states. Colonel Francis Marion of South Carolina created his own company of Rangers, which operated independently of the conventional American army. Using guerrilla tactics and their intimate knowledge of the swamplands, they successfully harassed the British by performing lightning raids and disappearing into the swamps, much as the Seminole Indians would in the 19th century. Marion earned the nickname “Swamp Fox” because of his tactics (Whitehorne 2006). The training of the U.S. Army at the new academy at West Point, however, reverted to the rigid European style and abandoned the necessity of guerrilla training.

*Officer Training and the French Legacy*

West Point officially began in 1802 as a loosely defined educational system in which cadets would stay for any length of time and were of any age (McDonald 2004). Sylvanus Thayer, superintendent of West Point from 1817 to 1833 (Betros 2004), changed this. His actions perhaps had the biggest impact on the shape of military strategy of the Second Seminole War and are arguably still important for modern day military education. Thayer graduated from Dartmouth College in 1807 as the valedictorian of his class. He was then awarded an appointment at West Point and graduated the following year, in 1808, as a second lieutenant. During the War of 1812, he directed the construction of fortifications at Norfolk, Virginia, and
was promoted to the rank of major (Betros 2004). Afterward, he was awarded money to travel to France, where he studied at the École Polytechnique, the French military educational institution (Abbot 1878). The school was founded in 1794, during the French Revolution, to serve primarily as a preparatory school for the various branches of service (Boynton 1871). Admission was based on results of a public examination and successful completion of prior schooling. The curriculum was designed to be a two-year course of study. Upon completion of the coursework, cadets were allowed to choose the branch of service they wished to join, based on merit and available openings (Boynton 1871).

In 1817, President Monroe appointed Thayer to the superintendency at West Point, where he enacted policies of standardization, discipline, and rigorous testing based on what he had learned while in France. He sought to create an American version of the French system, and therefore French texts and treatises figured heavily in the curriculum, which required the cadets to read French. West Point’s new curriculum included classes in French, math, drawing, philosophy (physics), infantry tactics, gunnery, strategy, theoretical military science, drill, and many others (Robbins 2006). Reports of the Board of Visitors in 1821 show that “elements of permanent fortification” were also part of the curriculum. It is this training that may have significantly influenced the course of the Second Seminole War, because cadets learned to follow a prescribed set of guidelines for each situation they encountered. Thayer created a four-year program to ensure conformity and continuity between graduating classes. Every aspect of a cadet’s schooling was to prepare him for a military career. As one cadet wrote in 1822:

If there is a means stronger than any other of cementing the union of the States, and perpetuating our government, it is the national Military Academy at West Point. To this institution, young gentlemen are sent from all sections of the Union. They come together with all the sectional prejudices, habits, and knowledge. . . . Their former habits, manners, and prejudices soon become extinct. They form a new character, a national character, which is no where else formed in the country.
They separate and are scattered to every part of the country; but their feelings are not separated, and their interests are not divided, and generally never will be. . . From this source an uniformity of political principles and opinions and national and personal attachments will be formed and disseminated, which will bind together our States, and perpetuate our union, when without this cord they might separate (Skelton 2004:29).

How the military is trained affects the outcome of any engagement. Most militaries operate based on tradition, training, and orders. It is this tradition—and how knowledge is constructed—that is of interest here. Education at West Point focused heavily on the French education model (Betros 2004). The French had the leading military educational institutions in the world in the 19th-century (Betros 2004). These French academies focused heavily on fortification and engineering and did not deal much with drill and troop movement theories. “Thayer saw West Point as primarily a school of engineering and showed little interest in cultivating either liberal arts or strictly military courses” (Betros 2004).

In Western Europe, at least, what might be termed fortress warfare dominated the landscape. Huge, geometric structures signaled the significance of military architecture and artillery. Officers had to know how to defend or besiege and capture fortresses. Technical awareness became imperative, as artillery and engineering, together or separately, became a distinct branch or component of armies by the eighteenth century (McDonald 2004:25).

This French connection created formulaic methods with which officers were taught to approach problems. Regardless of environment or previous success or failure, these strategies appeared to have been implemented repeatedly in Florida. For example, the same type of fortification was built, regardless of who the commanding officer or engineer was or what the environment was like at the proposed fort’s location. This suggests that standardized education was the cause.
This new French-based training had shortcomings, such as overly emphasizing traditional European-style tactics rather than flexible guerilla tactics, which had been more commonly used in the United States.

Overall, however, the West Point approach to military science was narrow, technical, and derivative. . . . With a few exceptions, most notably (Dennis Hart) Mahan himself, Academy-trained military thinkers focused mainly on traditional fortification, tactics, and the particulars of military weaponry and equipment rather than on strategy or broad military policy. Moreover, they tended to accept uncritically European models rather than seeking flexible solutions to military problems within the context of American conditions (Skelton 2004:33).

It is interesting to see how much of the American military heritage is based on French influences, even though the American military would be engaged in wars that were very different from those fought in Europe. This enculturation of how to fight a war properly had an overwhelming impact on how the war in Florida was conducted.

*Dennis Hart Mahan – Educator and Accomplished Strategist*

Dennis Hart Mahan was another key figure in the shaping of West Point’s curriculum. He graduated in 1824 at the top of his class and became an instructor at the academy. After two years of teaching, he was ordered to France to enroll in the Military School of Application for Engineers and Artillerists at Metz (Abbot 1878). This school was designed to teach artillery and engineering after the cadet had completed the scientific training at the École Polytechnique. It also was a two-year curriculum; however, it focused on teaching aspects of “practical study.” Upon graduation, cadets joined a regiment and were “employed in practical exercises with troops till they obtain the rank of second captain” (Boynton 1871). Subjects of study at Metz consisted of
topography and geodesy, including military drawing and surveying, under special circumstances; field fortifications, military art and legislation, permanent fortification, and the attack and defense of fortified places, accompanied by a sham siege: architectures, as applicable to military buildings and fortifications; the theory and practice of construction, and artillery (Boynton 1871:371).

Mahan brought this new knowledge back to West Point, where he served as a full professor of civil and military engineering for the next thirty years (Pappas 1993). He published many of the leading treatises on military art and science, and also translated several French works for use at West Point (Abbot 1878). Yet the school's focus on engineering would make Lieutenant Henry Prince a key player during the Second Seminole War. Prince graduated in 1835, and by 1836 he was serving in Florida. As the engineer in charge of rebuilding both Fort Foster and Fort Dade, he left a significant mark on the landscape that reflected his West Point training. Mahan had not yet published his treatises on military science when Prince was his student, but as a professor of civil and military engineering, Mahan would certainly have lectured on the subjects he was writing about and, in turn, influenced Prince’s ideas about how to build a fort and what a proper fort should look like (Betros 2004).

Other Notable Military Theorists

Philosophizing and publishing treatises about military strategy has a long history that dates back hundreds if not thousands of years (Phillips 1985). Referring to the European military revolution of 1560-1660 in Europe, Parker states that “they required troops who were highly trained and disciplined, men who would act as cogs in a machine; and the cogs had to learn how to march in step and how to perform their movements in perfect unison—they even had to dress the same” (1976:196). This legacy had a lasting effect on global military doctrine. When the academy at West Point was forming, France was seen as the leader in military science.
The Marquis de Vauban (1633-1707) was considered one of France’s greatest military thinkers and wrote extensively on military science. Vauban’s key publication, *The New Method of Fortification* (1762), emphasized the new reliance on scientific methods of warfare and even discussed the best soil type and location for placing forts (Figure 11). This could have been a significant lesson for Florida, which has a plethora of marshes and swamps. A critical feature that Vauban notes is that marshy ground should be avoided, because it causes illness. It is surprising that this fact took so long to be implemented in Florida; many forts were built near marshy grounds/standing water, and illness was rampant.

![The Disadvantages of a marshy Situation.](image)

1. It is almost impossible to relieve it.
2. It must be strengthened with Piles driven in.
3. Sallies thence are commonly unsuccessful.
4. The Air is there always unhealthy, which is the Occasion of frequent Distempers, because the Water there is always corrupted.
5. These Places may be attacked without any great loss of Men, provided they stay till the Frosts.

**FIGURE 8.** Excerpt from Vauban's treatise. (Vauban 1762)

In addition to becoming more scientific, the principles of speed and timing emerged as central themes with many famous tacticians:

The Duke of Wellington commented that “time is everything.” “Strategy,” Napoleon reflected, was an “art of making use of time and space.” Jomini located tempo and rapid marches at the center of his military theories. Clausewitz opined that military geniuses achieve “rapid and accurate decisions” because of superior faculties to evaluate time and space. (Cunningham and Tomes 2004:119)

To achieve this level of efficiency, strict training of troops is imperative. West Point served to fill that need for training in the United States.
The Board of Visitors and West Point’s Curriculum

Annual exams were administered by the Board of Visitors each year at West Point. After reviewing the cadets’ progress, a formal written report on the state of the institution as a whole was submitted. These reports provide valuable insights into education at West Point. The earliest record of the Board of Visitors has pages of recommendations on the books needed for the library. The list of topics of books requested includes philosophy, geology, hydrostatics, magnetism, astronomy, mathematics, and architecture, among others. However, no military-themed books were requested. In 1821, the course of study was as follows (Board of Visitors 1821):

4th Class, 1st year—Algebra, Geometry, Plane and Spherical Trigonometry and the use of Logarithms, French Language
3d Class, 2d year—Descriptive Geometry, Application of Algebra to Geometry, Analytical Trigonometry, Integral and Differential Calculus
2d Class, 3d year, Mechanicks, Astronomy, Physicks, Chymistry, Drawing
1st Class, 4th year—Fortification, Artillery, Tacticks, Civil and military Architecture, Application of descriptive Geometry to Stereotomy &c, Geography, History &c

Ultimately, the goal of the course of study was to teach the cadets basic French and mathematics during their first year. As they moved up each year, courses of study became more specialized and cadets were split into sections based on merit (Figure 9). Those that were the highest ranked learned more specialized subjects, to prepare them for jobs as engineers, while the second- and third-ranked sections of each class focused more on the skills officers would need in the field, such as artillery or tactics.
FIGURE 9. List of courses and textbooks used at West Point, 1824 (Board of Visitors 1824).

West Point Graduates and the Second Seminole War

The global connections that helped to shape the outcome of the Seminole Wars are often overlooked in the literature. Yet this conflict is the first war in which a large portion of the 452
officers are known to have served in at least one of the three Seminole Wars, and had been
trained at the newly created United States Military Academy at West Point. Of these, 15 served
during the first war, 285 served during the second, and 146 served during the third. Some of
these officers served in multiple wars and may have been counted twice.

Brevet Major-General George W. Cullum compiled an exhaustive list of all graduates of
the Military Academy. Each graduate’s entry contains a short biography, a description of their
military career (if known), miscellaneous notes of interest, and his unique identifying number,
which is now known as a “Cullum number” (Cullum 1868). Cullum gave the first graduate of the
Academy the number one, and each cadet after that was numbered according to graduating class
and merit. I made exhaustive use of these lists; information relating to officers who served in the
Florida was extracted and is listed in Appendix A.

Conclusions

A better sense of the mindset officers of the Second Seminole War brought to conflict
can be gained by studying the available texts they read during their time at West Point. While it
may be impossible to show a direct cause and effect of this standardized education, I argue that
some of the trends seen in Florida’s fortified landscape are a result of standardized education:
Despite a constant change in command, similar tactics and methods were employed repeatedly.

I have demonstrated that there is ample reason to believe that officer education may have
significantly shaped the war in Florida; however, testing this hypothesis has proved difficult.
There are few models for investigating an entire war in general, and none that I am aware of that
include education—and determining how to approach the concept of education archaeologically
can be challenging. As I will show in the following chapters, modern military approaches can be
used to investigate the Second Seminole War and provide the tools necessary to investigate hypotheses about education and adaptation.
CHAPTER 4:
USING MODERN MILITARY THEORY FOR HISTORIC CONFLICT ANALYSIS

“Fort” Brooke, Tampa Bay, Jan. 9th, 1836.
Mr. Editor:—The attention of the public may in some degree, be attracted to this point, and I therefore give the following information:

This place was never fortified; two block houses were indeed built at the end of a street four or five barracks, and quarters on each side. The Secretary ordered “Cantonments” to be called “Forts,” and to that rule this post conformed.

The existing defences are called the “Fraser redoubt” in compliment to the late gallant officer of that name. It is a triangular stockade, with two block houses and a battery of two 12 pounders looking upon a plain; and some 100 yards from the barracks and a large grove of venerable live oaks, the gorge, or third side, was open to the bay shore, and has since the battle of Withlacooche, been enclosed with a 6 pound battery flanking it and making a cross fire upon the salients of the gorge. All that is fort about the position, has proceeded from the thews and muscles of its garrison from about the 1st Dec. to the date of this missive, Of all miserable contrivances in the paper way, paper forts are the most tormenting; impending evils check stronger epithets. It is the lot of man to do, to bear and to suffer; and here to do, or die (Army and Navy Chronicle 1836:79).

Modern Military Theory Meets Conflict Archaeology

Traditionally, fortifications have been studied in isolation, one site at a time. Little work has been done to connect fortifications within the framework of the larger fortified landscape. By zooming out and broadening the scope of the investigation to include more holistic and integrative analysis, greater insight into how a complex and connected landscape would have functioned is possible. In Florida especially, forts were built to be a network of supply depots. The supply-chain nature of these structures means that they were inherently interconnected, yet they have only been studied in isolation. Not only were these structures a network, they were
connected to the physicality of their place. How forts or depots fit into the landscape, how the landscape was used and modified to fit the fortification, how roads and trails connected fortifications, and how these ultimately changed the landscape by fracturing it as a display of power and ownership are all important, yet overlooked, aspects of Florida’s frontier past.

In this chapter I will describe how this complex landscape can be teased apart through the use a geographic information system (GIS) to perform physical comparisons between actual landscape features. The application of modern American military theory to this fortification network not only yields better understand of how the network functioned, but also provides a method to standardize analysis that allows for comparison to other systems, such as the network of fortifications on the Western Plains during the later Indian Wars. Previous studies of fortifications have tended to require unique terminology to explain the results. This is partly because conflict archaeology as a discipline is very young. As the field develops a more uniform lexicon, it will be easier to compare and contrast findings.

Conflict occurs between groups of people and is more than just the physical locations of hostilities. By using a more applied anthropological perspective, we can further humanize the causes and outcomes of conflict and develop a model to investigate other conflicts. My research goal is to expand the use of modern military science, especially KOCOA, to investigate historical conflicts in a more holistic manner—to recognize the social and cultural aspects of conflict and the role they may play in the outcomes of war.

Military Sciences Applied to a Historical Conflict Setting

As discussed previously, conflict archaeologists are starting to use current military terminology. Yet often this just provides a unifying term for something that has previously been
known by other names. In my opinion, it has not provided a significant amount of new information. However, it does provide a solid foundation upon which new insights can be layered. Modern methods employ highly precise GIS analysis, which may not useful to understand past conflicts because the locational accuracy of historical documentary information is extremely suspect. Therefore, the use of modern environmental data is not fruitful for the study of decision-making processes of the 19th-century, and having a unified language to discuss elements of the landscape as the soldiers would have known it becomes necessary.

Current American military theory provides this unifying framework. It is easily accessible by civilians, comprehensive in scope, and can readily be modified for discussion of historic events. I chose American military theory for this study for two reasons. First, a large store of military documents used to train present-day soldiers is widely available. Two of the most useful resources for research of modern military theory are Army field manuals FM3-0 and JP3-0 which have been approved for public distribution and are easily accessible on the Internet (Department of Defense 2001, 2006). Second, current military training is based on the model that was developed and refined at West Point Military Academy thus making it a natural starting place for using modern military science when studying past wars.

My goal for this chapter is not to present a primer in military theory, but to extract only those theories that can be related to past events and discuss how this modern definition benefits my historical analysis. For a more detailed look at other modern theories, refer to FM3-0 (Department of Defense 2001).
Levels of Warfare

There are three levels of warfare: strategic, operational, and tactical (Department of Defense 2006). The strategic level is the ultimate goal of war for a nation or multinational organization and is implemented through policy and national strategic objectives. The operational level is the “design and conduct of operations using operational art—the application of creative imagination by commanders and staffs—supported by their skill, knowledge, and experience—to design strategies, campaigns, and major operations and organize and employ military forces” (Department of Defense 2006:II-2). Finally, the tactical level is how specific battles or engagements are executed. Figure 10 is a diagram of the levels used in Desert Storm. In the case of the Second Seminole War, the strategic level would be the national Indian Removal Policy of 1832; this legislation set the Second Seminole War in motion. The operational level would be how each commander of the army in Florida organized their overall strategy—whether it was the grand campaign of General Scott, which planned to send multiple columns throughout the interior of the territory to find the Seminoles, or Taylor’s military squares plan. Finally, the tactical level of the war would be how each engagement was orchestrated and how unit commanders conducted their troops.
It is important to understand these three levels of warfare because while the ultimate goal was to relocate the Seminoles, there were often disconnects in how the three areas functioned. For instance, Washington—which set the policy—was so far removed from the day-to-day activities of Florida that troops were often frustrated with the government for not understanding what was necessary to bring the war to an end.

**Principles of War, Tenets, and Elements of Combat Power**

As can be seen in Figure 11, the U.S. military uses an operational framework composed of nine principles of war (objective, offensive, economy of force, mass, maneuver, unity of
command, simplicity, surprise, and security), five tenets of war (initiative, agility, depth, synchronization, and versatility), and five elements of combat power (maneuver, firepower, leadership, protection, and information) (Department of Defense 2001).

While these terms are largely self-explanatory, they are worth illustrating as they would have applied to the Florida campaign (Table 1), because in most cases these aspects of warfare contributed to the overall difficulties of the mission (Department of Defense 2001). Additionally this list of terms important to combat power is useful in historical research because it acts as a checklist to ensure all aspects of conflict are considered, including many aspects that traditionally are not discussed in the archaeological literature, yet are crucial when considering past conflicts.
TABLE 1. Elements of a full spectrum operation as applied to Florida.

<table>
<thead>
<tr>
<th>Element</th>
<th>Florida Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Changed throughout the war. First, the goal was to relocate the Seminoles to a central reservation; then it was changed to relocating them to a different territory.</td>
</tr>
<tr>
<td>Offensive</td>
<td>Limited by the terrain, supplies, and lack of information.</td>
</tr>
<tr>
<td>Economy of Force</td>
<td>Chronic shortage of troops due to short enlistments and widespread disease.</td>
</tr>
<tr>
<td>Mass</td>
<td>Affected by the troop shortage and the distance they were spread across.</td>
</tr>
<tr>
<td>Maneuver</td>
<td>Could not bring baggage trains into the swamps and were limited by the amount of supplies the men could carry.</td>
</tr>
<tr>
<td>Unity of Command</td>
<td>Requires a single command structure, but Florida changed commanders often. Also, there was frequent disagreement about command and delay in receiving commands.</td>
</tr>
<tr>
<td>Simplicity</td>
<td>The idea to relocate the Seminoles seemed simple, but due to other failures implementation of the plan was unsuccessful.</td>
</tr>
<tr>
<td>Surprise</td>
<td>Tried but could not find the Seminole strongholds and, if found, the Seminoles would flee before the army arrived.</td>
</tr>
<tr>
<td>Security</td>
<td>Forts were secure areas, but the army tended to travel by roads and the Seminoles knew this, which made traveling risky for the army.</td>
</tr>
<tr>
<td>Initiative</td>
<td>The attempt to find and engage the Seminoles at their location to set the terms of battle.</td>
</tr>
<tr>
<td>Agility</td>
<td>The reliance on baggage trains hindered the movement of the troops.</td>
</tr>
<tr>
<td>Depth</td>
<td>The plan to use three columns of troops to simultaneously attack the Seminoles to deny them freedom to maneuver.</td>
</tr>
<tr>
<td>Synchronization</td>
<td>A grand maneuver that involved three columns of troops converging on the Seminoles at the same time failed due to a lack of knowledge about the terrain and how long it would take for each column to travel there.</td>
</tr>
<tr>
<td>Versatility</td>
<td>The military tended to continue employing the same strategies: searching the wilderness, talks or parleys, incentives, and trickery.</td>
</tr>
<tr>
<td>Maneuver</td>
<td>The army moved slowly through the wilderness and was often deterred by landscape barriers such as swamps and rivers.</td>
</tr>
<tr>
<td>Firepower</td>
<td>In terms of weapons, the military and the Seminoles were well matched; however, the military had easier access to powder, ammunition, and repairs.</td>
</tr>
<tr>
<td>Leadership</td>
<td>Command changed several times, which further hindered the evolution of tactics.</td>
</tr>
<tr>
<td>Protection</td>
<td>Forts were the main source of protection; the army was vulnerable outside of them.</td>
</tr>
<tr>
<td>Information</td>
<td>The army was seriously lacking in knowledge about their terrain and their enemy.</td>
</tr>
</tbody>
</table>

The military was not as successful as planned in most aspects of warfare, which undoubtedly contributed to the protracted nature of the war. Even though the war in Florida occurred before modern technological advancements, such as rapid communications, were available, it can still be argued that the military did not adapt rapidly enough to successfully operate within the limits of the available resources and information. Despite the fact that
objectives were routinely not met, the military would have been profoundly affected by their experiences in Florida. While evidence of how these experiences manifested is currently lacking, additional research will hopefully shed light on this area of investigation.

Understanding the elements of combat power is especially relevant to studying historic wars, because situational understanding plays such a key role: The commander needs to have a solid understanding of the situation to direct troops and firepower. This becomes significant in Florida because, as will be shown, much of the war was directed by officials who were in Washington and far removed, both physically and conceptually, from the troops in Florida.

**Area of Operation and Landscape Visualizations**

Current military strategy visualizes the landscape in a way that most effectively defines goals. In Figure 10, the image on the left is from FM 3-0 and depicts how a region would be occupied to carry out a successful campaign; the image on the right uses examples from Florida to demonstrate how these concepts work in a practical setting.
A series of fortifications was constructed so that troops would never be too far away from supplies. Some of the fortifications were more substantial structures that would be classified as a home station in modern terminology. Fort Brooke would be considered a home station, because it was a larger type of fortification (more along the lines of an unwalled plains “fort”). It was a more residential fort used for directing the movements of troops in the field. Fort Brooke was situated on Tampa Bay, making it the largest port in the area, and was the major pipeline for supplies into the field. Transport by steamboat was a major means of transportation for troops, as well as the fastest and safest means to travel around the coast. Therefore, Fort Brooke provided a means for acquiring troops, goods, and supplies.

The smaller forts/depots would be classified as force projection bases. “These bases may be areas of operations but they also serve as short-term support bases that sustain deployed combat units. They may provide the range of support offered by a home base” and can shape the outcome of an engagement (Department of Defense 2006). These would be the temporary forts built as needed to serve specific purposes, such as Fort Dade and Fort Foster. These types of structures were to serve as staging areas to allow troops to push into areas of operations. These are analogous to the small, remote fire bases used in later wars, such as the Vietnam War.

**Terrain**

The terrain and weather or climate of a place can have a significant impact on the effectiveness of an operation (Department of Defense 2006). Failure to plan for these factors can cause the failure of the mission. This was beginning to be understood in Florida. As previously
discussed, Florida’s environment was unlike anything the military had previously encountered. Due to this unfamiliarity with the climate, the army expended a significant amount of effort to continue to operate in the traditional way, rather than change tactics to suit the environment.

The progress of the Florida war from the 1st of January, 1836, was attended with large expenditures of money, and serious embarrassments. The climate, ignorance of the swamps and hammocks, and the treachery and activity of the enemy, baffled the skill of the most zealous and intelligent officers (Sprague 1848:96).

Another problem with Florida’s environment was the temperature. With warm temperatures and high humidity almost year round, the military was ill equipped; often, the men were forced to wear their woolen winter clothes in hot temperatures due to a lack of supplies and summer clothing (Sprague 1848). The tough climate also created other obstacles such as difficulty finding potable water, which took a toll on the health of troops and animals.

From the lateness of the season into which we were thrown, from the causes already stated, we found the heat, even before the 20th of April, so oppressive, that the troops could not execute even ordinary marches from this cause alone. . . . The sink-holes, or ponds, on which both men and horses had generally to rely for water, were now, many of them, dried up; and in the others the water was tepid, besides being filled with vegetable matter and animalculae. . . . Add to these causes of distress and disease the swamps and hammocks which were traversed, the deficiency in bacon. . . . It will astonish no one to learn from the testimony that we had very many individuals, officers and men, that could neither ride nor march. The only recourse was to crowd them into wagons, for in a savage country we could leave no one behind (Sprague 1848:141).

Perhaps the most critical aspect of Florida’s terrain was the military’s lack of knowledge about the environment, which seriously hindered operations.

Eustis and Lindsay, as shown by their testimony, had no competent guides, and could obtain none. Clinch’s column was rather less badly provided in this respect, yet he had not a guide that knew any of the intricacies of The Cove, a Creatan labyrinth, held from the knowledge of the white man, as the sacred groves of the Druids were never entered except by the initiated. In short, all the difficult parts of Florida were, to the whole army, one terra incognita. Government gave me no
topographical information, nor had any to give; and the booksellers’ maps only afforded outlines filled up with unlucky guesses (Sprague 1848:143).

Eventually, though, some level of adaptation took place. The army soon learned to abandon certain areas during the hot summer “sickly season” and return when the climate was more favorable and disease not as prevalent. “This being the commencement of the sickly season, and his men much broken by exposure and harassing duties, it was deemed prudent and but an act of justice to give them an opportunity to rest, and thus avoid the diseases incident to the climate at this season of the year” (Sprague 1848:113).

Also, the failure to understand the swamps and waterways significantly hindered military progress—baggage trains and cannon carriages tended to get stuck and were sometimes abandoned. Rivers were dark in color, and therefore confusing; soldiers were never sure how deep the water was, and would often opt not to attempt to cross for fear of drowning (Sprague 1848). Detailed records of daily weather observations were kept at Fort Dade and some of the other forts, showing how important weather was thought to be.

Centers of Gravity

Again, although this is a modern term, the concept was well understood by both the military and the Seminoles. For instance, attacking the enemy’s centers of gravity (COGs) in a decisive and swift movement can “create dilemmas causing paralysis and destroying cohesion” (Department of Defense 2006). Troops often attempted to find the Seminole stronghold in the Cove of the Withlacoochee, because they believed it to be the Seminole’s COG and that destroying it would end the war. The Seminoles had a much easier time of attacking U.S. COGs, because they were forts at known locations and were prominent features on the landscape.
Linear vs. Nonlinear Operations

Linear and nonlinear types of operations probably had the most direct relevance to the Second Seminole War. In linear operations, troops remain in contact and move as a group. Linearity refers primarily to the conduct of operations with identified forward lines of own troops (FLOTs). In linear operations, emphasis is placed on maintaining the position of friendly forces in relation to other friendly forces; . . . conditions that favor linear operations include those where US forces lack the information needed to conduct nonlinear operations or are severely outnumbered. Linear operations also are appropriate against a deeply arrayed, echeloned enemy force or when the threat to LOCs (lines of communications) reduces friendly force freedom of action. In these circumstances, linear operations allow commanders to concentrate and synchronize combat power more easily (Department of Defense 2006:v-17).

However, in nonlinear operations forces operate separately and without direct, continual contact.

Nonlinear operations emphasize simultaneous operations along multiple LOOs (line of operations) from selected bases (ashore or afloat)...to protect themselves, individual forces relied more on situational awareness, mobility advantages, and freedom of action than on mass. Nonlinear operations place a premium on the communications, intelligence, mobility, and innovative means for sustainment” (Department of Defense 2006:v-17).

The Seminole War could be characterized as a nonlinear operation based on today’s definition. Units were dispersed across Florida and operated fairly independently for large periods of time. However, based on the technology of the time, spacing forts within close proximity was considered a high level of communication. This attempt to build a network of fortifications shows that the military knew they needed a linear operation to be successful. Due to limitations in money, manpower, and supplies, however, in actuality these forts were not as effectively connected as their planners had hoped. “I speak, sir, of detachments beyond
supporting distance; for all the columns were habitually subdivided, within that limit, in searching for, and in attacking the enemy” (Army and Navy Chronicle 1837:181).

Types of War

Another aspect of modern military terminology that can be adapted to an archaeological setting is defining the types of warfare encountered. While it may not seem as important to decide whether a particular war was an irregular war or an insurgency, knowing what kind of war it was allows the researcher to choose more appropriate methods to investigate the war. Tactics that work for traditional warfare are very different from those for an insurgency. Kilcullen (2010:2) states, “The character of any particular conflict is impossible to understand without reference to three defining factors: the nature of the insurgency being countered, the nature of the government being supported, and the environment—especially the human environment—in which the conflict takes place.” While this specifically refers to insurgency, these three factors are important to know for any type of conflict.

Traditional vs. Irregular Warfare

Another important distinction is the difference between traditional and irregular warfare. Traditional warfare takes place between “nation-states or coalitions/alliances of nation states . . . [and] typically involves small-scale to large-scale, force on force military operations in which adversaries employ a variety of conventional military capabilities” (Department of Defense 2006:I-5). The U.S. military was more accustomed to this type of warfare and focused heavily on training cadets at West Point for this type of engagement. In contrast, irregular warfare (IW) is
marked by a violent struggle among state and non-state actors for legitimacy and influence over the relevant population. IW favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary’s power, influence and will. In IW, a less powerful adversary seeks to disrupt or negate the military capabilities and advantages of a more powerful, conventionally armed military force, which often represents the nations’ established regime. An adversary using irregular warfare methods typically will endeavor to wage protracted conflicts in an attempt to break the will of the opponent and its population (Department of Defense 2006:xi).

The Second Seminole War could be classified as irregular warfare, although it may not have been intentionally carried out in this manner. The Seminoles were outnumbered, and therefore played to their strengths of knowing the terrain and attacking in sporadic episodes, which kept the military distracted. The army responded with traditional methods, such as grand troop maneuvers, in an attempt to outflank or outmaneuver the Seminoles.

Insurgency

David Kilcullen, perhaps the most prolific current military analyst, has written a comprehensive treatise on the ideas of insurgency and counterinsurgency (2010). Current field manuals define insurgency as

an organized movement aimed at the overthrow of a constituted government through the use of subversion and armed conflict. . . . Stated another way, an insurgency is an organized, protracted politico-military struggle designed to weaken the control and legitimacy of an established government, occupying power, or other political authority while increasing insurgent control (Department of Defense 2006:1-1).

Kilcullen (2010:x) points out that

insurgency, therefore, is irregular not in the sense that it is uncommon—it is exactly the opposite—but in the literal sense that it is “against the rules.” And since these rules are set by nation-states and their military establishments, this form of war is, always has been, and is likely to remain the preferred choice for
nonstate armed groups and others who have nothing to gain from playing by rules established to favor their adversaries.

Kilcullen stresses that it is important to understand each conflict in its own context instead of using another conflict as a template for comparison. Another key feature of insurgency and counterinsurgency that is applicable to Florida is that “counterinsurgency is at heart an adaptation battle: a struggle to rapidly develop and learn new techniques and apply them in a fast-moving, high threat environment, bringing them to bear before the enemy can evolve in response and rapidly changing them as the environment shifts” (Kilcullen 2010:2). While it can be argued that the Seminole Wars are probably not an insurgency in the strictest sense, they do follow some of the same principles; for instance, they, too, are a war of “competitive adaptation” (Kilcullen 2010:2). This gets to the heart of my research, by developing the tools to measure adaptation or failure to adapt by the military.

While military theory regarding insurgency may not be directly applicable to the Seminole Wars, some of the ideas underlying counterinsurgency strategies shed light on aspects of conflict that should be considered when trying to understand the Florida Wars.

This means that enemy-focused strategy, which seeks to attack the guerrilla forces directly, risks dissipating effort in chasing insurgent groups all over the countryside, an activity that can be extremely demanding and requires enormous numbers of troops and other resources. Counterinsurgents who adopt this approach risk chasing their tails and so exhausting themselves (Kilcullen 2010:9).

Since Florida never had a large number of troops, and commanders were not fast to adapt to changing situations, the Florida Wars cannot be considered a counterinsurgency. The Seminoles were fighting as an insurgency, but the U.S. responded as if it were traditional warfare, which compounded the problems that arose and ultimately contributed to failure.
Conclusions

The Second Seminole War provides archaeologists and military historians an ideal opportunity to broaden the approaches that have traditionally been used. Now that conflict archaeology has become a separate discipline, it is time to advance the methodologies and theoretical approaches. Modern military theories are an ideal starting point for this endeavor, but, as the following chapters will show, they cannot be applied to historical events without modification.
CHAPTER 5:
EVALUATING CULTURAL ADAPTATION USING LANDSCAPE THEORIES

They took along a six pounder, from the belief that it would produce a panic among the savages. But they seemed to have assembled in such numbers, as to render the stout defence of the unfortunate troops quite unavailing (Army and Navy Chronicle 1836:56).

Introduction

KOCA’s framework was designed to investigate a physical landscape. An archaeological view of landscape, however, is more nuanced perhaps than the military’s. To use KOCA as a model for testing hypotheses about human behavior and decision making with regard to the landscape, it is crucial, first, to understand how landscape and the cultural adaptation to landscape has previously been conceptualized in the field of archaeology.

An overwhelming amount of research has been conducted on landscapes, and it would be impossible to cover all of the various themes of landscape research in this dissertation. Over the last several decades, various theories of landscape have been developed and critiqued in the literature. Some current trends in landscape theory in archaeology include an acknowledgment of the complexity of landscape (Bender 2002), the role of power in understanding landscapes (Ortner 2006, Spencer-Wood and Baugher 2010), landscapes as palimpsests (Strang 2008), and the use of phenomenological approaches (Johnson 2012). Bender (2002:S107) summarizes the topic’s complexity: “This plurality of place is always in the making, and how it is used and perceived depends on the contours of gender, age, status, ethnicity, and so on, and upon the
Another concept newly emerging in landscape research is the idea of landscapes of action. Robb (2013:661) states that

the ensemble of practices and conditions people participate in creates a tacit landscape of action which guides and prompts action. Although landscapes of action are often physical places . . . the term can also be used to suggest a conceptual landscape in the sense of somebody surveying possible courses of action, considering how well each one copes with the challenges of the moment and what its foreseeable consequences might be.

With the breadth and variety of potential avenues of research into landscape theory, my goal in this chapter is to highlight relevant theories that will help elucidate how the Seminoles and military interacted within the Florida landscape and the effect this had on how both groups interacted with each other and each with their environment.

Understanding the Seminole Wars as a complex set of interrelated features rather than a linear set of battles between opposing forces requires a more complex set of theoretical orientations than has been previously applied; we must move beyond simplistic, single-site documentation to a holistic analysis of the complex nature of this war. To accomplish this goal, we must begin with a few assumptions. One is that the military is its own cultural entity as defined by Geertz (discussed below). Because the military is defined in cultural terms, interregional interaction theory can be applied to understand how the military and the Seminoles interacted. Interaction theory, which is assumed to have a landscape component, must be broadened to include a specific type of landscape interaction during times of hostility.

Conflict landscapes are a unique type of entity, and only now is a body of theory emerging that addresses their specific needs. In turn, conflict landscapes have a unique role in shaping identity and power relations, because they are landscapes of opposition by definition—an “us versus them” dichotomy that has important ramifications for understanding how groups interact. This oppositional power struggle will have important consequences for the way the
landscape is occupied and modified. As Zedeno (2008) points out, landscapes are socially constructed through direct interaction with nature and may be shaped by social forces, such as identity and memory. In turn, those social processes may institute physical modifications to the landscape (Zedeno 2008). For example, features such as roads were built by white settlers and the military in Florida to exert control over the wilderness. This alteration of the landscape created a feedback loop that changed how groups navigated the new environment.

*The Military as a Cultural Entity*

Anthropology’s history with the military has often been controversial (Gonzalez 2007). My goal here is not to delve into this debate, but to acknowledge that this is a difficult subject and to demonstrate that for the purpose of my research, the U.S. military officers of 1835 can be examined as a cultural entity or subculture. To discuss the processes involved when cultures come into contact, we must first discuss the definition of culture, clarify the terms “identity” and “ethnicity,” and briefly discuss theoretical perceptions of cultural boundaries. This discussion centers on how groups of people interact with each other and with the built environment. While I acknowledge that no single definition of culture is sufficient or can be easily articulated, my use of culture is based on the definition Geertz has laid out: “a system of inherited conceptions expressed in symbolic forms by means of which people communicate, perpetuate, and develop their knowledge about and attitudes toward life” (Geertz 1973:89). I chose this definition based on its focus on “system” and “symbolism.” Geertz also sees the role of anthropology as making sense of cultural phenomena and recognizing their patterns, rather than just recording phenomena (Carrier 2012). Pattern recognition is also key to my research on landscapes, because
KOCOA operates through recognizing the various parts of a terrain and categorizing them by usefulness.

This earlier definition of culture has several shortcomings, such as running the risk that the idea of culture can, in itself, become a stereotype according to which groups are categorized (Ortner 2006). Yet with no perfect definition of culture, this incomplete definition will have to suffice. Many of the officers in Florida were West Point–trained, which provided a unifying influence that affected how soldiers were trained to act and think. The military also fulfills Geertz’s definition for culture (Geertz 1973), in that West Point’s training and complex hierarchies of regulations can be seen as inherited; its graduates’ means of communication and behavior are unique (Zirker et al. 2008), and are certainly symbolic in expressing a clear message (of hostility to those that oppose them). The military also meets the last requirement of culture, in that it can change and/or adapt to situations.

Viewing the military as a cultural institution allows for the application of several anthropological theories. One area of interest is how the military as a culture or subculture interacted with the Seminoles, who were a unique and distinct cultural entity by the time of the Florida Wars.

*Why Use Interaction Theories When Studying the Landscape?*

Interregional interaction theory can shed light on why it is important to understand how groups interact and the processes by which they do so. Also, because the landscape can be seen as both the catalyst and the backdrop for interaction, I will discuss it in tandem with interaction theories. Reciprocally, the landscape is modified as a result of interaction or anticipated interactions (for example, forts are built in areas deemed to be in need of defense). The landscape
is critically important, as it has both constraints and benefits that, in turn, affect how those who inhabit the landscape adapt to or modify it. In this section I will first present an overview of interaction theory, followed by why it is important and how it is affected by—and simultaneously affects—landscape modification, then discuss some key landscape features that can affect interactions.

One potential shortcoming of previous interaction research is the effect that conflict has on intergroup interactions. Many interaction studies view conflict as a politically dominant group (core) trying to colonize another group (periphery) (Stein 2002). This simplistic, top-down approach fails to capture the complexities in Florida. The dominant group (the army) did not want to colonize the periphery (the Seminoles); they wanted to remove or eliminate them. In other words, they wanted no interaction with them. This requires a different perspective when using interaction theories to study any of the Indian wars. I intend to incorporate a variety of different approaches into a method that will allow for a more comprehensive investigation of these nontraditional or irregular wars. These approaches, some of which have previously been introduced, include the use of interaction theories, modern military theories, education/knowledge acquisition theories, and landscape theories.

Interaction and Identity

Determining how cultures interact and change has long been a question of archeological interest (Noronha and Goodchild 1992, Schortman and Urban 1987, Schortman et al. 1986, Steadman 1995). A multitude of theories and frameworks have been developed over the years to explain, interpret, and model cultural interactions, and each further refines and defines these explanations of interactions (Schortman 1989, Wells 1980). The interest in cultural interaction
stems from a need to understand and explain the built environment and the artifact assemblages that were left behind (Wells 1980). Below is a brief discussion of how ideas about interaction have evolved, followed by a discussion of how an interaction framework can be influential in discussions of fortified landscapes. Contact between cultures occurs on a physical landscape (Stark 1998), and fortified landscapes are a particular type of feature that has been overlooked in contact studies (Oosterbeek 1997, Parkinson and Duffy 2007).

The next important concepts, which are integral to an understanding of interactions, are identity and ethnicity, again, this is a more complicated discussion than can be accommodated here. How groups maintain identity and differentiate themselves from those they perceive to be “others” is important for understanding how these groups will interact. This is particularly relevant here, because it is believed that identity can delineate the boundaries in the archaeological record (Lightfoot and Martinez 1995, Parkinson 2006, Wobst 1974). Yet because interaction is assumed to occur, it implies that these boundaries are at least partially fluid—which can complicate the picture. Further confusion arises from occasional use of the terms “identity” and “ethnicity” as interchangeable in the literature.

Stone’s discussion of the situational negotiation of identity demonstrates this fluidity between the terms (2003). However, her discussion of interaction highlights the need to understand social identity in order to understand migration and the resulting interaction between groups (Stone 2003). Interaction is identified through the artifact assemblage, and she argues that archaeology needs to move beyond identifying instances of contact and migration and focus instead on “the nature of interaction between migrants and indigenous populations to understand how ethnic identity is tied to this interaction” (Stone 2003:32). To Stone, ethnic identity is how individuals express their identity in a given situation, and the outcome of that expression depends
on whether the situation needs “to either de-emphasize separate identities or emphasize and constantly reify the we/they distinction” (Stone 2003). Stone also notes that interaction studies tend to fall into two camps: one that “concentrates on processes of social categorization and interaction” and is based largely on work by Barth and Cohen, and a second that “concentrates on cultural content within the ethnic group rather than interaction between them” (Stone 2003). Each of these camps has their own assumptions. Looking at group interactions assumes that individuals are cognizant of the decision-making process and the symbols used to express identity, while looking within an ethnic group assumes that individuals are unaware of the decision-making process and use of symbol. This last assumption follows Bordieu’s idea of habitus, which implies that a culture, as a group, would not change without external stimulus or contact (Swartz 1997).

How groups are defined in the archaeological record involves defining boundaries, and contact is assumed to have occurred when artifacts are seen outside their normal distribution. Archaeologists have traditionally focused on ethnic groups as the boundary of research (MacEachern 1998), but boundaries can be defined many other ways as well, such as the boundary of a study area, a household, or a community. However, the important aspect here is that through the process of maintaining identity boundaries are created (Stone 2003). Boundaries play a significant role in the discussion of contact between groups, because not only is it important that groups be defined, but also how we define differences between groups and how individuals move across those boundaries. This has given rise to an entire area of research on boundary theory, which encompasses Bordieu’s concepts (Kooymans 2006, Swartz 1997) and Barth’s study of “the relationship between social boundaries and the construction of ethnic identity” (Parkinson 2006:34).
Boundaries are significant in archaeology, because they are seen as a “transitional space” and shed light on how space was constructed (Kooymen 2006:424). As Smith (1999:1) notes, “geographical space must simultaneously be shared and divided,” and therefore the division and use of space can provide significant information about the people occupying it. Kooymen (2006) also points out that there are many different kinds of boundaries, and of which has a different level of permeability, which can shed light on the types of behaviors that created them. It is this concept of permeability that is interesting, because boundaries exist despite this movement. “In other words, categorical ethnic distinctions do not depend on an absence of mobility, contact and information, but do entail social processes of exclusion and incorporation whereby discrete categories are maintained despite changing participation and membership in the course of individual life histories” (Barth 1969:10). Therefore, by understanding how space is divided and defined, much information can be gathered in such areas as social interactions, social identity, and beliefs and behaviors regarding space and others.

There are, however, many difficulties in studying boundaries in the archaeological record. First and foremost is that social boundaries, and sometimes even physical boundaries, are not always visible in the archaeological record (Kooymen 2006). Also, there is the issue of scale. Multiple boundaries can overlap within a study area and can be difficult to untangle. For example, activity areas within a house will have boundaries, each house within a community will have property boundaries, sections of the community may be distinguished from other sections, and communities will each have their own boundaries. Also, when looking at boundaries archaeologically, unless there is some overlap in the location or debris from one activity intrudes into another activity area, it may be difficult to determine the time that passed between activities or if those activities were contemporaneous (Kooymen 2006). Another difficulty for
archaeologists studying boundaries is translating “cultural boundaries,” which are defined by the artifacts, into the “social boundaries” that were in operation during the period under study (Parkinson 2006).

Understanding Landscapes

Landscapes are complex entities layered with social, political, symbolic, and physical meanings. As archaeologists, it is crucial to not only understand “the physical environment onto which people live out their lives but also the meaningful location in which lives are lived” (David and Thomas 2008:38). Landscapes also contain rules that govern those who live there and vice versa. For example, who can access what locations and when demonstrates that landscapes are contested territorial spaces (David and Thomas 2008). Fortified landscapes were neglected in landscape archaeology literature until recently. As Knapp and Ashmore (1999:2) stress, “taking a holistic landscape perspective compels us to stress the interrelationships among people and such traces, places, and features, in space and through time.”

Interaction Theories

Many interaction theories are limited in their unidirectional nature, due to the assumption that dominant cultures actively dictate to passive recipient cultures (Fitzpatrick 2008, Schortman 1989, Wobst 1974). In an attempt to move away from frameworks that view the recipient culture as passive, interregional interaction models were developed (Stein 2002). These were prominent methods of explaining culture change (Steadman 1995, Stein 2002). This has led to a move away from creating typologies of interactions to developing a framework to look at the variables and the “processes that explain why the organization and effects of culture contact can be expected to
vary under different structural conditions and historical contingencies” (Stein 2002). This framework was developed to break away from unidirectional models and capture the more complex nature of group interactions (Wells 1980). Wolf’s (1982) study of Europe’s interactions, for instance, which looked at multivariate levels of interaction, may have helped shape current thinking on interregional interaction (Steadman 1995).

These models do not completely abandon previous studies, but incorporate earlier frameworks as components of a new multivariate framework. For example, Schortman and Urban’s framework draws on acculturation studies, ethnicity studies, and system analysis to discuss interregional interaction in the Maya periphery (Schortman and Urban 1987, Schortman, et al. 1986). This new perspective allows for more variables to be considered in order to understand “why the organization and effects of culture contact can be expected to vary under different structural conditions and historical contingencies” (Stein 2002 p. 906).

Stein lays out seven important features that form the basis for understanding interaction networks:

(1) a concern with both processual (e.g., replicable methodologies) and postprocessual (e.g., agency, practice, historical contingency) approaches; (2) a rejection of unilinear models; (3) a focus on multiscalar examination (i.e., “top-down” perspectives of the network and “bottom-up” perspectives of households and social groups); (4) a recognition of patterned variability in power relations that is affected by distance, level of technology, and degree of social complexity, among other factors; (5) the recognition that interacting complex societies are heterogeneous with different groups whose primary goals and interest are often in conflict; (6) the ability of internal dynamics (e.g., economic, political processes) to shape the network’s organization; and (7) the principle that “human agency is as important as macroscale political economy in the organization of interregional interaction networks” In other words, this perspective does not treat less developed peripheral polities as “passive recipients of unidirectional influences from the core” (Stein 2002:907).
The important distinction between interregional interaction theory and previous models is this multivariate approach to understanding past behaviors. This interregional interaction model acknowledges that no single perspective can provide a complete picture, but by incorporating several perspectives and scales, a better understanding can be attained. Also key is the model’s use of network analysis and the realization that these processes often happen in conflict or opposition to outside groups. However, what this list of features does not address are the physical effects of contact. All of the variables listed above are crucial for understanding how cultures change, yet there are no variables that address the role of the landscape, such as the resources available that can direct contact or how those resources are accessed. Schortman and Urban (1987) acknowledge this when they write that culture change is known to occur when resources are localized. But what happens when resources are restricted by other populations? This is one of my points of interests. How a landscape is fortified will affect who controls various resources, which in turn will affect (based on the points discussed above) how cultures or groups interact and change. The U.S. military certainly tried to restrict the Seminoles’ access to resources, ranging from gunpowder, liquor, and food to cattle and trading along the coast, and even tried to prevent them from raising crops.

An underlying theme in an interregional framework has to do with how interactions are defined and who/what is engaging in these interactions. This study of how cultures interact is now termed “intercultural interaction.” Due to the difficulty in defining “culture” based on the archaeological record, however, other frameworks view interaction from a society level (intersocietal interaction or interregional interaction), because “society” is easier to define. Schortman and Urban define society as “a group of people who interact on a daily basis with each other and who share certain basic understandings that permit those interactions” (1987:40).
Regardless of the scale of the study (subculture, culture, society, ethnicity, etc.), groups are spatially bounded and, because of this, interaction models can be developed. As discussed above, because identity is formed in opposition by creating an us/them dichotomy, this lends itself nicely to a discussion of war, because war is a clear form of this dichotomy and opposition.

Another consideration that needs to be accounted for is that groups are made up of individuals, and individuals sometimes do not act in concert with the larger group (Parkinson 2006). Also compounding the complexity of untangling these interactions is that individuals have their own status, but this status changes depending on the situation. This creates a nested set of identities, each displayed through specific means and in specific situations. Because of the situational-specific nature of identity and status, patterns of behaviors and contact can be hypothesized (Stone 2003). All of these factors depend on interaction to determine how identity, boundaries, and behaviors are expressed.

The environment and access to resources can also have a significant role in mediating interaction. “In fact, the physical territory over which ethnic statuses are employed depends on the range of resources considered important by people in different societies and the extent to which the need for these resources brings [sic] individuals together into repeated contact requiring predictable interactions” (Schortman and Urban 1987:64). It is the role of the environment that I am interested in. Contact is often seen as being shaped by the environment and resources; however, the aim of this study is to demonstrate that the way in which the landscape is modified and built arises from contact. This built landscape then applies new stimuli and can further mediate how contact occurs.

This cyclical nature of environment and culture change is important because, as Wells (1980) points out, culture is a system, and a change in one area leads to a change in other areas.
His study focuses on the exchange of goods and the resulting consequences, which demonstrates the importance of the social context of exchange and the social implications of exchange, because “the circulation of goods can be viewed as a form and expression of social interactions” (Wells 1980:144). This idea of trade goods as a proxy for interaction can be modified to investigate the process of fortification as a proxy (as well as a mediator) of interaction by looking at why and how places were fortified and what effect that may have had on intergroup interactions. Archaeology can provide physical remains that shed light on what kinds of trade and interactions between groups may have taken place.

How Interregional Interaction Has Been Investigated

Below is a brief discussion of some of the ways interregional interaction models have been applied to archaeological questions. Each study focuses on specific components of interaction to answer specific questions. However, some generalizations can be made about the methodology of interaction studies. As Schortman and Urban (1987) point out, interaction studies can focus either on content—that is, what items are passing between cultures—or the process of culture change. I will provide a few examples of studies that focus either on exchange of content or the process of change in interregional interaction studies. This is a short overview and is by no means exhaustive.

Exchange of Content

Most interregional interaction studies focus on material culture as a proxy for contact or interactions (Kelly 1997, Wells 1980). Pottery is one popular indicator for interaction, because of its prominence in the archaeological record and its stylistic variability (Clayton 2005, Odess
Hegmon et al. (1997) investigate the “organization of production” to show that distribution of items can illuminate what types of interactions were taking place (regional or interregional). If production of a specific artifact type was made in several locations, this may be due to shared knowledge as well as exchange, as opposed to concentrated production and knowledge (Hegmon, et al. 1997). By incorporating the distribution of other artifacts that occur alongside the pottery in question, information can be obtained about whether it was the pottery or the people that moved (Hudson 2006). For example, are other cultural traits appearing in the new locations along with the pots? Or is it just the pots?

Stark’s (1998) study of technological boundaries is similar to Hegmon et al.’s discussion of distribution. Boundaries are delineated through the technological choices and processes required to manufacture an item. Technological boundary theory uses the extent or distribution of technology as a proxy for a social group, which serves as an alternative to the information exchange model. As discussed previously, understanding the nature and extent of a boundary is necessary to determine whether an item is found beyond its boundary, which can then provide information about contact, exchange, and behavior. In the Seminoles’ case, many goods were being traded. Seminoles became adept at negotiating for supplies, food, and ammunition by making promises to emigrate they seemingly never planned on keeping. At the same time, the military often hired Seminoles to procure fresh meat to provision the troops, which demonstrates the flow of items in both directions between these two groups that were at war with each other.

Similar to the study of the distribution of material culture in interregional interaction are studies that focus on trade. Trade models are used to explain how materials are passed between groups. This approach broadens the focus of earlier trade studies: Rather than only looking at what and where items are traded, trade is seen as an agent of change. However, also similar to
what occurs when studying artifact distributions, defining boundaries can be complicated by the fact that an exchange of items usually occurs beyond face-to-face interaction (Welsch and Terrell 1998). That is, artifacts can be traded multiple times, and the group that created them and the group that ultimately receives them may never come into actual contact. Welsch and Terrell (1998:51) question “what kinds of social phenomena are being mapped by particular distributions of material culture and what social groupings are being created, maintained, or delineated by exchanges involving material culture.” The goal of interregional interaction models is to tease apart what these distributions tell us about social and behavioral processes.

**The Process of Change**

Another prominent area of interaction studies emphasizes the role of economic factors for interaction, with trade and exchange being the primary agents of cultural change (Hirth 1978, Reeve 1993). This approach to interregional interaction can focus on a small subset of artifacts deemed to be prestigious items, which serve as a proxy for elite interactions (Green and Rodell 1994, Hayden and Schulting 1997). Obsidian trade networks are an ideal example of this (Bressy et al. 2005). Another approach to the economic aspects is exemplified in Reeve’s (1993) study, which demonstrates that trade was necessary to sustain large population centers, because the local environments were not rich enough to support a significant number of people. In addition to economic factors, interaction studies also look for political motivations for contact: Having the means to obtain scarce, prestigious resources can be used to consolidate power. Besides resources, Green and Rodell (Green and Rodell 1994) discuss how the built environment can also be used to display power, and Kanter’s (2008) discussion of political competition illustrates how politics shaped culture change within the Chocoan Anasazi.
Behavior is the central factor in interaction studies; the goal of an interaction model is to identify methods to investigate the processes of social changes. It is assumed that as groups interact, knowledge and ideas will be transmitted along with material items. Stark (1998 p. 209) states, “in this framework, generally called the information exchange model, material culture is seen as a mechanism for the conscious conveyance of information, although the information content may vary depending on the viewer.” Interaction studies can elucidate how social structures operate. “Weber defines social interaction as behavior which ‘takes another’s action into account and is thereby oriented in its course’” (McDermott and Roth 1978:341).

While this overview of interregional interaction provides a paradigm on which further analysis of conflict landscapes and hostile interactions can be layered, it is only one of several potential models that may be useful. It could be argued, for instance, that a world-systems approach or the use of practice theory can also be employed to understand change, each with its own strengths and weaknesses. New discussions about reassessing territoriality may also provide fruitful insights into the Florida situation. VanValkenburgh and Osborne (2013:2) state that they “regard territoriality, the dynamic configuration of boundaries within a landscape, as a product of the engagement of political institutions, physical environments, and human subjectivities.” World-systems theory, which, arguably, also offers insight into my research, implies an amount of distance between areas deemed “core” and those deemed “periphery” (Hall et al. 2011). While there are many different ways to investigate the social, political, and environmental landscape of Florida, it is beyond the scope of this research to discuss them all. I chose interregional interaction based on its network approach to the problem; change was not seen as being instigated from the top down or bottom up, but rather as a complex web of interactions. Yet even this paradigm needs modification when investigating conflict. Even interregional interaction
seems misleading, because in Florida’s case it can be argued that there was only a single region: the territory of Florida. Even so, within Florida these two competing groups inhabited different micro-landscapes or regional niches and had different relationships with the landscape (for one group the dense hammocks of Florida was a safe haven; for the other it was inhospitable and deadly).

An interaction model is ideal for investigating the processes and outcomes of fortifying a landscape. An approach that considers multiple variables as well as multiple scales and perspectives is crucial, because a unidirectional model will fail to capture the complexities of the relationships between the U.S. military, the Seminoles, and the landscape. The act of physically dividing the landscape with built features (forts and roads, in this case) will directly impact how cultures on that landscape interact and how they gain access to resources. These built features will ultimately cause changes within the local cultures. How the landscape will be divided, however, is contingent on how the cultures that share it are interacting. In this study, I propose to incorporate the landscape into a feedback model of change.

*How Culture Contact Analyses Can Benefit Fortified Landscape Studies*

Interregional interaction models are powerful analytical methods that offer the tools and framework necessary to understand past social networks and the process of culture change. I will broaden this framework to study interaction and culture change during war. Scott states that military sites and those that inhabit it “offer a unique perspective on the behavioral aspect of a culture, or cultures, in conflict” (Scott 2009:299). Interaction studies tend to overlook war and overt hostile interaction in favor of amicable or only covertly hostile interactions, such as trade and political maneuvering. Below, I have outlined ways that interregional interaction models can
be used to explain how fortified landscapes can affect interactions, and conversely, how interactions can affect the fortified landscape. While Stein’s seven points of interregional interaction acknowledge the need to view change from the top down as well as from the bottom up, this concept has not been applied to the landscape (Stein 2002). I propose that the landscape must be considered when studying an interaction, while simultaneously showing how, in turn, the interaction shaped how the landscape was modified. But first, to study conflict landscapes from an interaction perspective, some definitions are necessary to clarify what a landscape of conflict is and how it poses a unique set of problems.

*Fortified Landscapes*

A fortified landscape is loosely defined in the literature as any place that contains some form of defense. To understand this concept, it is easier to first understand each part: fortified and landscape. Landscape is defined in this study as “spaces in which a group of humans actively interact with a natural environment” (Rockman and Steele 2003). Landscapes in the broadest sense encompass social landscapes, built landscapes, and natural/ecological landscapes, as well as the meanings applied to a landscape (Ashmore 2002, Rockman and Steele 2003). Historical military dictionaries and encyclopedias of the time offer insight into how military terms, such as fortification, were defined.

An 1810 publication entitled *Military Dictionary, or Explanation of the Several Systems of Discipline of Different Kinds of Troops, Infantry, Artillery, and Cavalry; The Principles of Fortification, and All the Modern Improvements in the Science of Tactics* (Duane 1810) has a 27-page entry defining “fortification.” It distinguishes between “fort” and “fortification” with a fort being “in the military art, a small fortified place, environed on all sides with a ditch, rampart, and
parapet.” The entry for fortification describes these structures as larger and more permanent for the most part, but also has a subentry on field fortifications. Accordingly, forts and fortifications have a specific set of parts with a unique terminology for each, such as bastions, ramparts, parapets, glacis, and fascines, to name a few. There are numerous combinations of designs in which these parts are assembled to create a fort. The in-depth discussion in the military literature on forts and fortifications demonstrates how important landscape features were to military operations.

I will use the term “fortified landscape” to mean the landscape that was engineered by the military and considered defensible. The terrain was specifically chosen, altered, and constructed to meet the military’s ideological perspective of landscape. However, this is further complicated by the fact that a landscape is rarely a pristine, natural environment; much more likely, it has undergone many generations of revisions by numerous cultures and peoples. For example, in Florida, the Spanish had a very different method for dividing the landscape; they viewed it from a different perspective, and had used it for different purposes than the U.S. military intended to. The military inherited this already divided landscape, which must be considered in any research into Florida’s landscape change.

*Key Features of a Fortified Landscape*

Many important features dominate a fortified landscape; the most obvious are the forts and the presence of an army. The most important criterion for site selection in the 19th-century was the availability of potable water. However, lesser features are also strategically critical for a Western military. For instance, roads were particularly important in the context of Florida: Without roads, the army is not able to resupply, move easily, or feel safe in a “civilized” world.
Roads were so important to 19th-century travel that in a KOCOA analysis, they could be considered Key Terrain and not just Avenues of Approach. The concept of military roads was perfected by the Romans, who built straight roads from outpost to outpost and removed any obstacles in between. As will be discussed below, roads are both functional and symbolic and leave tangible traces of power and ownership on the landscape.

Frontiers vs. Fortified Landscapes

There has been much discussion in the literature about the archaeology of frontiers. However, the term “frontier” is conceptually different from the concept of a fortified landscape. Although fortified landscapes often occur on “the frontier” and entail interethnic contact, frontiers tend to be dynamic in nature, with boundaries that fluctuate (Forbes 1968). Frontiers also tend to be classified as colonialist enterprises, with core-periphery interactions taking place (Lightfoot and Martinez 1995). Yet not all frontiers are fortified, so there are subtle differences between fortified landscapes and studies of frontiers. “Boundaries” are sometimes used interchangeably with “frontier.” However, as McCarthy suggests, frontiers have an element of outwardness, while boundaries are more concerned with looking in (McCarthy 2008).

How a Landscape is Modified Will Reflect the Types of Interactions Taking Place

The multivariate approach to interregional interaction is directly applicable to understanding how cultures will interact on a fortified landscape. As Cameron (1998:186-187) states, “Architecture structures daily use of space by breaking space into compartments within and around which other activities take place. By defining patterns of encounter and avoidance, architecture directly (as well as symbolically) reflects social relations” and is perhaps the best
clue to social identity. While Cameron discusses the physical ways contact can be mediated, Stone (2003:35) points out that physical modification of the landscape (which includes architecture) also has a symbolic aspect, in that it can “project and reify ethnic identity through the use of markers that distinguish an ethnic group from others in the community, a visible and active marking of the we/they distinction.” A further discussion of the symbolic nature of a fortified landscape will follow; however, in this context it is important to note that the symbolic aspect helps to solidify identity and group unity. This is accomplished by creating opposition to another group. “Ethnic groups cannot exist in the absence of this competition for power; that is, they do not exist in isolation and only continue and are called into operation in opposition to one or more other groups within an overarching sociopolitical organization” (Stone 2003:35).

Fortifying a landscape is clearly oppositional. However, there has been little discussion of how forts create group identity among the fort’s inhabitants. Once an identity has been created, it will shape how that group interacts with others. Forts can be viewed as what Stone (2003) calls “active markers,” in that they actively mark the landscape and demonstrate group affinity and meaning.

Hirth’s (1978) discussion of gateway communities offers insight into how this network of forts operated during the Second Seminole War. Hirth argues that the exchange of commodities led to the organization of complex societies. This exchange relied on long-distance trade, which caused the creation of what he calls “gateway communities” along trade routes to control the movement of goods (Hirth 1978). These gateways would have developed either as a direct response to trade or through a process of settling frontier areas along previously established routes that then gained importance for trade. These communities were usually built on the cusp between areas of production of scarce resources and demand for them, to reduce the cost of
transportation across long distances. This is a good analogy for understanding Florida’s forts. The military built forts to serve as supply mediators to the outlying communities, troops on the move, and, on occasion, the Seminoles themselves. Forts were strategically placed supply depots so that supplies could be sent to the areas that needed them.

Knowledge Can Be Passed Between Groups Despite Hostile Interactions

Information is an economic and political resource that can be bought and sold. Precourt (1980) discusses information in the same terms as property, in that it is controlled and used as a resource; he refers to this type of information as being “property-like.” When this view of knowledge and information is combined with Schortman and Urban’s (1987) discussion of information exchange, it is directly applicable to this discussion of fortified landscapes. “We assume that what passes among societies along ethnic networks is information, that is, energy, materials, social institutions, and ideas” (Schortman and Urban 1987:69). Since information is seen as a commodity, we can hypothesize that it will be exchanged despite active warfare, because it is a resource that can be used for negotiation and bargaining.

Fortified landscapes often occur where there is active conflict; yet despite hostile interactions, information can still spread. When discussing fortified landscapes, it is important to consider what kinds of information can be traded, either overtly or covertly, between groups—even if they are in conflict. Information is spread overtly through direct contact, such as during peace negotiations, and covertly by, for instance, observing the enemy’s tactics and learning from them. Environmental knowledge is often passed between groups; however, it does not follow the typical core-periphery model (Lightfoot and Martinez 1995): The indigenous population has the experience of and knowledge about the local environment, and the colonizers
are at a disadvantage. There are numerous examples of colonizing forces learning from indigenous peoples after a period of acculturation and then using indigenous environmental knowledge and guerilla tactics (Hirsch 1988, Richter 1983). In one example, during the Pequot War, the military traveled a great distance around where they perceived the Pequot tribe to be residing so that they could attack from behind, thus employing an indigenous guerilla tactic (Hirsch 1988). Major Robert Rogers may be the most notable in this regard; he issued 28 rules for his Rangers in 1757 (Rogers 1757). Rogers was one of the most famous early guerilla fighters, and his rules are still in use today; avoiding detection, moving stealthily, and maintaining sentries to avoid ambush are recurring themes.

Interregional interaction models investigate what causes social change. Schortman and Urban (1987), therefore, state that not all information can cause social change. However, information that does produce change within a society has developmental significance. This change occurs through a positive feedback system, because of the interconnected nature of society; as stated previously, a change in one area will result in changes throughout a culture. During conflict, information is expected to be a significant propagator of change, because it is highly valuable and commodified. Both the military and the Seminoles would have tried to be secretive about their information, yet at the same time, both required information about each other to make decisions. The role of information in culture change has not been extensively discussed in the literature, and will be further investigated in this study.

*The Perception of Future Interactions Will Shape How a Landscape is Modified*

Interaction studies may also shed light on how individuals who are fortifying a landscape perceive future interactions: An expectation of future hostilities may encourage continual
fortification of the landscape, whereas an expectation of peace may discourage such costly investments. On the other hand, continuing to fortify a landscape even during peace can offer insights into processes such as peace maintenance or serve as a reminder of ownership (Delle 1999). Dobbert states (1975:22) that “culture is built up out of the transactions between the members of a society and between members and their environments over time; . . . transactions, both with persons and with an environment, imply an exchange of information; and . . . transaction and information exchange imply the buildup and maintenance of a system.” Similar to Schortman and Urban’s (1987) discussion of feedback loops, when information is obtained it is used to make changes, and those changes, in turn, affect the group. Choices are made by assessing the costs and benefits of an action, based on past experiences and education (Hitchcock and Bartram 1998). Therefore, each decision is determined situationally through the perception of the situation and the knowledge at hand (Hitchcock and Bartram 1998). Kenzle (1997) also points out that defensive structures describe the state of social relations and can therefore be useful in investigating social change.

*Physical Features Can Change the Way Cultures Access Resources*

Studies of fortified landscapes also benefit from inclusion of a culture contact approach. How a landscape is divided and shaped can influence how those cultures will interact, and can cause changes in those cultures. The modification of the landscape also becomes a powerful symbol or message to those groups in contact. The process of fortifying a landscape involves a system of putting up barriers, both physical and social, and those features portray ideas of differential access. Kenzle (1997) shows that these sociophysical boundaries have social implications, because they distinguish insiders and outsiders by serving as physical markers of
inside and outside. Kenzel’s study of fortifications in the American Southwest shows that walls serve as “the facilitation of interpersonal regulation by 1) demarcating zones of territorial control; 2) promoting desired social contact, and conversely by limiting undesired contact; 3) regulating the flow of people through the environment; and 4) helping to maintain privacy” (Kenzle 1997:199). This clearly demonstrates that walls serve to control access to space and resources by limiting access. Fortifications in Florida functioned in a similar manner.

Fitzpatrick’s study of interregional interaction among Micronesian islands may provide a similar analogy to the fortifications in Florida. Contact in Micronesia involved long-distance, open-sea voyages between islands for the purpose of accessing resources—in this case, quarrying “money” disks. Even though fortifications were no longer present, the bounded nature of the islands provided a situation similar to fortification. The purpose of these dangerous voyages was to obtain valuable, scarce resources as a means of gaining and controlling power (Fitzpatrick 2008). The villages that were on the islands with the rock quarries would have received payment in the form of labor for the right to quarry. Because these islands were physically separated, it created a unique form of interaction and contact. Fortifications in Florida could be argued to serve a similar function. Forts were physically separated, and were designed to control strategic resources (supplies, bridges, river crossings, etc.), and consolidate power (by physically dominating the landscape); this would have significantly impacted how these cultures interacted (one group controlled the resources and the other had to find a way to “pay” if they wanted access to them). Even though in Florida this occurred on the same landscape—as opposed to among isolated islands—many of the same social processes may have been in place.
Fortified Landscapes Can Modify Culture and Identity

Cameron states that “architecture not only reflects social organization and values, it also can play a key role in shaping social values” (1998:186). Her analysis of Puebloan architecture demonstrates that the shape and style of the large, public great houses may have directly influenced today’s multistoried, close-knit Puebloan communities when the great houses began to be used domestically (Cameron 1998). Van Dyke also states that “architecture shapes and is shaped by human activities and perceptions” (1999:471). This clearly demonstrates how architecture is created and that how it is used can significantly impact the cultures using it. In this analysis, I argue that the process of fortification (i.e., how the forts were built and where) had a significant impact on the way these cultures interacted.

Schortman and Urban (Schortman and Urban 1987) show that the immediate natural environment a group occupies will be a significant factor in how that group changes and develops. Other groups in the area can become the impetus for change, but because both groups will be subjected to similar contact situations and the same environment, this will cause them to co-evolve (Schortman and Urban 1987). As Kohl (1987) shows, cultural evolution is “dependent upon its relations with other societies; . . . cultures are open, not closed systems.” This tripartite relationship between the two groups in contact and their relationship with the physical environment that they both inhabit can be useful for investigating the processes of social change during the Seminole Wars.

The process of interaction can shape and change both the cultures and the fortified landscape, which will add unique pressures for culture change. The example of the Seminole War clearly shows how conflict can shape cultural identity. The Seminoles were an amalgamation of several northern tribes that only coalesced as a cultural unit during the war,
becoming a more unified front against attack. Prior to contact, the cultural entity known today as
the Seminoles did not exist. There are many other examples, such as Major Rogers and his
Rangers, of how the military shaped its strategy during the Indian Wars to adopt “Indian” tactics
(Hirsch 1988). Arguments have been made that even though the military usually only adopted
guerilla tactics begrudgingly, these tactics profoundly shaped the culture of the military, and this
legacy can be seen even in today’s modern wars (Knetsch 2003). Fortified landscapes create a
dichotomous landscape, and this, in turn, can lead to a dichotomous relationship between
cultures (us vs. them). This unequal power relationship causes a constant negotiation of identity:
Some behaviors will need to be modified to survive, yet at the same time maintain identity.

_A Fortified Landscape is a Symbolic Landscape_

Understanding the symbolic nature of a fortified landscape is an important aspects of
interregional interaction. As Kenzle states, “The latent functions of architecture involve the
transmission of meaning or the communication of ideas about space, structure, appropriate
behavior, social responsibility, power or status, and cosmological belief” (1997:197). The built
environment can communicate many levels of meaning, and each set of meanings comes with a
set of appropriate behaviors (Rapoport 1982). Rapoport (1982) discusses the levels of meanings,
which range from low-level to mid-level to high-level depending on the complexity of
information being transmitted. Van Dyke (1999) differentiates between the communicative
potential of internal and external architecture based on who is the viewer. Kenzle writes, “The
delineation of territory is a defensive mechanism and communicates both ownership and
personalization of space” (Kenzle 1997:199). Architecture can serve as clear markers for
inhabitants about their place and behavior and as markers for outsiders. In the Pueblo example,
gates and plazas allowed the group to see who entered, which caused “selective admission and exclusion,” and the walls strengthened group cohesion (Cameron 1998). This is echoed in Florida, with forts limiting access by having main gates through which all personnel had to enter.

Landscape (as well as the features on that landscape) can serve as a social diacritic by displaying symbols of identity, inclusiveness, and separateness from “others” (Schortman and Urban 1987). Because social meanings are reproduced on the landscape, they should be identifiable in the archeological record through recognizing boundaries for these markers. For these meanings to be conveyed, they need to be publicly visible (Schortman and Urban 1987).

The diacritical role of architecture is currently under discussion in the literature. Cameron (1998) states that “buildings are stationary . . . so they have less chance to be viewed by individuals outside the community. As a result, they might be less likely (than, for example, traded items or clothing) to be used in active cultural signaling of group membership; people within the community already know the messages they might send.”

Schortman and Urban’s (1998) discussion of proxemics, which refers to the behaviors and beliefs concerning the proper use of space and includes patterns of knowledge that focus on the environment and survival, questions the role proxemics play in creating social change. They state that “no evidence exists that changes in the perception of space have significant implications for changes in other spheres” (Schortman and Urban 1987:69). As applied to the Florida campaign, I disagree; I believe that ideas governing the use of space were highly significant in shaping intersocietal interactions during the Second Seminole War. Rapoport (1982) contends that “people react to environments in terms of the meanings the environments have for them.” By creating a fortified landscape, ideas about power, behavior, and identity are also created—and because they occur on hostile landscape, the meanings they portray will
significantly shape how others react and interact with them. “Bourdieu argues that cultural resources, processes, and institutions hold individuals and groups in competitive and self-perpetuating hierarchies of domination” (Swartz 1997:6)—and a fortified landscape clearly portrays a hierarchy of domination. By incorporating Stone’s (2003) idea of “ethnic signaling” or Wobst’s idea of “active signaling” into an analysis of interregional interaction, a more complete investigation of the role of fortification in culture change can be conducted (Cameron 1998).

Forts clearly serve as a form of nonverbal communication, and because changes in cultures have a cascading effect due to feedback loops, I hypothesize that the diacritical nature of forts would certainly have had an effect on all groups involved.

Conclusion

Discussions of fortified landscapes and culture contact/interregional interaction studies are occurring more frequently in the archaeological literature. However, these discussions rarely intersect. I argue that much can be gained by combining these perspectives, especially in frontier areas or areas of conflict. The stereotype of “taming the frontier” usually involves a significant investment to create a “civilized” landscape that contains the same types of features as other established population centers. These can include towns, roads, private residences, and services. Because this is taking place on “the frontier,” however—which is seen as hostile and dangerous—major investments in protection are often perceived as necessary. These investments in protection take the form of fortifications and other military features such as camps, roads, supply depots, etc. The militarization of a landscape will significantly impact the culture of any individuals living there (both settler and native); however, it can also shape how these polarized cultures interact with each other. Often, both inhabit the same landscape; even so, those features
of the built landscape will have extremely different meanings for each. To the settler, a fortified landscape can mean safety; for the military, it can mean a strategic resource; and to indigenous people, it can be a symbolic representation of domination and hostility. Some of the first settlements in America, such as St. Augustine and Jamestown, were city-forts. The landscape was fortified because of fear of the native population. This extra layer of complexity needs to be considered in any study in which the landscape plays a significant role in mediating contact between groups. While it is assumed that cultures will interact differently during war than during peaceful coexistence, by specifically investigating how these cultures interact and how information, knowledge, and material goods pass between them, a richer discussion of the kinds of relationship they had can be gained. Landscapes are not only the background for, but also provide the context and meaning of, interactions.
CHAPTER 6:
ROADS AS PALIMPSESTS OF POWER AND CONTROL

For politicians and civil servants, the growth of empire building and nationalism, proceeding hand in hand with the rise of map-making agencies and colonial administration, was an increasingly important focus of frontier attention in the 19th and 20th centuries (McCarthy 2008:202).

Introduction

As discussed above, the landscape has significant potential as a physical representation of dominance and control. By physically altering the landscape to demonstrate ownership, complex layers of meaning get assigned to a single space. As Lyons states in her research on rural architecture, a pattern of building was used “to generate hierarchical power and produce meaningful material contexts through which they claimed land, jural rights, and engaged in alliance building” (Lyons 2007:180). While this statement concerned her research in rural Ethiopia, it also applies to the way the U.S. military approached Florida, building forts and roads based on a perceived aesthetic that had been learned through training at West Point and was meant to assert power. One way the military attempted to “conquer” Florida’s wilderness was through an intense building campaign of fortifications. While fortifications in general receive significant scholarly attention, a second feature that is just as important, if not more so, often gets overlooked: roads. Roads are necessary for moving large columns of troops and baggage trains. They allow for forts to act in concert as a network rather than lone outposts. They also are very visible on the landscape and are symbolic of a very Western idea of transportation and
modernization. Roads are often taken for granted in archaeological settings, but are vital when discussing western ideas of transportation. Transportation was something settlers in Florida struggled with. Due to the nature of the terrain, moving wagons of supplies between locations was a serious undertaking, even with the crude roads that were available. In order to discuss Florida’s fortification network as a web of connected points, it is crucial to understand how those points were connected. Below is an overview of what roads are and why they are a vital piece of the fortified landscape puzzle.

Symbols of Power: Roads

Roads are a vital component of social networks and yet are often overlooked in archaeological investigations. Not only are roads important for travel, transportation, and communication, but they are also crucial in nation-building enterprises and the construction of a “modern” landscape (Laurence 1999). Roads and trails have been recognized for their importance in spreading culture (e.g., the Romans built roads and bridges wherever they went), but have only received a minimal of scholarly research (Chevallier 1976). Discussions of roads usually center on how they were built (Laurence 1999), how they were used (Nelson 1955), or how they evolved (Burghardt 1969). But all of these assume that roads are a single static entity, when in reality roads contain multiple features: destinations (nodes), environments, purposes, and meanings that make up a complex physical and social network. My aim here is to investigate how roads contain a network (the differentiated parts that make up a road), what their role is in social relationships, and how roads could be used for different purposes such as conquest. Military roads and roads of conquest have received even less attention in the literature, and distinguishing between a road the military simply uses and a road the military built for military
purposes can be difficult. I argue that to fully appreciate the role of roads in society, we must consider not only the purpose for which the road was built, but also the other components and features that comprise the entire road network.

*Understanding Roads*

The term “road” is apparently such a commonplace word that no scholarly discussion of roads defines the term. According to the *American Heritage Dictionary*, a road is defined as “an open way, generally public, for the passage of vehicles, persons, and animals . . . a course or path.” It is difficult to determine the difference between a trail and a road based on this definition. This distinction is important, because each will tell different stories about the people who built them or used them. For this discussion I will define a road as a purposefully built (or cleared) tract that connects different features on the landscape, while a trail is created through use over periods of time. Burghardt (1969) describes some misconceptions about roads. For example, there is a false assumption that roads evolved from preexisting animal trails, which became footpaths and then roads. This may be the case in some instances, but it clearly does not explain the origin of the majority of roads. He also notes that there is a romantic view of roads heading “to unknown, far-off lands” (Burghardt 1969). This, too, is not the case, and his study of roads in the Niagara Peninsula of Ontario demonstrates that roads always have a destination. And lastly, roads are popularly believed to follow the topography. This is true in many instances: Rivers are forded at shallow, narrow places, and steep inclines may be avoided. However, as technology advances, topology is not as limiting as it once was; even so, it still has an effect on road placement (Burghardt 1969). There are many misconceptions about roads. They are often
overlooked in discussions of historical landscapes, social networks, nation building, and war yet it is crucial to understand how roads can benefit any of these analyses just mentioned.

**Importance of Roads**

Road networks are critical for communication, travel, safety, conquest, and habitation. They were the main arteries for the movement of people and goods around the landscape. An examination of road networks can provide valuable information about the people who built them, the roads’ intended purposes, and how they were used. I use the term “network” here because roads are not a single, uniform entity; they are made up of complex sets of interconnected features. For example, the types of terrain the road is crossing will influence how it is constructed. Road features are specific to the environment the road crosses. For example, bridges will only be found over water or deep ravines. This fragments a single road into multiple road sections with different typologies and cannot be considered as one single, uniform feature. Although this may be seen as standardization across cultures, not all cultures will react to similar environments the same way. For example, the Seminoles would leave canoes on the river banks to cross, the U.S. military would build bridges (Mahon 1985), and others may have built a road that detours around the water or ravine. Because roads are complex features, looking at which elements combined to create the network or system can offer insight about what the purpose of the system was, how it was used, and how it fit into a way of life.

Looking at landscape as a differentiated system provides a unifying method of analysis for interpreting the multitude of histories that take place on the landscape. Each region has had many different cultures, political systems, and ways of living that have existed in that region over the centuries; by having a standard landscape-level method of analysis, we can begin to
understand how these different systems operated, how they changed the landscape, and how they themselves changed over time. Every culture had to meet transportation needs. How they chose to meet them will be informative. More insight can be gained into how these cultures operated and what their interests were by determining whether they built a footpath or a formal road and how they dealt with a difficult terrain.

The U.S. military built permanent roads that were wide enough for wagons to travel and contained bridges, but what was considered permanent in the frontier of North America was very different from the Romans’ view of permanent: The U.S. military’s focus was on ease of movement and exerting control over a difficult landscape, rather than creating formal paved roads that were aesthetically pleasing to travelers. This demonstrates that issues of display, power, prestige, and dominance all surface when each component of the network is analyzed and its place in the network examined.

*Physical Function of Roads*

Roads serve multiple functions that are both physical and social. The same road can be used by different people for different purposes, which can complicate defining what kind of road it is. For instance, a military force may build a road and view it as a strategic defense. Because it runs between two towns, however, the populace will use that road for travel and trade, whereas government officials may see it as a way to send messages and build alliances. This causes the same road to contain multiple identities and meanings. So while roads facilitate similar physical functions (travel), the social uses and meanings can be very different.
Travel and Transport

The main purpose of building a road, trail, footpath, etc. is for travel. Regardless of whether it is for traveling to a religious location or to hunting grounds, people need to navigate their landscape. The need to move through the environment can be met in two ways, either by purposefully creating roads or having trails form through habitual use. Additionally, what kind of travel is taking place will shape how the road is constructed; for instance, size will depend on the road’s intended use. If people are moving through the landscape unencumbered, then the width of the road does not need to be great, whereas if wagons are being used for transport, then the road must be wide enough to accommodate them and free of obstacles (Bogart 2004). The need to transportation goods and supplies is another major reason roads are built. How a culture meets its transportation needs will determine the features of the road. Foot traffic, mule or camel teams, and wagons will each have their own requirements for road construction.

Another interesting feature is that how a road is built may inhibit others from using it. An example would be a road built for walking, which would render it too narrow for wagons. If transport needs to be fast, roads may be paved and bridges built. The Inka had a different use for roads. Vast road networks were needed to collect tribute, which was essential for maintaining power over a large area. These networks were heavily focused on economic and administrative functions, and their main feature was storage points along each route for supplies and surplus (Jenkins 2001). Therefore, their roads were often winding trails through the mountains, because their need to connect outlying settlements was more important than fast travel (Jenkins 2001).
Alteration of the Physical Landscape

Because roads are intentionally built, they require a modification of the landscape that they cross—trees and vegetation will be cleared, steep grades may have to be flattened, unstable ground will need to be reinforced, and low areas may have to be raised. Construction of the road itself causes these primary alterations of the landscape during the physical construction. However, roads also create secondary and even tertiary modifications to the landscape. A secondary modification would include features along the road such as tolls, depots, and water sources, which are there to service the road. Tertiary modifications would be the addition of nodes and destinations along the way such as towns, crossroads, and features to assist travelers. These are not directly part of the road, but now have a vital connection to it.

Social Function of Roads

As mentioned earlier, roads also fill many social functions, and the same road can serve multiple social functions simultaneously. Social functions vary by individual as they view the road and travel it, and this can shape how they interact with the road—for example, which features along the road they access (e.g., military supply depots or inns), which features they do not have access to (e.g., a fort), and what their final destination is can all shape their experiences. Below are a few of the major functions roads served; each will be discussed briefly.

Communication

Aside from moving people and things, roads were essential for efficient communication (Adams and Laurence 2001). News and information could only spread as fast as people could travel, and therefore roads were a significant tool in creating social networks (Chevallier 1976).
Communication along roads can occur formally or informally. Formal communications include intentionally passed messages, such as government documents, military orders, or letters to family members. Informal communication is the information that spreads as people travel and bring news to new places. Also, roads were often built specifically to serve the post office and the delivery of mail (Nelson 1955).

**Power**

Roads can also serve to demonstrate power and prestige, through ownership and control, having the resources to build a road, or having the authority to collect taxes. Rome is a clear example of how roads were used to demonstrate power in newly conquered areas (Laurence 1999). Building or repairing roads was a major mechanism for Roman emperors to assert power and to demonstrate their prestige to those traveling the road, because roads would be named after builders or repairers, and monuments and arches would have lined the roads declaring who maintained them (Laurence 1999).

**Symbolism**

Very similar to power, roads also serve as symbolic entities. They are symbolic of ownership or control of an area, but they can also symbolically represent alliances by connecting two distant towns (Chevallier 1976). Roads can also be seen as symbolic of the strength of an empire. The longer and more numerous roads are, the more they demonstrate the power and resources of the ruling elite, such as was the case with the Inka (Jenkins 2001). Roads can also be symbolic of boundaries, as in the case of the Fort King Road, which served as the western boundary of the Seminole reservation.
Road Components

Roads have many components, and their arrangement gives meaning and identity to each road. Many of the components are necessitated by the environment. Low-lying, swampy areas will either need to be avoided or construction methods will be required to raise the roadbed or lay planks over the wet ground. Forts and buildings on the road will be limited to higher ground, where there are adequate building materials and water nearby for the troops; they must also be close enough to other areas that supplies, messages, and troops can pass between them. Despite the obvious environmental constraints, social aspects shape what components roads will have; these will depend on the purpose of the road. I have organized the main components of roads into four conceptual categories and will discuss how each is important in shaping road networks.

Destination

Roads are not blazed into the wilderness, but are built to reach a specific destination (Burghardt 1969). Destinations can include towns, forts, ports, villages, or homesteads, to name a few. The destination, and even its size, can dictate what kind of road was built. Because I am discussing roads as part of a system, it is important to note that many of these destinations would not have had just one road leading to it, but that larger destinations are in fact nodes of a larger network of transport connecting the road to ships, canals, railroads, or other roads. If the destination is a single military outpost, for example, then the road leading there would be built to allow the ease of movement of large numbers of people and goods. If the outpost is on a remote frontier, it most likely will not contain items along the road to assist private travel (inns, markets, etc.). If the road is leading to a major city center, it will be built to allow for large-scale travel.
and transport, but it may also include inns, markets, smaller villages, watering holes, etc., to assist in the public’s travel.

Way Stations

Before mechanized transportation, traveling was a slow process, taking weeks or months to reach a destination. Therefore, commonly traveled roads would have developed secondary and tertiary features, many of which were meant to assist travelers. These can include water sources or cisterns, stables for fresh horses, supply depots, camps, or inns. These features were not the final destination, but were important for travel; therefore, they deserve to be discussed in a separate category. Many of these features will be unique to the route’s purpose. For example, Syrian Hajj routes contained public water cisterns along the way to provide water for travelers in the desert (Peterson 1994). Religious temples, monuments, and cemeteries also can occur along heavily used public roads (Chevallier 1976).

Structural Components

Roads are not uniform, and are not necessarily linear features. They contain many specifically engineered parts and sections to meet the needs of both terrain and traveler. Items range from technological aspects such as the construction of the foundation of the road bed; the width, length, and shape (straight and direct or winding); planks called “corduroy”; topology; and soil type to bridges or crossings, as well as associated parts such as ferries or canoes that are necessary for continuing on the road, but are not attached to it.

The Romans, who were the most famous of the early road craftsman, built complex paved roads. Roads would have multiple structural components, and construction would be
determined by the type of ground to be built on. If the soil was unstable, a deep roadbed would be dug and the base built up with rubble, sand, and stone layers. The surface was sometimes paved with mortar or clay, which would require regular repairs. In low-lying areas, drainage ditches could be used to divert the water away from the road, or causeways were built with poles as a base and layers of rocks placed on top to raise the road (Chevallier 1976). Roman roads tend to follow straight, direct paths between destinations, and their builders altered the landscape to fit their needs rather than build the road around the landscape (especially for shorter roads; this was not always the case with longer roads) (Chevallier 1976, O'Connor 1993). Bridges were built and hills were cut through to accomplish this. The Romans knew that the shortest distance between two points was a straight line, and this was the fastest way to move an army from point to point. Many Roman roads were so well constructed that they are still in use today.

Knowledge or Information

Information is important for traveling the road, but is not always necessary or available. Items such as signs or markers to show the way, mile markers, maps, or a person’s experience are included in this category. Roads are only useful if you know where they go and have an idea about what to expect (e.g., will a boat be necessary? Will the wagon fit on the road?). Romans considered itineraries and mile markers important, but scale maps were not widely used (Brodersen 2001).

By defining the parts that are absolutely essential, a better model can be developed of how the road operated. Also, roads tend to evolve slowly over time, with new features being built and added independently of each other. A master plan for the entire road for its entire history would be unlikely to exist at the outset of building it. Features were added as they
became necessary. This piecemeal approach can provide insight about the progress and development of not only the roads, but society as well. A chronological approach to features of the road and along the road can elucidate the shifting behaviors of the cultures that built them. Investigating how it was built and modified can shed light on purpose and intention, which is sometimes a difficult process in historical and archaeological analyses.

*Roads of Conquest or Military Roads*

Roads of conquest were built for a specific purpose that offers a unique perspective into the past. Roads can be investigated as unique artifacts of war that, in turn, can be used to investigate the process of war. A road of conquest is defined here as any military road with the aim of subduing and controlling an outside group and tends to be built on the frontier or periphery of control. Roads of conquest and military roads are very similar in nature and sometimes used interchangeably. In this paper I define them as follows: a road of conquest is built with the intention of war, whereas military roads are built for military purposes but can include peace-time purposes. Although road use (for either type of road) is not restricted solely to the military, these roads served the function of allowing troop and supply movement across the territory. In the U.S., roads of conquest were almost always built by the Army Corps of Engineers and were funded by Congress for military purposes. Often, these roads connected important military installations or strategic resources rather than towns.

The distinguishing feature that separates military and public roads, I postulate, is the builder’s intention. Defining military roads is further complicated by the fact that often it was the military that had the skilled engineers (again, frequently West Point-trained) and it was they who built many public works projects such as bridges and canals in addition to roads. Therefore, these
features may have been built by the military but were intended to be public; this is why determining intention is important. Features designed for the public will obviously be useful to the public and easily accessible by it, whereas roads of conquest will always be built by the military, which will retain control of them. Another aspect of this road type is that they tend to be on a frontier or in an area of culture conflict. Roads of conquest are built to subdue another group; therefore, they will be built to allow the military to enter a new area in an attempt to gain and maintain control.

These roads were immensely important to the military, because they were the only effective means of travel and communication, and had landmarks for orientation. Moving large columns of troops, supplies, and horses is a slow process, and without the aid of a road it can be enormously difficult. There are countless examples from the Second Seminole War in which it took several days for the military to get a baggage train across a river when there was no bridge (Mahon 1985). The military also relied on roads for communication and the transmittal of orders, which could be useless if it regularly took months for them to arrive. Finally, roads can serve as boundary markers and points of reference, which can be important in an unsurveyed wilderness.

**United States History of Roads of Conquest**

The first wartime roads to be built during the Indian Wars were in Indiana. They were constructed during the turn of the 19th-century (Nelson 1955). A lack of roads had plagued North American military campaigns, especially throughout the conflict with Native Americans. For example, General William Hall’s attack on Canada’s Fort Malden was a disastrous failure because of the lack of roads through the Michigan Territory’s swamps. This defeat eventually led to Michigan’s being lost to the British in 1812. It was not regained until 1813, and this was only
accomplished because roads and trails were built first (Nelson 1955). Though the lack of roads was acknowledged to be a chronic problem for the military, Congress was reluctant to authorize the building of roads for either military or public use because the Constitution only provided for post roads, and Congress felt that it was not within its power to make internal improvements for the states (Nelson 1955). But by 1812 Congress had acquiesced and started providing limited funds to construct roads. After several other defeats due to a lack of roads, President Monroe signed the Survey Act of 1824, which called for federal surveys of routes for roads and canals necessary for military, commercial, and postal purposes (Nelson 1955). Major General Edmond P. Gaines said that roads and canals were “more essential to the . . . national defense than fortifications designed for . . . our seaports” (Nelson 1955:10).

The Fort King Road as a Case Study of Military Roads of Conquest

The Fort King Road is discussed here as a case study of military roads of conquest because it was built, maintained, and mainly used by the military during the Seminole Wars. It is considered part of a network because it was part of a much larger network of roads, trails, and forts that crisscrossed the Territory of Florida. It was also a major piece of the military infrastructure, because it ran between two of the largest and longest occupied forts (Fort Brooke and Fort King); it also connected the interior of the territory with the coast. It is considered here to be a road of conquest, because the sole reason for the military occupation of Florida was to relocate the indigenous population. Military resources were stretched thin, and every piece of construction that was undertaken was only done so if it was considered necessary to the overall strategic plan. Because of the strategic nature of the Fort King Road, it fulfills the KOCOA categories as both Key Terrain and an avenue of approach.
Investigating the Fort King Road as a road of conquest that contains distinct but related parts offers an interesting way to investigate militarized landscapes. Examining how this road operates on a larger scale and intersects and/or is integrated into other features allows us to treat it as a dynamic and evolving system. But it can also be considered as a natural/biological system (the environment it is located in), a physical system (how it is built), and a cultural system (by which it serves a multitude of cultural needs). All of these concepts will need to be defined and analyzed before undertaking a systematic analysis of the Fort King Road as a landscape feature.

Brief History of Florida’s Roads

The Spanish occupation of Florida began in the mid 1500s, and colonization in the New World occurred through religious conversion rather than as a result of overt military campaigns. In 1565, Jesuit missionaries established the first mission in St. Augustine. From there missions slowly spread out along the Florida-Georgia border and into the panhandle. Missions located farther into the interior appear to have been at the request of local chiefs, which makes this colonization strategy unique (McEwan 1993). The missions’ primary role was religious conversion; they also served as a support network for the maintenance of the colony. Though there was a military presence and a number of garrisons, this was a unique instance of colonization that did not require the military to be the driving factor. Therefore, any roads built by the Spanish are difficult to consider as roads of military conquest. Rather, they were roads primarily built for travel and the collection of tribute, and it was their presence that was indicative of religious conquest: They were not built to move troops to overtake the indigenous population, but to convert them to Christianity.
Because the settlement of Florida was a colonizing enterprise by the Spanish, a brief discussion of Spanish roads is in order even if they are not roads of conquest. Early records show that the Spanish relied on preexisting Indian trails and trade routes for travel. “Unfortunately, the early Indian trails used by the European explorers were not mapped or well documented in their diaries because they were so commonplace. These writers tended to record only peculiarities and anomalies” (Duever, et al. 1997). Another issue was the temporary nature of many smaller trails, which were frequently moved when villages and hunting grounds moved. Some of the larger trails, however, would have been more permanent, and it was probably these that the explorers relied on. The Spanish would have needed communication and supply routes between the missions, as well as routes to collect the tribute they required from the Indians. They too felt the need for a better road system with more direct routes (rather than routes that followed the topography), and several requests were made for road improvement (Duever, et al. 1997). One road the Spanish built was along the east coast, which was known as The Royal Road or El Camino Real. This was not a road of conquest, but rather a road of communication and infrastructure. Reports show that it was still in use even after the mission period ended, but had fallen into disrepair during the British occupations (Duever, et al. 1997).

There was not a great Spanish presence in South Florida or even around the Tampa Bay area. Therefore, by the time the U.S. military moved into the Tampa Bay area and the interior of Florida, there was probably not much Spanish infrastructure left. From the scant records available, it does not appear that the Fort King Road was built along either an Indian trail or an old Spanish road.
History of The Fort King Road

On February 28, 1824, Congress approved an act to survey and create roads in Florida (Figure 13). It is interesting to note that the first federally funded roads in Florida were designated specifically by Congress as public roads as opposed to military roads. Further complicating the picture is that these roads were then called “military roads” only because they were built by the Army Corps of Engineers and the military, regardless of purpose (Duever, et al. 1997, Nelson 1955).

Section 1. Be it known that the President of the United States be and he is hereby authorized to cause to be opened, in the territory of Florida, a public Road from Pensacola to St. Augustine, commencing at Deer Point, on the Bay of Pensacola, and pursuing the old Indian Trail to the Cow Ford on the Choctawhatchey river; thence direct to the Natural Bridge on the Econofinan river; thence to the Ochese Bluff on the Apalachicola river; thence in the most direct practicable route, to the site of Fort St. Lewis; thence, as nearly as practicable, on the old Spanish road to St. Augustine, crossing the St. John's river at Picolata; which road shall be plainly and distinctly marked and shall be of the width of twenty-five feet.

Section 2. And be it further enacted that the President, be and he is hereby authorized to employ the troops of the United States, stationed in Florida, in such manner as he may think proper, in the completion or assisting in the completion of said road.

Section 3. ( Appropriates $20,000.)

Section 4. The President authorized to cause to be surveyed and marked out, the direct and practicable route for a public road from Cape Sable passing by Charlotte Harbor and the bay of Tampa, to the point where the Suwanney river will be intersected by the road to be opened from Pensacola to St. Augustine, and to cause to be surveyed and marked out the route for a public road from Cape Florida to St. Augustine.


In 1825, Congress realized that it needed to connect the outposts in Florida and appropriated $12,000 for road construction for military purposes. A road was to be built from Fort Brooke (present-day Tampa, where the Hillsborough River meets Old Tampa Bay) to the
north end of the territory. The full road was not constructed immediately, but a trail began to be blazed that would run from Tampa to Ocala. Originally it was called The Military Highway, but was also known as the Federal Road, the Old Military Road, and the Fort King Road.

Road construction would have been something covered in classes at the Military Academy. Mahan’s 1838 treatise on civil engineering had an entire chapter of 24 pages dedicated to the construction of roads (Mahan 1838). However, as with most subjects taught at West Point, it was focused heavily on well-engineered paved roads that would have been found in cities. One large section of the chapter is dedicated to mountainous terrain, which is not even applicable to Florida. Much of the remaining chapter is dedicated to the various types of road coverings, drainages, and the requirements of each soil type. None of these recommendations seem to have been implemented in Florida, as will be seen in the discussion below.

The Fort King Road was a major artery for military movements during the Seminole Wars (Morris and Hough 2009). It also served as the western boundary of a short-lived Seminole reservation in the center of the territory. However, little systematic research has been done on this major piece of military infrastructure. The road was roughly 100 miles long, crossed three rivers, and eventually had four forts stationed immediately adjacent to it. Beginning at Fort Brooke in Tampa Bay, it ran north/northeast across the Hillsborough River at Fort Armstrong (later renamed Fort Foster). Then it crossed the two forks of the Withlacoochee River at Fort Dade before terminating at Fort King in Ocala (Figures 14 and 15). This major supply road saw the movement of many troops and supplies, as well as many skirmishes and battles. Its purpose was to create a network of forts to prevent Indian uprisings. While it allowed for faster travel, it was also a weakness, because the Seminoles knew exactly where the army had to pass and could easily attack.
FIGURE 14. 1838 map of Florida showing the major roads
FIGURE 15. 1838 map with roads and trails highlighted within the study area.
Components of the Fort King Road

Returning to the list of components that might comprise a road, we can compare the Fort King Road’s components to other roads of conquest. This will elucidate how the Fort King Road functions, how it is similar to other roads of conquest, and how it is unique.

Comparing the components of the Fort King Road (Figure 16) to other roads of conquest can be difficult. First, the context of the Second Seminole War was unique; both the environment and the historical setting were unlike anything previously experienced by the military. Having a history of multiple occupations and different perspectives can obscure how the road operated. Also, the American situation was different from situations in other countries. During the Seminole Wars and many of the other Indian Wars, the objective was to expel the indigenous population from colonized areas. Military campaigns in other countries, in contrast, tended to focus on the invasion of neighboring countries. Despite Florida’s unique military history, some general comparisons can be made to other road networks for military conquest throughout history.

The components of the Fort King Road can provide information about how the road fit into the military’s strategic plan. Below is a brief discussion of the four components of roads: destinations, way stations, physical structure, and knowledge. In Florida, forts were the roads’ major destinations. Florida was considered a hostile frontier, and most settlements would have had some form of fortification. This was different from the Roman situation, because Roman roads often connected towns that were already established for civilian purposes rather than military outposts (O'Connor 1993).
The way stations along the Fort King Road are one component of the road and would have been very specific in nature. This was a frontier setting and was, for the most part, an undeveloped landscape. Therefore, points along the road were mostly smaller forts acting as
depots for storage of materials and locations for troops to camp (although the troops would camp outside the wall of the forts). Roman roads are a well-known example that can be used as a comparison, because many features of Roman military strategy have influenced military campaigns throughout history. However, with Roman roads, it can also be difficult to determine whether they were roads of conquest or just public roads the army happened to use. Some distinctions are possible, however, because it appears that how wide a military road should be had been standardized. As stated in the Law of the Twelve Tables, a set of 5th century Roman laws: “Military roads must be 8ft (2.4m) wide on straight sections and 16ft on bends” (Chevallier 1976). Roman roads also contained many features along their lengths. One such military-specific component, the granaries and other storage facilities that supplied the marching troops with food, served a function similar to that of forts in the Seminole Wars.

Roman roads could also, essentially, contain a police force—a military unit stationed to patrol the roads (Chevallier 1976). This was different from the Fort King Road. Although the military traveled the road frequently and could act as guards while traveling, units were not dispatched with orders to patrol the roads. Roman roads also had various public components, such as places for overnight stay, relays for changing horses, and even fortified villas, so Roman roads appear to have had more features that were available to private citizens than the Fort King Road. While this may be due to scale and population density, it may also suggest that Roman roads of conquest often focused on creating political alliances to maintain control rather than just military force.

Structural components of the Fort King Road consisted mainly of a dirt road with bridges across the rivers. In areas of wet ground or swamps in if that area could not be avoided, it would either be filled in with sections of corduroy (as seen along other roads in Florida, such as the
Bellamy Road across north Florida) or the ground built up with vegetative matter. In a letter to General Jesup, General Foster states:

P.S. *Five days labour of one hundred* men, upon the *road* from Fort Dade to this place [Fort Brooke] would be of very great advantage, forty axes, ten spades, six scythes & several reaping hooks to cut the long grass of the ponds & place it upon the deep parts of the way covered with earth, will make an excellent causeway over which the most heavy loaded wagons can pass without difficulty, where now the road is almost impassable. The roots & stumps would all be cut out. Teams to drag the grass short distances will be wanted. It is generally found where the ground is in want of the causeways (Missal and Missal 2005:103) emphasis original.

Structurally, the Fort King Road differed greatly from Roman roads, which were designed to be permanent structures; many are still in use today. Each section of the road was specifically crafted for its unique environmental context. The Fort King Road appears to have been a more temporary road, with stumps often left between wagon tracks. Other roads in Florida dating to this period sometimes contained sections known as plank roads or corduroy roads, which were roads with logs or planks laid horizontally across the road in swampy areas (Duever, et al. 1997). Roman roads contained similar features, but they were buried under layers of stone and dirt and served more as a foundation than a surface treatment (Chevallier 1976).

Knowledge of the Florida environment was limited, but a few maps dating to that time show the rough location of roads and forts. Therefore, by building forts and roads, the military acquired environmental knowledge; only when an environment had been occupied did the military come to understand it.

Many diaries of soldiers note the distances to different features, which further demonstrates that knowledge about roads was sufficient without the use of signs and markers along the route. One hypothesis for the lack of maps and markers may be that the road network was relatively small, and most travelers could navigate with only a rough idea of the route. The
Roman network, on the other hand, was much more extensive and relied on an accurate system of mile markers to navigate it (Chevallier 1976, Laurence 1999). Also in use was a system of itineraries, which were written tables of destinations and mileage (which were read much the same as a bus schedule is today) rather than scaled maps (Adams and Laurence 2001, Chevallier 1976).

The components and features of roads can tell us much about how the road was used. All of these components worked together as a system to meet the physical needs of travel as well as the social needs of a people. Physically, travel and transport are crucial for any large, sedentary society. The ability to move food, goods, and people is what keeps urbanized societies and economies functioning. But roads play an even greater role, and both the Fort King Road and Roman roads exemplify the social aspects of a road network. Military campaigns rely on the speed of communication, and Rome was well known for its reliance on this. Power and symbolism are also crucial in military campaigns. Because roads are a physical line on the landscape, they carry great meaning: ownership, power, trade networks, alliances, and much more.

*Perception of Landscape*

Even though the focus here is on the Fort King Road as a road of conquest, multiple perceptions of this road must be mentioned. Each culture will have its own view of the road, and the road will hold different meanings for them. For example, to the Seminoles it was a direct affront to their way of life. A road could essentially become a barrier, because crossing it was risky. For example, the road was a specific boundary of a reservation that they were forbidden to leave (Knetsch 2003, Mahon 1985). Therefore, to the Seminoles, the road would have been an
obstacle and something that they preferred to avoid. At the same time, they also used the road to their advantage, such as in the attack on Major Dade. Knowing that troops passed through prescribed locations, they ambushed his column of troops as it traveled the road, killing most of the soldiers (Laumer 1995).

Pioneers and settlers of Florida would also have a different view of the road. For instance, it may have represented civilization: they relied on roads to obtain supplies and information. Many were coming from a world in which roads were more pervasive, and most or all traveling was done on them. To these settlers, roads would have been one of the first necessities in building a community; this was proven by the homesteaders who settled near roads and ports rather than on more fertile hammock lands after the Armed Occupation Act of 1842 opened up large tracts of land in Florida.

Lastly, the military’s perspective of the road would have been entirely strategic. These roads would have been built in the straightest line possible between two points to speed communication and travel. Any sharp bend in the road could potentially cause a huge bottleneck when traveling with large columns of troops. Money and resources in Florida were stretched thin; therefore, none of the military construction projects (forts, buildings, roads, etc.) would have been of large, permanent, infrastructural items (Mahon 1985). Building was done expeditiously, with the assumption that structures would be temporary. This poses an interesting conundrum with the Fort King Road. It was hastily built and just wide enough for a wagon to pass; stumps were left in the middle, if wagon wheels could pass on either side—and yet the Fort King Road was considered permanent. It survived throughout the wars once it was built and was a crucial piece of infrastructure. Therefore, even the perception of permanence is open to interpretation.
Conclusion

Archaeology has wrestled extensively with identifying and understanding how various groups, ethnicities, or communities interact, because this is so central to understanding the past. Interregional interaction theories can provide a baseline to investigate how groups at war interact and how hostilities can shape those interactions—which do not cease at the start of conflict, but rather are shaped by and in turn shape it, causing a domino effect. How groups interact will affect how the landscape is modified, and how the landscape is modified will affect how groups interact. All of these cyclical processes leave traces on the archaeological record, and discerning their context and meaning is complex: Which caused which—did the conflict shape the landscape, or did the landscape cause the conflict?

Fortifications are an ideal landscape feature through which to understand how group interactions shape the archaeological record, because forts are a particularly clear form of architecture built for a clear purpose. Along with fortifications, many additional structures are necessary for support. One such forgotten, yet immensely important, feature is roads.

Roads seem to be overlooked in the literature, and discussions of roads of conquest are almost nonexistent—yet they play a crucial role in all aspects of society. Roads can shape how people use a landscape and perceive it; they can also provide a wealth of information about how they were used. While roads are typically examined as a linear feature connecting two locations, I argue that even a straight road running between two points on a map can be considered a system because of the complex arrangement of elements. A single road can contain multiple building techniques, a variety of features, and multiple meanings, from physical transport needs to a symbolic statement of ownership. With the increasing availability of spatial technologies, I propose that the study of road systems and networks can be greatly advanced, and the importance...
of roads understood, beyond their economic context. Roads are a crucial and yet often invisible piece of the landscape. In order to move people and goods between points on a landscape a road is needed but is usually taken for granted archaeologically. In order to see Florida’s fortification system as a network, roads are the lynchpin tying these fortifications together. Roads are doubly important in Florida due to the nature of the terrain ranging from marshy/swampy areas, dense hammocks, or open sandy prairie all of which are troublesome for wagons to traverse without the aid of a prepared surface. As will be shown in the following chapters, transportation difficulties were something officers habitually did not take into consideration when approaching the war in Florida.
CHAPTER 7:
FLORIDA’S FORTS AND WHAT KOCOA CAN TELL US

In addition, armies were encumbered by huge supply trains, by their storage magazines, and by the rudimentary character of transport and the road network. Armies were not the static institutions so often pictured by historians; when led by skillful generals, they could be capable of all kinds of complex operations, even amphibious assaults against defended shorelines. Yet due to limits in firepower and mobility, they could not pin down or pursue a shattered opponent and destroy him completely. Invariably the vanquished escaped to fight again. (Kohn 1975:3)

Note to Reader: Portions of this chapter have been published in Historical Archaeology, 2012, 46(1): 62-73.

Introduction

KOCOA has become a common—and often a required—tool for studying battlefields and conflict. The premise for this type of analysis requires an understanding of the landscape, which is also crucial for the archaeological study of conflict. The preceding chapters have discussed the background of the Second Seminole Wars, modern military theory relevant to conflict archaeology, how education was standardized at the Military Academy at West Point, how archaeology can offer insight into the behaviors and mindsets of the soldiers in Florida, and what information the material remains transmit about creating a “livable” fortification. These data sources can now be combined to demonstrate that KOCOA can be broadened from its traditional use as a method for creating map boundaries into a method for investigating the success or failure of the military’s adaptation to the Florida environment.
Tracing the origins of KOCOA is difficult, as the basis of this concept has always been a part of military decision making under the rubric of various other names. It is a formalized memory aid for a common sense principal. KOCOA is the acronym of the modern US Marine Corps, while the US Army uses OCOKA or OKOCA. OKOCA as a term can be traced back to an earlier field manual from 1990 and perhaps even earlier in other manuals not available for public distribution (Department of Defense 1990). This method of terrain analysis is a formalized process that has been theorized and analyzed by the earliest military philosophers and is a deeply historicized process despite its new label. The education at the Military Academy was based on this tradition of landscape analysis and has been further refined into the acronym we know today. Therefore, when using KOCOA it is important to acknowledge that it is a current version of traditional military knowledge, and that it has a long history, which has shaped its current form.

Terrain is a vital part of the decision-making process when engaging in conflict between groups, especially when an organized military is involved. At the Military Academy in 1821, cadets took classes in geography, landscape drawing, geometry, and field fortifications. These classes focused heavily on understanding and utilizing the physical environment. Before discussing how the military implemented its knowledge about the landscape, it is first necessary to understand why Florida’s fortified landscape was different from any other fortified landscape—which involves more than just the semitropical climate.

Florida had a unique 19th-century fortified landscape. To put this war in perspective and to show how different it was from all other domestic wars the U.S. fought, from the Revolutionary War to the Civil War, Florida had twice as many forts as any other state or territory despite its shorter history as a U.S. territory. This was demonstrated in 1868 when Brevet Major-General George Cullum created a biographical sketch of all West Point cadets. The
multivolume tome lists the military achievements of each cadet in order of class rank each year. He also included several tables of data, the most interesting of which is a list of every fort in existence (to his knowledge) at that time in the whole of the U.S. and its territories. A tally of forts by state shows that Florida is clearly unique (Figure 30).

![Bar chart showing the number of forts by state as of 1868. Florida is listed having 155 forts; Virginia has the second highest, with 70.](image)

**FIGURE 17.** Number of forts as of 1868 (Florida in red). (Cullum 1868)

Florida is listed having 155 forts; Virginia has the second highest, with 70. The list includes forts built in 47 states and U.S. territories from the Revolutionary War on, and includes many frontier territories that also saw conflict against Native Americans. What made Florida so different in the way the military approached it? I propose that it was Florida’s unique semitropical landscape, combined with the new training program for officers at West Point that contributed to the excessive fortification policy, which was imposed due to unfamiliarity with surviving such a different kind of terrain. Through the use of KOCOA, these questions will be investigated.
Understanding Florida’s Fortified Landscape

Investigating military education archaeologically presents difficulties. However, forts serve as an ideal focus for finding the intersection of training, environmental knowledge, and the physical landscape. Forts are an important key to understanding how education was put to use because they are a tangible “artifact” with remains that can be recovered archaeologically. They require specialized knowledge to design and skilled laborers to build. Military texts discuss fortifications in great detail. Since West Point’s curriculum centered heavily on engineering and Mahan’s treatises (which were used as textbooks at West Point and are still available for reference), it is clear how these officers were trained. Figure 31 shows a sketch of Fort Brooke—but just how factual these sketches are is up for debate. Archaeology, in turn, can reveal the type of fort, where it was built, and how it was supplied or outfitted. KOCOA can provide the framework for bringing together and interpreting these various data sets.

FIGURE 18. Image of Fort Brooke.
Source: http://floridamemory.com/items/show/27126
KOCOA’s Current Function

Based on the extensive training officers received, there is ample reason to believe that this education significantly shaped the war in Florida. Testing this hypothesis, however, has proved difficult. There are very few models for investigating an entire war in general, none of which includes education. Current research methods for studying “fields of conflict” and battlefields utilize modern military operational strategies such as KOCOA and apply that to past events. KOCOA, which stands for Key Terrain, Observation and fields of fire, Cover and Concealment, Obstacles, and Avenues of Approach (Fitzpatrick 2008, Fonzo 2008), is a modern method for quickly—and often mentally—assessing the strategic nature of a landscape (Department of Defense 2001, Marine Corps Institute 1997).

More recently, the American Battlefield Protection Program (ABPP) has adopted it as a standard tool for historical analysis, but stresses that it is used only where “fire was given or exchanged” (McMasters 2011). KOCOA was first used as a landscape tool for archaeology in 1996 at Gettysburg (McMasters 2011). However, despite this new and widespread use, it is difficult to find clear discussions of the methodology. On the most basic level, KOCOA allows researchers to take documentary evidence (such as from diaries, letters, and field reports) that is locatable on the physical landscape and map it according to its strategic importance. This allows for the “core” of the battlefield to be inclusive enough to encapsulate more than the field on which troops formed and attacked each other. It allows for features, such as the road that made it possible for the troops to arrive at the battlefield, to be considered, because this defines how the armies approached each other and significantly affected the outcome of the conflict.

KOCOA is a powerful tool that allows for descriptive and textual information to be mapped onto a physical landscape. Using GIS, different aspects of a landscape can be tagged
with their corresponding KOCOA feature (Maio et al. 2013). This allows for better understanding of how the larger landscape was used during conflict rather than just the immediate battlefield. It also allows for a fresh perspective on past events.

This use of modern military theories to approach the Second Seminole war provide an opportunity to invoke Ann Stoler’s concept of “reading with the grain” (Stoler 2009). Using KOCOA for historical analyses requires a significant venture into the archival materials related to the event in question. However, students are taught to approach archives critically, to view them “against their grain”, or from the bottom up (Stoler 2009). However, as Stoler argues, archives can be treated as an ethnographic source of information in and of themselves. Seeing the archival documents in the context of the ones who created them, allows for a more emic view of past events. In this case using modern military theory to understand military history allows for the colonial viewpoint to be reconstructed as well as interrogated, leading to a richer, multivocal understanding of past events.

Examples of KOCOA and Archaeology

Identifying the reasons for this extensive fortification program in Florida is challenging. I have yet to find documentary evidence that discusses a specific fortification strategy or unifying plan for Florida. Excavation can shed light on where and how these forts were built, but trying to answer the question of why a location was chosen requires different methods. KOCOA has moved into the spotlight for military archaeology, mostly due to the efforts of the ABPP, which now includes KOCOA analyses as part of its training for new grant recipients. However, actual guidelines for how to perform this analysis are extremely difficult to find. This “analysis” usually consists of a data table that lists each landscape feature, its corresponding KOCOA
category, and some roughly placed boxes on a map (highlighting all Key Terrain, for example) (Fonzo 2008). Figure 32 is a typical data table, which was created for a grant application. An example of a KOCOA map from the Battle of Buckland Mills is shown in Figure 33.

<table>
<thead>
<tr>
<th>Battlefield Element</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Terrain</td>
<td>A portion of the battlefield, possession of which gives advantage to the</td>
<td>Road junctions, bridges, high</td>
</tr>
<tr>
<td></td>
<td>possessor.</td>
<td>ground.</td>
</tr>
<tr>
<td>Observation and Fields of</td>
<td>Any point on the landscape that allows observation of the movements,</td>
<td>High ground, sloping approaches</td>
</tr>
<tr>
<td>Fire</td>
<td>deployments, and activity of the enemy that is not necessarily key</td>
<td>to entrenched positions.</td>
</tr>
<tr>
<td></td>
<td>terrain, offers opportunity to see over an area and acquire targets, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>allows flat-trajectory weapons to be brought to bear on the enemy.</td>
<td></td>
</tr>
<tr>
<td>Cover and Concealment</td>
<td>Landforms or landscape elements that provide protection from fire and hide</td>
<td>Walls, structures, forests,</td>
</tr>
<tr>
<td></td>
<td>troop positions from observation.</td>
<td>ravines, riverbanks, entrenchments, ditches</td>
</tr>
<tr>
<td>Obstacles</td>
<td>Landscape elements that hinder movement and affect the ultimate course of</td>
<td>Rivers, walls, dense vegetation,</td>
</tr>
<tr>
<td></td>
<td>the battle.</td>
<td>fortifications, revines, ditches.</td>
</tr>
<tr>
<td>Avenues of Approach</td>
<td>Corridors used to transfer troops between the core battle area and outer</td>
<td>Roads, paths, creek beds,</td>
</tr>
<tr>
<td></td>
<td>logistical areas.</td>
<td>railroads.</td>
</tr>
</tbody>
</table>

FIGURE 19. KOCOA elements from the Battle of Buckland Mills. (Fonzo)
FIGURE 20. An example KOCOA map for Key Terrain from Buckland Mills. (Fonzo)

The ABPP requires this form of analysis and documentation because it helps identify not only the core of the battle but also the extent of other relevant features. This can also be used in a preservation context, by determining the extent of key features. For the ABPP, however, KOCOA is only used to define battlefield boundaries (McMasters 2011). However, the concept of KOCOA can be used to address the following “What” and “Where” questions:

Where is the battlefield?
What were the objectives of the combatants?
What were the Key Terrain features?
What were the Avenues of Approach/Retreat?
Where did the fighting begin?
Where were the areas of heaviest combat?
Where did the fighting end?

I propose adding the following to this list:
Why was an area fortified?
How were fortification locations chosen?
What kind of fort was built, and why?
How did this strategy evolve through time?
What other adaptations did the military make through time?
What role did standardized education play in how the landscape was modified?

The ABPP’s use of KOCOA provides the basic building blocks for battlefield analysis. My research design adds to the model’s potential by investigating the “Why” questions.

Interestingly, in its KOCOA PowerPoint training, the ABPP advocates use of the idea of Inherent Military Probability, as: “Nineteenth-century military historian Hans Delbrück demonstrated that intelligent inspection of the terrain could prove or disprove many traditional battle accounts. Following Delbrück’s principles, A. H. Burne proposed and tested the concept of Inherent Military Probability, which he defined as the ‘solution of an obscurity by an estimate of what a trained soldier would have done in the circumstances’” (McMasters 2011). This is much more in line with my study’s research goals, yet there are no guidelines on how this common-sense approach to battlefields should be applied. My research will provide additional methodologies for applying KOCOA to conflict analysis—but first we must understand the landscape and training soldiers would have received. Otherwise, simply applying modern theory to modern maps or modern terrain will not work.

When attempting this analysis for the Second Seminole War, I encountered several difficulties. First, applying modern terminology to historical documents involves significant speculation. For instance, the assumption that a landscape feature is salient simply because it made it into the written record may be false: It could simply mean that the army stopped for a rest and a bored soldier decided to jot down the day’s events and describe his surroundings—while the truly significant features were never described because the army was on the move and
there was no time to stop and record them. Another difficulty is that KOCOA is usually applied to a single event that occurred at a single location during a small timeframe. Attempting to use KOCOA for a seven-year campaign that ranged across most of the territory of Florida, therefore, is more problematic. Also, when dealing with a longer engagement, it is necessary to recognize that each side will have different goals, which ultimately shape the face of the conflict. Yet despite these and other difficulties, I argue that KOCOA provides a useful starting place for broadening our understanding of conflict archaeology because it allows for education and training to be factored into models of adaptation.

Maps as Environmental Knowledge

One important distinction between my use of KOCOA for this study and how it has been used in previous studies is the type of maps employed. In earlier studies, KOCOA was applied to modern topographic maps, as demonstrated in the example from the Battle of Buckland Mills. A typical KOCOA analysis would be to go through the primary literature and plot the places mentioned on a current map. Yet during the mid-1800s, most of the interior of Florida was unmapped territory. This has important ramifications for my analysis, for which the maps themselves are important artifacts and vitally important for what Leone calls “recovering mind”:

The mind works in orderly ways that are not self evident, using, it is sometimes said, a logic like arithmetic or a grammar. The basic assumption is that the human mind categorizes and divides; creates contrasts and opposition; that it reverses, displaces, and distinguishes between inside and outside, culture and nature, male and female; furthermore that the mind uses a limited repertoire of contrastive categories like these to think about virtually all reality” (Leone 1982:742)

Leone also stresses that all artifacts (which would include maps) are made by people who have ordered thought patterns, and that order and meaning are recoverable (Leone 1982).
Primary sources, such as soldiers’ diaries, are rife with passages about how little is known about the Florida wilderness, which demonstrates that there was very little reliable environmental knowledge of the terrain they were occupying. The military as a whole had large gaps in its knowledge about the terrain, which means that those soldiers’ perspectives on the Florida landscape were quite different from our current, highly precise, satellite-image versions. Grand, large-scale maneuvers were planned—yet, with no clear picture of the terrain that had to be crossed, most of them were unsuccessful. By looking at a sample of maps from this period, a sense of the extent of their lack of knowledge can be gained. If large areas were unknown, it might be reasonable to assume that occupied areas were done so out of chance discovery rather than due to a strategic decision-making process about the nature of the surrounding features.

For this analysis, I used ESRI ArcGIS 9.1 to perform all of the spatial analyses. GIS software packages have become fairly standard for archaeological mapping and analysis; therefore, only a brief overview of the capabilities of the software will be discussed here. For more detailed information, numerous texts on the subject are available.

*KOCOA of Florida*

While KOCOA is usually used for investigating the landscape surrounding a specific battle, in the case of the Second Seminole War, KOCOA is used in this analysis to investigate the larger concept of a fortified landscape. The area around the Fort King Road and the forts, bridges, battles, encampments, bivouacs, and other associated features will be investigated using this technique. The Fort King Road was a main road running roughly from present-day Tampa to Ocala and was also referred to as the Military Road. Using KOCOA, a pattern of how a landscape was assessed and used can be identified. For example, what an officer deemed
strategically important (Key Terrain) versus what was expected to provide Cover and
Concealment shows how the soldiers on the ground viewed and interacted with their physical
surroundings. Therefore, when a fort was built, the location may show what part of the landscape
was seen as strategically important. The same concept applies to roads: If effort was expended to
create a formal road, it signifies the strategic importance of that place.

KOCOA has been used in a variety of ways by archaeologists around the world (Fonzo
2008, McMasters 2011, Scott and Bleed 2011). Even so, the full potential of this methodology
has rarely been exploited. While traditionally KOCOA has been used more as a method for
categorizing the landscape and less as an analytical tool, it does provide a unique opportunity to
approach archaeology from a more anthropological point of view. Modern military science uses
KOCOA as almost a mental checklist of how to assess one’s terrain, but by incorporating
archaeological and historical evidence, this can yield insight into the mental processes the
individuals, for instance, who fought the Seminole Wars. For instance, by knowing how they
used and modified the landscape, KOCOA can suggest what parts of the terrain they felt were
important (i.e., forts would have been built on what was seen as Key Terrain). Therefore,
archaeology uses almost a reverse form of KOCOA. Showing how the landscape was fortified—or avoided—provides insight into how the officers inhabiting that landscape perceived it.

The 19th-century conflict in Florida was unlike any war the United States had ever
fought. Thus, studying this conflict is more difficult, as no previously developed methodologies
appear to be viable. If KOCOA were used strictly as intended by the ABPP, the area surrounding
Fort King would have a lone box that could be added to the area of the fort for Cover and
Concealment. This box would also serve to demarcate the Key Terrain, because the fort was built
in an area that was deemed worthy of protection (Figure 34). In addition, it falls into the
Observation and Fields of Fire category, since the fort was close to the top of a small bluff. The area surrounding the fort would have been cleared of trees to prevent ambush and to serve as an area for troops to camp, because they might not have all fit within the walls of the fort. Depending on which historical map is used, either a single Avenue of Approach in the form of the Fort King Road can be added, or up to four roads and trails that terminate at the fort. Finally, the only Obstacle in the area would have been a small stream that is at the bottom of a shallow ravine to the east of the fort.

FIGURE 21. KOCOA map of Fort King.
This method does not provide any insight as to why the fort’s location was selected; it merely provides a way to classify and group data into categories. As demonstrated by Figure 34, Fort King was not placed on the highest point of the landscape, according to the archaeological evidence. Even if a hypothetical KOCOA analysis based on how the troops should have approached their landscape were conducted, it would look almost identical to what they actually did, but with the box closer to centered on the highest elevation. So why is this approach not very useful for conflict landscapes, as opposed to the way KOCOA has been applied to battles such as Gettysburg or the Battle of Buckland Mills? Even if the entire Fort King Road area were included, it still does not add much to the understanding of the area. One reason, I argue, is because this analysis is applied to modern topographic maps. The Florida landscape is vastly different today from what it was in the 19th-century, whereas much of the original landscape at sites such as Gettysburg is extant (Figure 35).

Figure 22. KOCOA map of Gettysburg.
Using a map created at the time of the Second Seminole War not only offers a more realistic representation of the historic landscape, but will also provide information about what knowledge had been gained about Florida’s wilderness, since it was largely unexplored. Maps can shed light on areas that have actually been surveyed, in contrast to maps based on oral accounts or a local informant’s descriptions.

For example, the 1838 map could be used as a base map, because it is one of the more accurate and detailed maps available to officers during the Seminole Wars (Figure 30).

FIGURE 23. Map of Florida 1838.
Importing this map into ArcGIS and digitizing KOCOA features from it provides a sense of how the landscape was used by the soldiers of that time. Each type of KOCOA feature can be traced to create a shapefile in ArcGIS. This creates a less cluttered view of these maps, with only the important features highlighted, and yields a more visually appealing map. This digitized map makes it easier for new patterns to be discerned (Figure 37).

One of the first elements that stand out in Figure 38 is that all of the battles the cartographer included are clustered along roads and trails. Whether this is because soldiers chose to engage the enemy at these locations along the road for easy access, or because the Seminoles were ambushing soldiers as they passed by, is difficult to determine at this stage of analysis. Further research will attempt to separate the correlations between roads and battles. All of these observations, however, could be made from the original map without need of digitizing—so what new information does KOCOA provide?

The strength of KOCOA is that it becomes a unifying framework within which a host of different types of information can be systematically cataloged. This standardization, in turn, makes it possible to compared various battles and military engagements. However, KOCOA was designed to be used in conjunction with a European style of fighting, in which two armies meet on the open battlefield. The design of KOCOA is not as well suited for assessing irregular warfare and insurgencies. Even so, with some adaptation KOCOA has much to offer for understanding these small Indian wars.
FIGURE 24. KOCOA features on an 1838 map.
**Historical KOCCOA Analysis and Difficulties**

KOCCOA is a recent methodology that has been applied ad hoc to past landscapes. While it has gained prominence in the literature with frequent use, relatively little has been written on how to perform this type of analysis in an archaeological context. Though researchers have attempted to perform this analysis on what the landscape would have been like during the event in question, the trend has simultaneously been to approach this “past” landscape with modern eyes. A feature we would perceive as strategically important might not have been how the officers of the time would have viewed it. Another difficulty with the way KOCCOA analyses are performed is the reliance on historical records. The methodology usually includes researching the historical literature and maps of the period in question and flagging any locations mentioned as part of the conflict on modern topographical maps. However, to do this for the Second Seminole War would be problematic. Primary data are scarce, aside from dispatches to Washington and a few journals. In addition, official dispatches, orders, and communications tend to leave out locational data and instead focus on getting supplies, troops, and money. And even if the documentary sources had locational data that were useful for KOCCOA, which map should the data be mapped on—a highly subjective and error-filled historical map that represents soldiers’ knowledge at the time, or a modern topographic map that would not have been available in the 19th-century, but is necessary to create site reports and analyses?

**Combining Perspectives**

It will be difficult to tease apart the reasons for this dearth of mapping. It may be that historical maps are intentionally created as large tracts of unmapped wilderness; unmapped, barren lands give the impression that there was no ownership of the land and that no one was
occupying it as a ploy for the government to assert ownership (Byrne 2008). Perhaps it due to a lack of surveyors to create the maps or was it a combination of both? Regardless of the reason, because no single map dating to the mid-1800s accurately depicts the true spatial layout of the Florida landscape, I will use four historical maps created around the time of the Second Seminole War to create a more complete picture.

FIGURE 25. Historic maps used for GIS analysis

In these four maps, even Tampa Bay—which was the main port during the war and, ostensibly, should have been well known—was drawn four different ways. The maps were imported into ArcView and overlapped, as shown in Figure 38. When these maps were overlain, it became obvious that there was a huge variance in landscape feature locations. Figure 39, for instance, shows significant locational variation for the Withlacoochee River, which was a significant key feature in the war. This demonstrates the amount of error in environmental knowledge. To put this in perspective, the variance in where the river is drawn is greater than the width of Tampa Bay.

FIGURE 26. Map showing an overlay of the digitized Withlacoochee River. Each line represents the river as shown on various maps.
This variance highlights inaccuracies not only in the map, but also of the soldiers’ and mapmakers’ knowledge. Most likely, these maps were sketches of major features and had not actually been surveyed. For most people of the time, these maps—if they even had access to them—provided the only knowledge they had of the interior. Some had been specifically created so that officers could take them into the field and make corrections and additions to revise the collective knowledge about the wilderness. Even so, by combining these historical maps, a conceptual landscape based on the collective knowledge of the troops in Florida at this time is possible.

In spite of these inaccuracies, some interesting conclusions can be drawn when the maps are considered as representations of spatial knowledge. Essentially, they are snapshots of what was known about the Florida environment. The four maps were stretched and georectified so that they matched each other in size and shape. All features that were of military importance were digitized, including—but not limited to—roads, trails, swamps, high ground, rivers, and lakes (Figure 40). When the features for all four maps are viewed together and color-coded by map, the result is illuminating (Figure 41), and a specific pattern emerges.
The two earlier maps show most of the features centered around the Fort King Road and the Withlacoochee River. The 1838 map includes a significant number of swamps, with detailed information (Figure 42); this suggests that perhaps, by this point in the war, the military had realized how important the swamps were as a resource for the Seminoles and, in turn, a dangerous place for themselves. Finally, the 1845 map has more detail information for the
southern and eastern parts of the state, which suggests that the military had expanded deeper into the wilderness. This expansion is more readily seen in Figure 41, which only compares the 1836 map to the 1845 map.

FIGURE 28. Digitized features from four maps.
FIGURE 29. Features from the 1836 map compared to those from the 1845 map.

*KOCOA as a Predictive Model*

Instead of using KOCOA to analyze what the military perceived as important during the Seminole Wars, I suggest that KOCOA be use as a predictive model against which hypotheses
about how these soldiers adapted to their landscape, as an outgrowth of their training, can be tested. “Human beings adapt not to their real environment but to their ideas about it, even if effective adaptation requires a reasonably close correspondence between reality and how it is perceived” (Trigger 1989 p. 261). Archival data provide a basis for understanding how officer training should have functioned in Florida. Historical treatises, in conjunction with soldiers’ accounts, can be mapped using KOCOA, and variations between what the texts say and where these forts were archaeologically found suggests that at some level, learning and adaptation have taken place. This change signals not only a change in strategy but also a change in the defining characteristics of military culture and operations.

**Study Area**

My first step in the analysis was to define the limits of the study area. For the purpose of a feasibility study, it would be excessively complicated to attempt to model the entire war across the entire State of Florida. Therefore, I focus on a 50-mile buffer around the Fort King Road (Figure 43). This road was chosen because it was a major artery for military movement and was a central feature in the Second Seminole War. Fifty miles was arbitrarily selected as the buffer’s radius, because it encompasses the major areas of the war and, in addition, represents the approximate distance the army could march in three days. In most case, this was the extent of sorties into the wilderness, due to the amount of provisions that could be carried by the troops.
FIGURE 30. Map of Florida showing the study area, 1838 map.
To create the master map for the analyses, I chose a map from the Rumsey Map Collection (Hood 1838) because it was the most detailed map that could have been easily accessible by the officers stationed in Florida (Figure 43). The accuracy of these early maps is unreliable, because they were closer to sketches than to surveyed maps; therefore, it was impossible to stretch the Hood map to fit the real-world shape of Florida. Attempts to georectify it to a modern coordinate system stretched the desired features beyond recognition. The alternate approach, of importing a Tagged Image File Format (TIFF) image into ArcGis, would have made it difficult to work with the data because, without an accurate map scale, all of the digitized features would only be images with no statistical power. Therefore, a compromise had to be made. The map image was imported into a GIS environment where the spatial reference was set to North American Datum, (NAD83), High Accuracy Reference Network (HARN), and State Plane Coordinates for West Florida in feet. This projection was chosen because much of the modern geodetic data used in this analysis were already available. The Hood map was then scaled so that when its scale bar was digitized, the length matched the modern real-world length. The scale bar drawn on the Hood map represented 35 miles. When the Hood map was digitized and added as a layer to the GIS map, the GIS map was scaled up or down until the scale bar length also measured as 35 miles. The map was then georeferenced so that this scale became permanent. I realize that this is not the most accurate way to reference a map, but due to the inaccurate nature of the source material, it produces a workable facsimile. It should be noted that although the distance is correct for the Hood map image, the map is not georeferenced to real-world latitude and longitude coordinates.
**Different Groups, Different Strategies**

KOCPA can be applied to the Second Seminole War to more fully understand the nature of this protracted engagement. However, it should be applied differently depending on the objective: capturing the military’s perspective of the war or the Seminoles’. For example, Key Terrain is any landscape feature that confers an advantage. In Florida, there were a variety of types of terrain that could be considered key or decisive. For the military, it could be high, dry ground, whereas for the Seminoles it could be an island or hammock in the swamps that was well hidden. This is because each side had different goals. For the Seminoles, the goal was to stay hidden and in Florida—very different from the military’s terrain requirements. Another important factor to note is that this discussion relies heavily on a masculine view of landscape, since my topic concerns the military and Seminole warriors. Different genders will have different strategies and interactions with the landscape.

Table 3, shown below, defines each category and is based on tactical diagramming (Heal 2005) and a report on the Battle of Buckland Mills (Fonzo 2008). I have also added examples of the types of military features and Seminole features that would fit each category.
TABLE 2. Seminole Wars examples of KOCOA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Definition</th>
<th>Military Examples</th>
<th>Seminole Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Terrain</strong></td>
<td>Any landscape feature that confers an advantage</td>
<td>High ground, dry ground, roads, bridges, forts</td>
<td>Dense hammocks, hiding places, islands, inaccessible land suitable for farming, rivers</td>
</tr>
<tr>
<td><strong>Observation and Fields of Fire</strong></td>
<td>Any landscape feature that allows for surveillance of the enemy as well as the use of Weapons</td>
<td>High ground, block houses, Clearings</td>
<td>Within firing range of hitting the military but concealed behind trees or Vegetation</td>
</tr>
<tr>
<td><strong>Cover and Concealment</strong></td>
<td>Any feature that allows for protection from incoming fire and obscures movement from the enemy</td>
<td>Forts, fortifications, breastworks, natural features such as ditches or ravines, etc.</td>
<td>Areas of dense vegetation, inaccessible hammocks, or islands</td>
</tr>
<tr>
<td><strong>Obstacles</strong></td>
<td>Any feature that impedes movement</td>
<td>Rivers, dense vegetation, swamps/wet areas</td>
<td>Walls, pickets, breastworks</td>
</tr>
<tr>
<td><strong>Avenues of Approach</strong></td>
<td>Any route that allows for easy Travel</td>
<td>Roads, trails, occasionally rivers when boats were available</td>
<td>Roads, trails, rivers</td>
</tr>
</tbody>
</table>

The landscape features used in the above table were taken from primary sources that discuss how each side (military or Seminole) actually used the landscape to their advantage. A few examples are given below, taken from Sprague (1848), to demonstrate how landscape classifications were made. Water as a barrier is a common theme discussed throughout the letters in Sprague’s history, in which the Seminoles disappear across a body of water or swamp and the soldiers are unable to continue their pursuit (Obstacle). What can be assumed from these descriptions is that the Seminoles used water to their advantage (Key Terrain).
Driving the enemy before us for the distance of one and a half miles. . . . The regular troops and Floridians were pushed forward as rapidly as possible to the scene of the action, but meeting with an almost insurmountable obstacle in a difficult miry swamp, half a mile in extent, and from two to three feet deep in mud and water, were prevented from reaching it (Sprague 1848:164).

The ford reached on the Withlacoochee by the troops, and which was so resolutely defended, was about three feet deep. The water was black and sluggish, deceiving those who ventured to approach. Had the contemplated charge been made, the river would have been crossed (Sprague 1848:166).

The nature of the country was such that soldiers could not even carry their cartridge-boxes. They were compelled to deposit them, with their muskets, in light boats, which they pushed before them through the mud for many miles to an island, where they found the Indians (Sprague 1848:196).

The enemy was vigilant and independent; he lived upon the wild productions, and knew the swamps and hammocks, while the soldier, as he waded them without food or rest, looked upon these fastnesses as his sepulcher, more than as a field of battle (Sprague 1848:166).

KOÇOA Analysis Simplified

Because environmental knowledge of the soldiers in Florida was so limited, plotting out all the strategic aspects of a landscape based on KOÇOA may not provide much new meaningful information. If the soldiers were unaware of the larger landscape, the decision-making process would be limited to what they had personally experienced. Identifying each individual KOÇOA element could result in an analysis that contained more detailed information than the soldiers really had access to. Therefore, I decided to collapse these KOÇOA elements into areas deemed safe versus dangerous. Again, these distinctions were made based on a close reading of primary texts (Laumer 1998, Missal and Missal 2005, Sprague 1848). When classifying features based on whether the military would have viewed them as safe or dangerous, it becomes evident that dangerous areas were avoided (for example, roads go around swamps as much as possible). In
the map below (Figure 44), forts, roads, and trails were considered safe because those were areas the military either occupied or traveled through. Swamps and rivers were deemed dangerous based on primary literature, which discussed their perils. When mapped, it is clear that the roads, trails, and forts have avoided dangerous areas as much as possible. When dangerous areas were not avoidable, the area was made safe. For example, where the Fort King Road crossed two rivers, bridges and forts were built to secure these locations. Features were determined to be safe or dangerous based on ideas of inherent military probability (i.e., common sense), accounts of what happened, and soldiers’ descriptions of Seminole tactics and behaviors. Figure 36 shows that the military controlled a very limited area—and even that is deceiving, because though the roads were symbols of American military strength, they were also a weakness: The Seminoles only had to wait alongside a road in ambush to attack.

The same approach can be used to view the Seminole landscape (Figure 45), which is the exact opposite of the military’s. Roads are now areas to avoid (unless planning an ambush), because that is where soldiers would most likely be. In contrast, dense swamps and hammocks are the areas of refuge in which they have a tactical advantage.
FIGURE 31. Map showing areas classified as either safe or dangerous for the U.S. Military.
FIGURE 32. Map showing areas classified as either safe or dangerous for the Seminoles.
Assessing Training

The gap between training and application can be seen in the landscape features that the military decided to fortify versus what the textbooks defined as features that should be fortified. I analyzed the locations of four forts and their surrounding areas and compared features such as elevation and soil type. Forts were classified as Key Terrain (because only important features would be fortified) and Cover and Concealment (because they provided protection during an attack), and they were placed along a road, which is an Avenue of Approach. Therefore, these areas were deemed important enough to fortify and were highlighted in our KOCOA analysis. But why? What was important about a given area? Traditional training emphasizes that key elevations should be occupied and fortified. To determine whether forts in Florida were located at the highest point in the immediate area, a digital elevation model (DEM) was obtained for Florida. The location of each fort was plotted with a 500-foot-radius buffer. Four additional buffers were then placed in the four cardinal directions surrounding the fort’s buffer. Elevations for each buffer were averaged. These averages were plotted on a graph and compared to the average elevation of the Fort King Road for reference (Sivilich 2012). GIS data of the forts and surrounding areas show that none of the forts was located on the highest elevation (Figure 46).
FIGURE 33. Actual vs. hypothetical elevations of fort locations.
The image on the left shows how the hypothetical fort locations were created using GIS. The center circle is a 500 foot radius buffer placed around an actual fort location and the surrounding circles are 500 foot buffers placed around proposed fort locations. The graph on the right shows the elevation data for the locations of the forts, the proposed fort locations, and the mean elevation of the road.

In Florida, which has elevation changes of only about 300 feet, occupying any sort of height would be an advantage. Even Mahan’s treatise (Mahan 1836:139) states that “woods, commanding heights, precipices, and villages, constitute the strong points of a position. They serve as points of support against which the wings of the army rest; or else, by covering parts of the front, they serve as the key points in the defense” [emphasis added]. This leaves the question of why elevation was not taken advantage of in Florida.

One hypothesis is that these structures were related less to fortifying an area and more to providing logistical support in the form of supply depots and way stations. In his letter to Major General Jesup, Col. Foster states:
It is my duty to express to you my settled opinion, confirmed by time and experience that the system of Forts and Depots with light movable columns between them, composed of part horse and part Infantry is the only certain way of putting an end to this inglorious war without loss of many lives either of Horse or Man, and of causing much fatigue and suffering to the Troops (Missal and Missal 2005:93).

The transportation of troops and supplies across the wilderness had been a constant problem for the military. Supplies were stretched thin across the landscape, and complaints about acquiring enough tools, food rations, and other necessities were a constant theme in official dispatches. Maneuvering large baggage trains through the swamps on roads that were little more than cleared trails was a chronic problem, and yet the army could not function without them. Therefore, “forts” would have functioned primarily as storehouses located at conveniently accessible locations and would only secondarily offered the fortified defense of Key Terrain during an outbreak of hostilities. The following account summarizes the difficulties of being undersupplied and understaffed:

THE SEMINOLE WAR

It seems to be the fate of this nation to meet with signal disasters at the commencement of every war; they are the consequences which inevitably follow from our parsimonious policy. It is quite clear that the destruction of property effected by an enemy at the onset, together with the suspension of all ordinary business, if converted into dollar and cents, would maintain many regiments of disciplined troops who would be glad of the chance of flying to the rescue of our defenceless citizens. Let us look at the condition of Florida: a few hundred regulars were ordered there, by piecemeal, to drive off a powerful band of warlike Indians, acquainted with every inch of ground and ready to fight with desperation. Already the blood of many of our gallant fellow soldiers has covered the ground, and their scalps are the trophies of savages. They have been fighting at fearful odds, one to seven or eight. Dade, Frazer, Basinger, Gardiner, are massacred. Clinch has fought nobly, but is now on the defensive; his communications are cut off, and apprehensions are felt for his security. Even now his devoted band may have shared the fate of their butchered comrades. Let it be understood that five thousand men will be necessary to hunt down these nimble warriors before the sickly season commences; they are supposed to number near 2,000, and must be
surrounded. They have inexhaustible quantities of arrow root, and the rivers and lakes abound with fish; these will furnish, it is thought, an ample subsistence for them, though such diet would be meager for the whites. It is no longer prudent to despise this band, but give us, in the words of Demosthenes, action, action, action. SUBALTERN (Army and Navy Chronicle 1836:79).

This shows a departure from their training in regard to fortifying strategic areas and, perhaps, an adaptation to the local environment despite the fact that these forts were often attacked and harassed. It is interesting to note that the officers did not deviate from the European fortification-centric approach; they simply altered the functions of those fortifications. Careful attention must be paid to the wording of original sources, because confusion or ambiguity can occur due to changes in the meanings of words across time—for instance, use of the word “fort” when a more accurate description would be “supply depot.” Examples such as this demonstrate the complexity of this war.

This hypothesis that the forts served more as supply depots would mean that for them to be most efficiently used for that purpose, they should be easily reachable. Instead, they were more than a day’s march from each other. Messengers on horseback could probably travel more quickly between them, but moving soldiers and baggage trains would have been more difficult. This would have required troops to bivouac overnight between forts, which would have been dangerous.
FIGURE 34. Map showing buffers with a 15-mile radius around the four forts.
Figure 34 shows the four forts with a buffer of 15 miles around each. This distance was estimated based on diary accounts of troops traveling about 15 miles a day on foot. To make these forts easily accessible and highly connected, the 15-mile radius from one fort should reach the neighboring fort location. Since each fort is more than 15 miles away from its neighbor, this meant that the soldiers would have to quick march in the heat, facing the possibility of heat exhaustion, or they would have had to camp overnight between forts, making the troops and supplies vulnerable to attack.

*The United States Military’s Way of War*

As has been discussed above, military tactics are defined by doctrine, which, in turn, is based on centuries of prior practices. Change in early colonial periods happened very slowly; according to Ross (1979), “parade-ground drill and battlefield tactics were virtually identical” to early military practices. In fact, when the 1791 French training manual was updated in 1831, very little actually changed other than adding a section on how to fire from a two-rank line rather than from a three-rank line (Ross 1979). Eventually, in the mid-19th century, American troops were trained to advance openly, rather than always in strict lines, and to use aimed fire (Ross 1979). Smith (1836:71) documents the use of this newer method when he writes, “We immediately extended as Light Infantry, covering ourselves by the trees, and opening a brisk fire from cannon and musketry. The former I don’t think could have done much mischief, the Indians were so scattered.”

However, the defining feature of the Seminole Wars, I argue, is the military’s lack of adaptation to Florida’s environment. Numerous primary sources detail this steadfast reliance on traditional methods. Below is a selection of those sources, organized thematically.
Drill and Parade

Despite the harsh realities of frontier military service, an effort was made to maintain the appearance of regular military life. Despite exhausting fatigue duties and with many on sick leave, drills and dress parades were still held regularly.

February 22d.—We are still here, sedulously engaged in drills, and the thousand other duties of a camp—distributing munition, clearing the ground, and pitching tents out of the way of watch fires, aye, and of cooking fires too. For no where is the definition of man, as the cooking animal, more correct than in an army, when not on the march, (and he has any thing to cook.) The staff are often sent into the city for supplies, and most catagmatic falls do our horses favour us with, as we gallop over the broken bridge. We leave here to-morrow for Hernandez at least some of us, for, by reason of the wretched transportation, we have to move in detached bodies. The best friends must part. (Smith 1836:139)

But valor and patriotism alone, are not sufficient for that end. Some tactical instruction and an exact obedience to commands, are also necessary. Instruction can only be acquired by opportunity and labor. A firm resolution to obey, accomplishes the other great requisite at once. Let the resolution be taken by all who have nobly turned out to avenge their butchered countrymen.

But again:- to parade, to march, to mount guard and to fight, are not the only duties of war. To handle and preserve the supplies of the army, and to construct camp and other field defences, are equally required of every good soldier. A corps of servants, for these purposes, would be too large and cumbrous. It would double the army, and render one half too mean and the other too delicate, for the glory of a well contested field. Fatigue parties must, therefore, when wanted, be furnished by all the corps in their turns, and proportionally. —Winfield Scott. (Army and Navy Chronicle 1836:167-168)

Transportation

Transportation and movement of troops was a constant difficulty in the dense Florida swamps, and soldiers constantly complained about this. The terrain was even too difficult for
horses of the mounted troops, and often these mounted troops had to abandon their mounts and go it on foot.

February 28.—To-day we are out in the scrub and hammock land, up to our heads in briars, and our knees in mud. I start on horseback, but finding it impossible (as the guide foretold) to progress with my horse, I have him returned to camp, and proceed a-foot (Smith 1836:147-148).

Volusia, on the St. John’s, March 11th.—We left Camp M’Crea on the morning of the 15th, and though thence to this place is but thirty miles, we did not arrive here ‘till to Day. Three days occupied in traversing such a distance; will sufficiently attest the condition of the road, I should rather say, of the trail, for road we had none, except of our own making. Great indeed have been the toil and fatigue endured on this march, and nobly did our fine soldiers accomplish it. They were often in water to their waists, more than half the way being through swamps.

After toiling for hours to cut away the dense growth of trees, the very stumps left beneath the surface of the water, (and which therefore could not be trimmed lower) were so numerous that it became impossible to guide the horses through the tortuous clearing. They were accordingly taken out, and the men put in; or, to express myself in other words, the teams were unhitched, and the soldiers drew over the wagons by main strength, unassisted by horse power (Smith 1836:154).

Baggage trains were another huge logistical problem for the army and the quartermaster’s unit. How to provision large companies of men in an environment where everything had to be brought in, including forage for the animals, was a dilemma. Baggage trains were easy, slow-moving targets for attack, and required a huge number of men, draught animals, and wagons.

These three companies, with three pieces of Artillery, and a baggage train of 90 wagons, escorted by the First Regiment of U. S. Infantry (a part of whom where mounted), left fort Brooke . . . (Coker and Schafer 1990:457).
Fortifications

Fortifications were another enormous labor effort; troops were constantly working to fortify their locations, whether they were constructing a permanent fort or a hasty breastwork while bivouacking. However, even these “permanent” fortifications were only temporary: As soon as the army abandoned one for any length of time, they burned it to the ground to prevent the enemy from occupying it. When troops returned to that location, the fort would be rebuilt. Many of these forts were burnt and rebuilt several times.

Camp M’Crea, March 6. . . . We have thrown up an extensive breast-work, (with deep trenches around it) constructed a commissary store-house, and mounted a small cannon a-top of it. This piece we named M’Duffie, to do honor to one who honors Carolina and the country at large . . . We have also levelled the embankments, burned the grass, cut the palmetto and scrub, and removed all objects that were within rifle shot of our camp, behind which the enemy could conceal himself. . . . Now that the stockade and other labours are completed, we are absolutely idle, (except at drill) and frittering away that precious time which might be employed in serving or in saving the country. They say we are waiting on the Carolina horse—why were they not furnished with the means of transportation, and all things needed to bring them here two weeks ago, as was expected? (Smith 1836:148-149)

We have strengthened our work very much in the last two days, as we have made a lunetto, which gives us a flank fire. A short time before Fraser left, the work put up was called Fraser’s redoubt. (Army and Navy Chronicle 1836:56)

“Fort” Brooke, Tampa Bay, Jan. 9th, 1836.
Mr. Editor:- The attention of the public may in some degree, be attracted to this point, and I therefore give the following information:
This place was never fortified; two block houses were indeed built at the end of a street four or five barracks, and quarters on each side. The Secretary ordered “Cantonments” to be called “Forts,” and to that rule this post conformed.

The existing defences are called the “Fraser redoubt” in compliment to the late gallant officer of that name. It is a triangular stockade, with two block houses and a battery of two 12 pounders looking upon a plain; and some 100 yards from the barracks and a large grove of venerable live oaks, the gorge, or third side, was open to the bay shore, and has since the battle of Withlacochee, been enclosed with a 6 pound battery flanking it and making a cross fire upon the salients of the gorge. All that is fort about the position, has proceeded from the thews and
muscles of its garrison from about the 1st Dec. to the date of this missive. Of all miserable contrivances in the paper way, paper forts are the most tormenting; impending evils check stronger epithets. It is the lot of man to do, to bear and to suffer; and here to do, or die (Army and Navy Chronicle 1836:79).

Adaptations

Some small concessions were eventually made by the military. For example, all brush and trees were removed to have a clear field of fire to prevent the enemy from stealthily approaching the forts, which created a liminal space around each fort. Also, much of the Florida territory was abandoned during the sickly season. The war would then be resumed in the fall, when disease seemed less prevalent.

It may be proper to remark, that the attack was not made from a hammock, but in a thinly wooded country; the Indians being concealed by palmetto and grass, which has since been burned (Smith 1836:75-76).

The Peninsula War. – The descriptions we have received of the fatigues of the march, the difficulties of the country, and the mode of fighting adopted by the Indians, give a discouraging account of the prospects of the final restoration of peace to the Peninsula of Florida. The scene of operations is a mere jungle of swamps and hammocks, which at this season begin to send out deadly, pestilential vapors, under the influence of which the strongest constitution cannot long stand. Disease has already disabled a large number of troops, and as the summer advances, a great mortality must infallibly take place. Bad roads, a country producing no supplies, toilsome marches, harassed perpetually by scattered parties of an enemy, whom they never see, but who watch them in the morasses, and, after firing a shot or two, disperse, and dive into the recesses, where they cannot be found, and no prospect of action to bring this dispiriting and exhausting struggle to a crisis, make this Florida war one of the most unpleasant that can well be conceived. The patience and perseverance of the troops is deserving of the highest praise. A simple zeal for the performance of duty sustained them through the severest difficulties, without the excitement of anticipating an engagement and a decisive victory. It is obviously impossible to continue them on such a service through the hot months, in such a dreadful climate and country. The protection of the few remaining settlements seems all that can be done, without a prodigious waste of life – and the discharge of the volunteers, such being the determination, should be given as soon as practicable. Their patient endurance, under these circumstances, deserves and will receive the gratitude of the country. Mobile Com. Register (Army and Navy Chronicle 1836:318).
The military was not the only group slow to adapt. Native Americans could also be, but this was less important for them, since their strategy was mostly successful. Eid’s discussion of the Indian way of war, while set in the 1700s, seems consistent with what was happening with the Seminoles in Florida (Eid 1988). As Butler (2001:74) points out, “Seminole combat behavior augmented by patterned use of the cultural landscape and the prioritization of certain categories of artifacts” would allow a predictive model of their behavior and tactics to be developed. The Seminoles and the military remained stuck for years in a pattern that was difficult to end, and the patterned responses of both sides may have contributed to this stagnation.

One such tactic that Eid points out that was successful for the Indians, and which they employed for a long time, was the half-moon battle formation (Eid 1988). This tactic probably began as a cooperative hunting strategy that became invaluable in times of war. As its name implies, this was a system for flanking the enemy without surrounding it completely, which was critical to its design. Also important for this maneuver was that it contained an avenue of retreat for the Seminoles as well. This was an area in which the army and the natives differed completely in their way of fighting: The Indians focused on maintaining an avenue of retreat, while military doctrine placed emphasis on creating an avenue of approach for soldiers. Another important feature for the Indians was a running and “skulking” method of constant movement, which entailed more than simply staying hidden (Eid 1988, Ferling 1980).

Any one who has travelled, as we have done, the road from Tampa Bay to Camp King, will perhaps wonder why the Indians selected an open pine barren for their attack, in preference to the thick hammocks which skirt the Hillsborough and Ouithlacoochee rivers. We think it can be easily explained. Powell, by his spies, had perhaps been informed of the movement of Dade’s command, and sent a large force to cut them off, before they could form a junction with Clinch. Had the attack been made in the hammock, a number of the whites would have escaped.
under shelter of the woods. The object of the Seminoles was to destroy every man. Possessing, as they did, an overwhelming force, they would neither attack in these positions, nor attempt to surprise the camp at night, when the troops were well protected, and might have held out against a thousand Indians, or destroyed a large number of them. In the pine barren, the red men fought at equal and greater advantage, whilst all chances of retreat for the pale faces was cut off (Smith 1836 p. 76-77).

The Seminoles also became savvy about obtaining supplies. Since they were kept on the move by the advancing army, planting crops became more and more difficult. In several instances, the Seminoles would agree to treaty terms, such as to emigrate to a reservation out west, then settle around Fort Brooke, collecting subsistence and supplies as agreed. At the last moment before their scheduled departure, however, they would disappear back into the hammocks. Whether this was a conscious decision as a method for obtaining supplies or simply a fortuitous set of circumstances is difficult to ascertain from the scant historical documents that describe the war from the Seminoles’ perspective.

The lack of primary documentation about the Seminole’s perspective of this war makes any analysis of it fairly one sided. Understanding the Seminole worldview and what strategies and approaches they brought to the encounter may never fully be described because of this. Yet evidence of their actions remains both archaeologically, and to some extent, in the historical record of the military. From these bits and pieces, it is fair to say that the Seminoles were approaching this conflict as an insurgency because they kept up a fast pace of engagements and were highly adaptive to the changing conflict situation. However, developing a richer discussion about how the Seminoles thought about the war and how they viewed it may be difficult.

This adds an important dimension to this use of KOCOA. Traditionally KOCOA has been used for conflicts between two groups that had fairly similar cultural traditions. For example, the American Civil War where both sides had the same mindset and framework for
carrying out warfare. In the case if the Seminole Wars, KOCOA is being applied to two very different groups, who would have had very different approaches and methods for carrying out war. This means how they approach each other as an enemy and how they each interact with and utilize the environment will be very different. KOCOA is still valuable for understanding this conflict, it just needs to be applied differently in culturally appropriate ways to each side.

Conclusions

Layers of complexity must be critically assessed when analyzing and interpreting a fortified landscape. The wars in Florida were especially complex, because this was the first time the military had to operate in a semitropical environment and put their French-based military knowledge to the test in such an unusual environmental setting. This caused enormous problems, ranging from moving large baggage trains (getting stuck in the swamps, having inadequate roads to travel on, and being a highly visible target on the landscape prone to attack) to learning how to deal with malaria and the “sickly season.” Also, having the policy makers and those in charge of military budgets so far from Florida—and possessing little or no knowledge of the realities of Florida—was a huge obstacle for commanders trying to requisition supplies and money.

As Vencle points out (1984:118), “Changes and drifts in the spheres of power and politics left their archaeological imprints only in an indirect and belated fashion. For this reason, archaeology suffers from a general tendency to limit the consideration of war to the occurrence of a few static attributes of them.” The goal of my research is to create a more dynamic model for investigating conflict by moving away from single-site analyses. However, this type of research means putting ourselves in the mindsets of those we are studying. Modern technologies
and spatial information were not available to those soldiers until quite recently, so to understand past events we must view them through contemporaneous eyes and not our own.

Familiarity with the types of knowledge available to those in the past can greatly enhance our understanding of the wars’ outcomes. Historical maps provide information about key features and also about the extent of environmental knowledge. Determining how these officers were trained will allow us to look at these maps from their perspective and comprehend how globalized classroom knowledge intersected with their environmental knowledge to produce an outcome (whether success or failure). Using KOCOA to detect discrepancies between how the landscape was used and how officers were taught to use it, based on French methods, allows for a more critical assessment of the assumptions and alternative modes of conceptualizing the landscape to be developed. KOCOA provides a method of defining the operational level of the war, and GIS provides the tools for understanding it at the tactical level. Future research will continue to investigate this intersection between landscape and education to more fully understand the complexities of this largely forgotten war.
CHAPTER 8:
EXCAVATIONS AT FORT KING AND FORT DADE
AS A CASE STUDY

The study and intricate knowledge of the terrain is the beginning and the end of tactics. Everything to do with the ground, its shape, contours, texture, and even its color at times of the day, affects everything both you and the enemy do or cannot do. Both adversaries have the terrain of the battlefield in common. Other things being equal, victory goes to the commander who best understands the terrain. By Ralph Ingersoll, in The Battle is the Payoff (Caldwell et al. 2004:65).

Introduction

Much of the research on military theory has relied on documentary sources, such as primary accounts and diaries of officers who were present. However, information can also be gained by including archaeological evidence in the analysis. Fieldwork at forts Brooke, Foster, Dade, and King have been very preliminary, focusing mostly on determining the extent of the site boundaries and the intactness of the archaeological deposits. Several seasons of excavations have taken place at Fort Dade since 2003, one was conducted more recently in 2008 at Fort King, and at least one season occurred at Fort Foster in the 1970s. Fort Brooke, unfortunately, has been mostly lost to construction in downtown Tampa. Even so, in between municipal construction projects, many small CRM excavations have been conducted, and some evidence of the fort has been located in and among the buildings. This chapter will provide a brief overview of the archaeology done at Forts Brooke and Foster, as well as my own work at Forts Dade and King. More detailed reports have been filed with the State of Florida and are available on request. My goal in this discussion is to demonstrate the types of data that can be used for a
KOCOA analysis, even when only preliminary archaeological investigations have been undertaken.

*Fort Brooke*

Fort Brooke (originally Cantonment Brooke) officially came into existence through orders from the Adjutant General’s Office to Colonel George M. Brooke on November 5, 1823. In the following,

By the middle of this month, the men will be in their quarters which are the best log buildings I have ever seen, both for health and duration. The rooms being large, high, airy and as well put together as possible, the whole 260 feet in length and 12 feet from floor to the loft. We have completed the Quarter Masters and commissary’s store house, [and] bake house. The officers quarters have also been finished (viz. two blocks of it) in ten days (Brooke and Covington 1953).

This was an unusual fortification for the region. The largest shipping port in Florida was located on Tampa Bay, with Fort Brooke at its epicenter. This was a large, sprawling complex that, for the most part, was not confined within walls and was often referred to as a military reservation rather than a fort (Austin 1993). In the fort’s early years, it expanded to encompass approximately 16 square miles in an attempt to prevent civilian settlements from encroaching on government land, but to no avail (Austin 1993). Despite its large size, the fort was sparsely garrisoned for most of its history, often with fewer than one hundred officers and men. The situation was so desperate at Fort Brooke early in 1836 that General Gaines proposed burning the buildings, putting all civilians aboard ships, and marching out in search of the enemy.

Fortunately, he soon realized that such action would be rash, as the location served an important function as a shipping port.

Fort Brooke was not ready for an Indian war; one observer called it a paper fort, implying that it was only a fort on paper and not in actuality. Eventually, after the outbreak of hostilities,
more substantial fortifications were added, which included two blockhouses erected at the end of a street with four or five barracks on each side, a triangular stockade, two twelve-pounder cannons and a battery of six-pounders (Covington 1958:328). At the peak of the war, it was estimated that as many as 4,800 troops were stationed there, in addition to the hundreds of Seminoles that had arrived awaiting deportation (Austin 1993). There were also more than one hundred structures within the confines of the fort.

Only limited archaeology has been done at this location, as much of the area has been developed by downtown Tampa. A 1993 report by Janus Research/Piper Archaeology details the results of several excavations that sought to identify intact fort remains in and among the massive modern disturbances (Austin 1993). They found some intact deposits that contained military-related items, which supported their conclusion that this was the location of the fort. But due to the piecemeal approach to the archaeology of this fort, which was necessitated by various construction projects, any comprehensive conclusions were difficult to arrive at; only a handful of trash pits, a hospital building, and a few other miscellaneous features were located and used to define the spatial layout of the fort.

Despite the limited archaeology done at Fort Brooke, there is still a rich documentary history that can help elucidate some aspects of this fort’s history. Fort Brooke is unusual in design; several hypotheses may explain that. The first is that because the fort was constructed in 1823—prior to the increased hostilities between the Seminoles and military this “fort” was not intended to act as one but instead as more of a military outpost or town designed to meet the needs of a major shipping port. If both goods and people were frequently passing through, this could be one reason for the high number of buildings within the compound and the need for a dedicated hospital building. Another possibility is that the fort was not built by an engineer from
the Military Academy and was not constructed with formal fortification plans in mind. A third possibility also has to do with the early construction date. It is possible that the fort’s layout was not sufficiently functional or did not meet the military’s needs, and therefore the plan was adapted for later fortifications.

**Fort Foster**

Order Number 18 was issued on November 28, 1836, and directed Lieutenant Colonel Foster to reestablish the abandoned Fort Alabama (Schene 1976). Construction commenced in December of that year and the fort was renamed Fort Foster, as shown in Figure 17. It was to have two blockhouses and a strong picket work (Schene 1976). The tasks were divided up; Captain Lyon was instructed to build blockhouse number one and Captain Allen blockhouse number two. Lieutenant Henry Prince was project engineer and also tasked with erecting the stockade pickets, and Lieutenant William Wall was to build the commissary store, magazine, and bridge. Both Prince and Wall were Military Academy graduates (Cullum 1868).

The purpose of Fort Foster was to protect the Hillsborough River bridge from being burned by the Seminoles. The original bridge at the Hillsborough River had been built in 1828 and burned in 1835. The new bridge may have been built about 700 feet downstream, if the drawing by Colonel Foster is to scale (Schene 1976). Moving the bridge down river would have placed it more securely under the protective fire of Fort Foster, which was designed to protect the bridge at this point. It was also intended to serve as a depot for provisions and forage and a hospital for the sick and wounded who had been brought in from the interior. The fort consisted of stockade walls and had two blockhouses, the guns of which would have a interlocking fields of fire centered on the bridge.
In discharging the duties of Quartermaster, I have been engaged with about 20 soldiers ever since I came here in repairing the fort, building houses for the comfort of the officers and men, and erecting store houses for the reception of provisions and forage. We have completed in 14 days four large storehouses, (each capable of containing 30,000 rations) built two sheds, one 90 and the other 50 feet long; one Hospital, and three houses, besides repairing three. They are made after the Florida fashion, of course; more regard being paid to convenience and comfort than to beauty. Major Belton says, however, that we have the handsomest fort in Florida (Coker and Schafer 1990:457-458).

Diseases such as dysentery became widespread around April 1837 and Dr. Baldwin, the assistant surgeon on post, began writing to request that the post be abandoned despite Jesup’s efforts to increase the strength of this key facility (Schene 1976). Eventually, Dr. Baldwin was allowed to remove the extra men, leaving only the seventy or so necessary to garrison the post, and took them to Lake Thlonotosassa, which he had previously scouted and deemed a healthier environment (Schene 1976). About a month later, Jesup agreed to finally abandon the post entirely, and the campaign against the Seminole Indians was halted during the summer months to avoid disease. It resumed in October.

Archaeology of Fort Foster

In the 1970s, extensive excavations were undertaken at the Fort Foster site to locate the fort and determine its configuration (Baker 1996). Eventually, this work led to the fort’s being reconstructed as a tourist destination. Excavations were conducted at both the earlier fort, Fort Alabama, and its later iteration, Fort Foster. Sections of picket works for both forts were located, including some intact remains of the pickets themselves at the bottom (Baker 1996).
FIGURE 35. Map of Fort Foster. (Missal and Missal 2005)
Despite extensive excavations, Baker (1996) provided only a limited report that focused mostly on architectural remains such as the pickets and powder magazine, so few comparisons to other forts can be made for the purposes of this study. Baker’s work did, however, discover the fort’s exact location and layout and will be discussed further in the following chapter.

**Fort Dade**

Fort Dade is located on the south bank of the Southern Fork of the Withlacoochee River (Figure 18) in the present-day town of Lacoochee. Construction, which was led by General Jessup, began in the winter of 1836 and ended in early 1837; the fort’s function was to protect the bridge across the river. It was named for Major Dade, whose ambush led to the start of the Second Seminole War (Laumer 1966). Documentary evidence about the fort is not very descriptive. Sources say that it was built on the location of Camp Birch, which was a breastwork where General Eustis camped. Below are some of the only snippets of documentary evidence, provided by General Foster, who oversaw the construction of the fortification, and Lieutenant Prince, who had just completed Fort Foster. Lieutenant Prince was a Military Academy–trained engineer, and supervised the day-to-day construction. Fort Dade became a crucial fort along the chain of forts that extended into the interior of Florida; it was briefly the Headquarters of the Army in 1837, and even saw the signing of the 1837 Acts of Capitulation (Mahon 1985:200).

The Bridge is fast going up, the ground designated for erecting the buildings being thoroughly prepared, Maj. Birch of the 4th commenced throwing up a breast to intersect the Block Houses & carry up the same at once. A Breastwork being deemed sufficient together with the Block Houses, as we have no time to spare farther than to render the place secure against an attack from Indians (Missal and Missal 2005:61).
A party detailed to clear off the ground intended for building on & staked, Lt. Prince, Chief Engineer, superintending. It is about forty paces from the Bridge to where the fort will be erected (Missal and Missal 2005:61).

The 6 Store Rooms built in such a manner as to form a part of two sides, 3 on the East & 3 on the North sides are 20 feet each in the clear, making abundance of room for large quantities of stores contemplated in being deposited at this post (Missal and Missal 2005:62).

FIGURE 36. The Withlacoochee River at Fort Dade. (photo by author)

Archaeology of Fort Dade

Excavations at Fort Dade began in earnest in 2003 when the Seminole Wars Historic Foundation, which owns the land that contains most of the fort’s location, partnered with the University of South Florida to locate and assess the location of the fort (Figure 19). Christine Bell, under the supervision of Dr. Brent Weisman, undertook this project as her master’s thesis and conducted excavations from 2003-2004. I was employed by the Gulf Archaeology Research
Institute (GARI) from 2006 to 2008, and we conducted additional work on both the Seminole Wars Historic Foundation’s property and the neighboring property under private ownership (Ellis et al. 2010).

FIGURE 37.View of Fort Dade as it is today (photo by author)

Discussions with local collectors indicated that there have been decades of looting. This was also a problem during both the USF and GARI excavation seasons, with looters entering the site at night and digging large pits in unfinished excavation units (Figure 20).
During Bell’s archaeological investigation in 2003, 169 postholes, eight 5x5’ units, and six 3.5x1.5’ units were excavated (Figure 21). The goal of that excavation was to determine whether any possible fort-related artifacts were still present on the property. Testing was very limited and exploratory in nature. Bell determined that artifacts of the correct time period were present, and the discovery of four gunflints is suggestive of a military site. This work served as the basis for a recommendation that additional subsurface testing be performed to determine whether any intact fort structural remains were present.
Beginning in 2006, GARI conducted fourteen months of more extensive excavations. During this excavation campaign, a total of 26 excavation units of varying sizes were excavated (Table 2 and Figure 22).
TABLE 3. Number of excavation units and their size

<table>
<thead>
<tr>
<th>Excavation Unit Size</th>
<th>Number Excavated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x2</td>
<td>14</td>
</tr>
<tr>
<td>5x5</td>
<td>8</td>
</tr>
<tr>
<td>2x5</td>
<td>1</td>
</tr>
<tr>
<td>3x3</td>
<td>1</td>
</tr>
<tr>
<td>3x4</td>
<td>1</td>
</tr>
<tr>
<td>3x7</td>
<td>1</td>
</tr>
</tbody>
</table>

FIGURE 40.Evidence of Burned Timbers in Excavation Unit N457-E490. (photo by author)

Despite looting, evidence of burned timbers (Figure 22) from what is believed to have been the blockhouse is present, and the large number of nails and spikes recovered suggests that the structure was substantial (Figure 23). The absence of impacted musket balls suggests that no serious fighting took place at the site, but several dropped shot are compelling evidence of military occupation (Sivilich 2009:89). One of the most striking features of the site is the higher
than expected number of luxury items such as window glass fragments, lamp glass, and finely decorated ceramics.

FIGURE 41. Map of excavation units
(Reproduced with permission from Gulf Archaeology Research Institute.)

Window glass is an unusual item when viewed in the context of a frontier outpost. Since these forts were built knowing that they would be temporary structures, it is interesting that glass windows would be added. While getting basic supplies for the military was difficult, it must have been even more difficult to import such fragile material. Also, when the structures were abandoned, why not salvage the glass for future structures? This is one of those behavioral patterns that is seemingly out of place. So far, no documentary evidence discusses the use of window glass. But it may have served an important function: In a climate where mosquito-borne illness is common, glass was valued highly. One problem with that argument, however, is that
the majority of personnel present at this fort would have camped outside the fort walls in tents. Only officers would have occupied an interior building.

*Fort King*

The Treaty of Moultrie Creek in 1823 divided Florida in half, with the portion south of present-day Ocala being a reservation for the Seminoles and the portion north of Ocala for white settlers (Davis 1929). In 1826, Gad Humphries built an Indian Agency in present-day Ocala. Fort King was constructed in 1827 and was located near the Indian Agency (Ocala Planning Department 1995). Its placement on the landscape was quite significant: It was located on the Fort King Road, and both the fort and road served as boundaries for the short-lived reservation that was imposed on the Seminoles, restricting them to the interior of the territory. The fort had an interesting history of occupation, which has been well documented in the 1995 and 1999 Fort King archaeological reports and will only be briefly discussed here.

The fort is described as a large structure consisting of:

- a space 162 by 152 feet (was cleared) to be enclosed by a barricade of split logs upended in the ground to form walls or pickets. Gates of heavy timber were placed on each of two sides, and on one corner of a blockhouse or watch tower, fourteen feet square, was erected . . . for the enlisted men a large barracks containing four compartments was raised. The rooms each about twenty-five feet square were separated by wide hallways, and there were piazzas front and rear. All was under one roof which provided not only protection from the sun, but also overhead storage. For the officers two separate buildings, about twenty by fifty feet, were planned, each with bedrooms and drawing rooms for two men. Extra sleeping space was in a loft above. Mess halls, kitchens, and ammunition storage almost filled the remaining area Ott 1967 cited in (Ellis et al. 2009:15).

The plan of this fort was unlike any others in the surrounding areas. It was built under the direction of Captain James M. Glassell, who was not a Military Academy graduate. Historical documentary evidence is intriguing for archaeology and for understanding the fort’s role in
general. For example, similar to Fort Dade, the artifact assemblage of this fortification is slightly unexpected. During the construction of Fort King, a letter by Lieutenant Francis D. Newcomb, Acting Assistant Quartermaster to Brigadier General Thomas Jesup, Quartermaster General, dated May 16, 1827 states:

The articles which will be most wanted at this post, and which will be absolutely necessary, to render the Quarters comfortable in Winter, will be window-glass. Bricks & Lime: —We will want also, plank for flooring &c, as we cannot saw by hand, all that will be required; —together with nails, Iron and Steel.—Major Glassell requested me to mention the above named articles, as those that would be indispensably necessary— (Ocala Planning Department 1995:29).

This request for window glass seems ostentatious on a frontier fort. Apparently the commanding officers at this time also thought this, and in a letter dated June 24, 1827, from Major T. Cross, Acting Quatermaster General, to Lieutenant Francis D. Newcomb, this is made clear:

With the reduced garrison designed for this position, it is believed, the necessity will not occur, for sending materials from Charleston or elsewhere, as requested in one of Maj Glassel’s former letters – As the post is altogether ‘temporary,’ any thing more than comfortable huts, for the company, would be improper. The transportation of brick, such a distance, could not be justified by the circumstances of the case. Suitable chimneys, can be readily constructed with logs and clay. June 24, 1827 (Ocala Planning Department 1995:31).

This exchange highlights the disconnect between the officers in charge and the officers on the ground. For instance, Major Cross denies the request for bricks for chimneys or stoves for heating the cabins and says to use the “logs and clay” locally available. However, in Florida’s coastal terrain the soil is so sandy that daub, chinking, or tabby could not be produced. Even trying to make lime out of local sources had failed, and some cabins were damaged during these experiments (Ocala Planning Department 1995). The officers on site usually tried to obtain
locally sourced products to meet their needs. When they could not, requests would be sent to their superiors, who often denied them because the items asked for were seen as unnecessary. Had the commanding officers been on site, they might have had a different opinion. In the case of building Fort King, many letters were exchanged explaining the local situation and trying to convince those in Washington to send the supplies needed.

Another problem highlighted by the Fort King letters was one of labor. Often requests for goods, such as lumber, were denied with the reasoning that soldiers on fatigue duty could procure timber and mill the lumber themselves. However, at the same time the strength of the garrison was slowly being reduced by those in Washington, while simultaneously disease was incapacitating the troops, leaving barely enough men to finish the fort’s construction and maintain guard duty. One example of how little distant commanders and officers on site agreed can be shown in the following letters.

June 8, 1827, Colonel Duncan L. Clinch to Colonel R. Jones, Adjutant General:

I was under the impression that my letter to the General in chief . . . contained sufficient information as to the distribution and location of the Troops in Florida— but on referring to that letter, I find that I should have been more explicit as to the location of the new temporary Military post, directed to be established pursuant to Order 79, of 1826— and I now have the honor to report that in Conformity to that Order, I caused the post on the Suwannee river, to be abandoned, and a Site Selected near the Florida Agency for the new post, which post is now Garrisoned by two Companies of the 4th Infantry Commanded by Captain Glassell and to which he has given the name Cant. King — From my knowledge of the Indian Character, I consider this post of more importance, in Controuling the Indians, and in giving protection and Security to the inhabitants of Florida, than any other post in the Territory, as it is in the immediate vicinity of the largest number of the Florida Indians, and between them and the white inhabitants -- & I am also of the Opinion, that it is of the first importance that it Should be garrisoned by two companies for altho’ much Credit is due to major Pierce and Capt. Glassell for their commands, for the zeal and Activity in Carrying into Effect the instruction given them, relative to the Indians, Still in a Country like the one assigned their protection, but little can be effected with one company — with a knowledge of these facts, & a full view of all the circumstances Connected with this Subject — I have Considered it my duty to suspend the removal of One of the Companies,
from the post near the Florida Agency until I receive further Orders on that subject – and at the same time, beg leave to recommend in the Strongest terms, tat the two Companies be continued at that post, until the Indians are quietly Settled within their limits or some other disposition made of them (Piatek 1995:30-31).

FIGURE 42. Map of Fort King (Ellis, et al. 2009).
FIGURE 43. Layout of Fort King (Ellis, et al. 2009).
Almost a year later, this discussion is still continuing:

April 5, 1828, Major General Winfield Scott to Colonel R. Jones, Adjutant General:

I deemed it expedient to break up the post, Camp King, occupied by a single company. This was done under the general authority to send four companies of the 4th Infantry from Florida to the vicinity of New Orleans without specification of the posts from which they should be taken . . . from the conviction that the importance of the post was by no means commensurate with the extra expense of sending to it supplies, over land, from Tampa Bay, 120 miles. – The commanding officer at Cantonment Brooke will be instructed, should he deem it necessary to the protection of the Indian Agency & his authority, to send a detachment of fifty men once or twice a year to the Agency, with orders to show themselves; --to effect those purposes, & to return. (Piatek 1995:35)

Fort King was abandoned in May 1836, and in July the Seminoles burned it down (Ocala Planning Department 1995). In 1837, a new fort was built on its location (Figures 24 and 25).

A tantalizing letter written after the abandonment of Fort King describes some of the substantial efforts undertaken in building the fort, since many items are listed as being present that would not be expected in a fortification, such as sash glass windows, window shutters, and proper doors.

In a letter of November 4, 1846, Edmund D. Howse, sheriff of Marion County and former custodian of the fort King property, urged the immediate sale of materials from buildings to those, like himself, desiring to build in Ocala. The lumber, though old was ‘worth considerable’, and ‘the floors,’ he wrote, ‘are plank, the doors and window shutters plank and the windows are sash glass, all very valuable in this country where we have no conveniences (mills) for making plank.’ And so the physical remnants of Fort King, whose presence had opened up the Ocala area to settlement, were utilized for more peaceful pursuits in the construction of civilization (Ocala Planning Department 1995:157).
Archaeology of Fort King

In 2008, over a four-month period, I participated in further excavation of Fort King with GARI. We conducted 50 shovel tests and 150 small test units, which were excavated in the vicinity of Fort King. This built on the work done by Piatek in 1991 and Ellis in 1994 and 1999. The tract of land the fort was located on is currently owned by Marion County and was previously owned by the McCall family (Figure 26 and 27).

FIGURE 44. Fort King as it appears today (photo by author).
Ellis (1999) found the highest density of potentially fort-related artifacts in the center of the parcel of land on an elevated landscape feature. Excavation has also shown extensive subsurface disturbance, especially due to plowing and agricultural use of the property since the late 1800s. Despite the disturbance, as a result of the archaeological data and archival information, (Figure 28) Fort King was approved as a National Historic Landmark in 2002.
FIGURE 46. Distribution of all artifacts found at Fort King. Reproduced with permission from GARI.

Fort Comparisons: Creating Comfort on the Frontier

Archaeology at these fortification sites has been very preliminary. Only two forts were excavated very recently, while Fort Foster’s excavation took place in the 1970s and Fort Brooke was sporadically excavated between the 1950s and 1980s. A comprehensive analysis of artifacts
would be redundant, since many site reports have already been filed with the State of Florida. Therefore, I will focus my discussion on the archaeology at Fort Dade and Fort King and will highlight some of the unexpected artifact types present and their significance.

Both Fort Dade and Fort King contained the usual artifact classes that would be expected at a military structure; architectural elements such as nails, gate hinges, spikes, etc. were abundant. Also, the fact that many of these elements were of a heavy-duty nature also speaks to their function for fastening large logs, such as for a palisade fence or a laid log blockhouse. Unfired musket balls are also an indicator of an armed presence on site (Sivilich 2009:89). Large quantities of flat metal container fragments that could be from either canteens, cartridge box liners, or food rations were abundant.

Some of the unexpected items found were fragile goods (Table 3), including a large variety of ceramics at each of the forts, which is unusual when viewed in the context of a remote frontier location. South’s (1978b:47) study of archaeological patterns notes a lack of ceramics as a key feature of his Frontier Pattern. One would expect to find pewter or enameled tin plates, which would survive the trip to these remote locations. Instead, a variety of decorative styles were found (Figure 29).

At both Fort Dade and Fort King, numerous types of refined earthenware have been discovered, each with a different pattern and decoration technique that ranges from transfer prints in all the colors (blue, black, pink, and brown) to hand-painted polychrome. The ceramic assemblage consists of whiteware, pearlware, creamware, ironstone, stoneware, and tin enameled earthenware.
Because many of them had been burned, making it difficult to determine whether these were whiteware, pearlware, or creamware vessels. Yet their presence on site speaks volumes about what the men found necessary for comfortable living. Whether they belonged to officers or enlisted men is difficult to determine; as of yet, no documentary evidence has been found that discusses the requisition or shipping of ceramics. Sutlers were common around and within the forts, and could have been the source of these items.
TABLE 4: List of Relevant Artifacts from Forts Dade and King.
Reproduced from GARI Reports

<table>
<thead>
<tr>
<th>Artifacts</th>
<th>Fort King Total</th>
<th>Fort King %</th>
<th>Fort Dade Total</th>
<th>Fort Dade %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregated Sand/Fort Earth/Limestone</td>
<td>1284</td>
<td>5.86</td>
<td>2504</td>
<td>21.07</td>
</tr>
<tr>
<td>Charcoal</td>
<td>3179</td>
<td>14.52</td>
<td>3543</td>
<td>29.81</td>
</tr>
<tr>
<td>Historic Ceramic</td>
<td>921</td>
<td>4.21</td>
<td>24</td>
<td>0.20</td>
</tr>
<tr>
<td>Historic Ceramic Pipe</td>
<td>335</td>
<td>1.53</td>
<td>44</td>
<td>0.37</td>
</tr>
<tr>
<td>Historic Glass</td>
<td>857</td>
<td>3.91</td>
<td>7</td>
<td>0.06</td>
</tr>
<tr>
<td>Historic Glass Bottle</td>
<td>2366</td>
<td>10.80</td>
<td>842</td>
<td>7.08</td>
</tr>
<tr>
<td>Historic Glass Container</td>
<td>45</td>
<td>0.21</td>
<td>22</td>
<td>0.19</td>
</tr>
<tr>
<td>Historic Glass Lamp</td>
<td>133</td>
<td>0.61</td>
<td>77</td>
<td>0.65</td>
</tr>
<tr>
<td>Historic Glass Window</td>
<td>317</td>
<td>1.45</td>
<td>17</td>
<td>0.14</td>
</tr>
<tr>
<td>Historic Lithic, Gunflint</td>
<td>22</td>
<td>0.10</td>
<td>10</td>
<td>0.08</td>
</tr>
<tr>
<td>Historic Metal</td>
<td>908</td>
<td>4.15</td>
<td>592</td>
<td>4.98</td>
</tr>
<tr>
<td>Historic Metal, Armaments</td>
<td>15</td>
<td>0.07</td>
<td>8</td>
<td>0.07</td>
</tr>
<tr>
<td>Historic Metal Container</td>
<td>38</td>
<td>0.17</td>
<td>124</td>
<td>1.04</td>
</tr>
<tr>
<td>Historic Metal Furniture</td>
<td>41</td>
<td>0.19</td>
<td>4</td>
<td>0.03</td>
</tr>
<tr>
<td>Historic Metal Livery</td>
<td>20</td>
<td>0.09</td>
<td>14</td>
<td>0.12</td>
</tr>
<tr>
<td>Historic Metal Personal</td>
<td>76</td>
<td>0.35</td>
<td>21</td>
<td>0.18</td>
</tr>
<tr>
<td>Historic Metal Shot</td>
<td>214</td>
<td>0.98</td>
<td>45</td>
<td>0.38</td>
</tr>
<tr>
<td>Historic Metal Tool</td>
<td>8</td>
<td>0.04</td>
<td>16</td>
<td>0.13</td>
</tr>
<tr>
<td>Historic Metal Nail</td>
<td>1</td>
<td>0.00</td>
<td>9</td>
<td>0.08</td>
</tr>
<tr>
<td>Prehistoric Ceramic</td>
<td>123</td>
<td>0.56</td>
<td>16</td>
<td>0.13</td>
</tr>
<tr>
<td>Prehistoric Lithic</td>
<td>1055</td>
<td>4.82</td>
<td>170</td>
<td>1.43</td>
</tr>
<tr>
<td>Other</td>
<td>9942</td>
<td>45.40</td>
<td>3777</td>
<td>31.78</td>
</tr>
<tr>
<td>TOTAL</td>
<td>21900</td>
<td></td>
<td>11886</td>
<td></td>
</tr>
</tbody>
</table>

The argument could be made that the archaeological record is biased in that only broken items were discarded, and the only items prone to breakage were the fragile ones. It is possible that more durable vessels such at tin, pewter, or wood may have been in use and not discarded. Despite this potential bias, for the purpose of this analysis the fact that such a large quantity of ceramics was found in the first place, speaks to the unusual nature of this assemblage. It seems impracticable to be transporting any breakable ceramics throughout the interior of such a wilderness as Florida.
Conclusion

Using modern military perspectives such as KOCOA to investigate the archaeological remains of conflict can provide interesting insights into the military mindset and behaviors. For example, in a frontier setting, where access to supplies was limited and difficult, it is interesting that more supplies were not salvaged before these forts were abandoned. For buildings that are built to be temporary and tend to be burnt down when no longer useful, why not strip them of window glass and other valuable construction materials prior to burning? This may speak more to the army’s mindset than anything. The belief that the war was, at all times, only a few months from ending seems to have been universal. Perhaps this abandonment of perfectly good supplies is due to the assumption that they would not be needed for future fortifications. Or perhaps more practically, the lack of available transport to move them to the next location precludes them from being salvaged.

Another interesting fact about the Florida frontier, as opposed to the western frontier, is that Florida was not as isolated. In the western regions, forts were often spaced very far apart, whereas Florida had a high density of forts, making them relatively close to each other in comparison. Yet this distance is confounded by the extremely difficult travel conditions (swamps and dense vegetation) not experienced in the west. This also means that there was a fluidity to the troop movement from one post to another. Perhaps this happened more in Florida than for those troops stationed at western fortifications, who may have resided more permanently at a single location. This may also explain why so many “unusual” artifact classes are found at these forts: Troops are bringing with them goods obtained either from home or during their travels. These luxury items may also speak to the stress troops or officers were under; they were bringing the comforts of home in an attempt to “civilize” the wilderness and make it more familiar. West
Point graduate William Warren Chapman remarks that on one of his marches, they were camped on the Little Hillsborough River and he “took an excellent cup of chocolate with Major Belton and Dr. Henderson” (Coker and Schafer 1990). Even South notes that frontier and fortified settings have a unique artifact signature that is different from more domestic settings (South 1978b).

Utilizing KOCOA to investigate the Second Seminole War has the ability to explain troop behaviors beyond what they did during conflict. KOCOA suggests that the military relied on the training received at the Military Academy to a large extent. I argue that because the texts cadets read focused on traditional European style warfare, large scale fortifications, and generally trained to operate in a more urban environment it, would not have occurred to the officers to modify their domestic behaviors to fit a frontier setting in which they needed to be highly mobile. It seems both in the archival and archaeological records, officers approached Florida as if it were any other state with towns and cities when, in reality, the frontier nature (by Western standards) was not conducive to the importation of fragile luxury items such as fine glass and ceramics.
CHAPTER 9:

CONCLUSIONS

We felt that the cause of Florida was a good cause, and that hers was no manly enemy waging equal battle, in the broad face of day, in “behalf of violated rights; but an ambushed foe, in mockery of the most solemn treaties, striking, like a cowardly assassin, from behind—stealing, like Tarquin, with feline stride to the couch of Lucretia. I should rather compare the Seminole to the ravenous beast of prey, prowling, at the dark hour of midnight, when no shepherd is out on the hill, and no whistle warns the devoted lambs that the wolf is on his walk (Smith 1836:106).

Obviously, written texts do not reflect past reality without gaps and on the contrary, without undue stresses (introduced both by omissions and by the character of origin and contextual biases of the documents in question), but their image of past societies is, in any case, undoubtedly to be referred to the testimony of archaeological sources (Vencl 1984:116).

Introduction

Where we find the remains of fortifications, physical barriers, and “lines of cleavage” in settlement patterns, we should not simply assume that they delimit hardened spaces of political domination, but attempt to clarify both the conditions under which these patterns emerged and the effects they had on the people who lived among them (VanValkenburg and Osborne 2013:15). One method that has been demonstrated here is to broaden the traditional use of KOCOA analysis for more appropriate application to a historical context as a tool for understanding the process of war rather than simply its outcome.

Using both modern military theory and traditional archaeological theory to study the Second Seminole War offers a much more comprehensive understanding of how it was
conducted. Previous research on this war has taken only a site-specific approach, and very little has been done to place these studies into a larger framework. As Gilchrist (2003:4) points out, many studies of war “prioritize the experience of the soldier or warrior in battle, neglecting the wider social and family networks and rendering the archaeology of warfare an exclusively male perspective.” While I have not considered here the gender issues of war, Gilchrist highlights the need to understand war in broader contexts. In the case of Florida forts, these “sites” did not exist in isolation; they were manifestations of a decision-making process that would have been influenced by the officers’ past experience and training. Yet formulating a comprehensive method to incorporate these diverse ideas can be difficult, and any acknowledgement of outside processes is a step in the right direction. This will open the door to the continuation of and advancement in refining these methods.

19th-Century Military Culture in a Globalized Context

During the mid-19th century, the United States military was still finding its role in society. The question of whether the country should have a standing army or rely on a citizen militia was still being debated (McDonald 2004). The Military Academy at West Point started to shape this debate. Thayer put his own mark on the military, however, when he instituted reforms at West Point that ultimately shaped the military into what we have today. Relying on military methods developed by other countries greatly impacted how the American military tradition evolved. In the case of Florida, this globalized influence significantly affected the outcome of the war through the use of tactics that were unsuitable for swampy terrain, and command of the troops changed continuously throughout these seven long years. Yet despite new leadership, the same strategies were employed time and again—strategies best suited to open, traditional, linear
warfare, not guerilla-style fighting. With the hundreds of officers that had been trained at West Point and thousands of troops (both militia and regulars) having served in Florida, it is improbable that the experiences in Florida would not have had an impact on the development of the military culture. The training these troops received would have left an indelible mark on how they operated, and this should be remembered when investigating historic military engagements of any kind. Understanding the educational process allows archaeologists to approach the mindset or worldview of military officers of that time, an approach that is sometime lacking in historical archaeology.

*Modern Military Science in Historic Contexts*

The use of modern military theory in conflict archaeology can have advantages, but can also have pitfalls. If applied incorrectly, it can oversimplify complex processes, which could mean gaining no new insight into a conflict other than expanding its boundaries of what is considered the core area of the battlefield to incorporate supporting features. While the use of modern military theory is a crucial first step, much more information can be gleaned by adjusting how these theories are applied.

The largest drawback of modern military theory is that it is premised on the fact that troops are in constant communication with a command structure, that communication is instant, and that the area of operation is highly mapped, with all troops having a thorough understanding of the terrain they are occupying. The latter is typically attained by formal or informal briefing sessions prior to entering a potential combat zone. This level of connectivity and real-time information was not possible during early historical engagements; therefore, assuming that some or all of the current methodologies are transferable can lead to false assumptions. As an example,
the demise of General George Armstrong Custer has been romanticized in books and movies by showing the valiant Seventh Cavalry fighting the Natives to the last man. In fact, Custer divided his forces into three, with no modern means of communication. His last known communication was a note he sent via a rider on horseback to Major Marcus Reno: “Benteen, Come on. Big village, be quick, bring packs. P.S. Bing pacs [sic]” (Scott 2013:25-27).

According to Native American oral history, some of the soldiers threw away their guns and ran. Many of them retreated to a dead-end ravine and were killed by Indians around the rim (Fox 1997, Scott et al. 1989); this has been confirmed by archeological evidence. The archaeology also shows that no line of defense was established on Last Stand Hill. Fox concludes that the command structure broke down, and the lack of tactical organization led to chaos and the eventual demise of the troops (Fox 1997).

Besides the lack of fast communications, the Florida wars were especially problematic because there were no accurate maps of the entire territory at the time of the Second Seminole War. Only a handful of key topographical feature locations were known, and errors in accuracy of mapping them were widespread. Not only were the troops operating blind, but the landscape was harsh and unfamiliar, which further hampered military progress.

This does not prevent the use of current military methodologies; rather, it simply requires that concepts be altered to fit the time period and situation to which they are being applied.

*The Military Mindset*

To most accurately employ modern military science in a historic context, one first needs to understand the environment in which the troops are operating. This can be done through a variety of sources: culling documentary evidence from letters that explain why orders are being
issued, locating maps and sketches to get a sense of how much collective landscape knowledge
the military, and incorporating archaeological evidence, since constructed features are physical
representations of thoughts and ideas. For example, the Fort King Road can be viewed as a
physical expression of the cognitive perceptions of what conflict entailed. The military built
roads because, in their mindset, roads are the proper way to move troops—and columns of troops
are how you properly carry out an attack on an enemy, despite the fact that the local landscape
made road building difficult and the enemy was too sparsely scattered across the landscape to
make the use of large numbers of troops in linear battle formations.

_Psychology of Living in the Wilderness_

Understanding the military mindset is crucial for the most productive use of modern
military theory, but grasping the psychology behind military decisions and actions also enhances
our understanding of these past events. Living in the remote wilderness, especially one as foreign
and unknown to the troops as Florida, would have severely strained the military’s operational
procedures. There are two basic options when dealing with an unknown environment. The first is
to adapt your situation to that of the environment. For example, the troops could have studied
how the Seminoles operated and adopted a similar methodology. The second is to make the
landscape conform to your expectations.

To a large degree, the military in Florida used this tactic: Vast amounts of time, effort,
and money were expended to create a built environment that was more comfortable for the
military. Leone argues that it is possible to reconstruct patterns of thought and ideology (Leone
1982), and the Second Seminole War is an ideal test case, since standardized education would
have influenced behaviors and reified certain ideologies. Forts were built; the comforts of home,
such as ceramic dishes and window glass, were imported; and roads were built for ease of transport—but, in reality, became easy points for ambush. In addition, large baggage trains often accompanied the men on missions into the wilderness, but, again, were a hindrance rather than a help.

Several themes emerge in the difficulties the military encountered due to their rigid adherence to training and tradition. As mentioned previously, their use of roads became a hindrance. Roads were labor-intensive to build, served as ideal ambush sites for the enemy, and limited troop movements to certain locations that the enemy could easily avoid. The use of large baggage trains also followed this pattern. The army never fully adapted to the climate, and with disease being as prevalent as it was—and with more soldiers dying from disease than from combat—very little was done to alter their behavior to remedy this. For instance, rather than move forts away from swamps, which were disease vectors, senior officers would withdraw the troops during the sickly summer season and then return in October and begin again. This essentially meant that the war started over again from the beginning, literally rebuilding forts that had been burnt down the previous season and searching for Seminoles all over again. In turn, this withdrawal of troops allowed the Seminoles time to rest and resupply, having learned generations ago how to deal with Florida summers.

Understanding fortifications and associated structures within the context of their landscapes can provide interesting insights into the cultural and psychological motivations of the inhabitants of these structures. Not only were forts constructed within the framework and rules created by the military culture that officers and engineers were part of, but they were also created to make the inhabitants feel safe. In this context, how the fort was constructed and what it was furnished with also reveals what was considered necessary for defense: Thick palisade walls,
two-story blockhouses, and perimeter defenses were built not only because the engineers were trained to build them, but because they were perceived as providing protection and security. Aside from these obvious parts of the fort, other, more subtle, comforts were brought in at what was probably great cost and which could easily have been done without. For example, window glass was not a necessity and must have been difficult to transport great distances to the frontier, where getting basic necessities, such as food and forage, was a constant struggle. Yet archaeology has discovered a significant amount of window glass at these forts. Ceramic dishes would also have been difficult to transport across such harsh terrain, but numerous patterns have been excavated at Fort King and Fort Dade. Perhaps this is suggestive of many men or officers having their own ceramic dishes.

Perceived safety is another interesting phenomenon that must be addressed when thinking about the psychology of living on the frontier. As previously mentioned, forts were built to specifications that would allow the troops to feel as safe as possible. The fact that these forts used two-story blockhouses and stout timber for palisades is testament to the uneasiness they felt in the wilderness; it would have been labor-intensive to build such massive structures when finding adequate lumber would have proven challenging. Also, a palisaded encampment might have been just as secure without a two-story blockhouse and cannon. Roads fit into this idea of perceived safety as well: The military preferred to travel on regular routes, despite knowing that the Seminoles often ambushed troops using them.

*Understanding Interactions*

Aside from the tactical and operational difficulties faced during the Second Seminole War, the intercultural interactions between the military and the Seminoles would have
profoundly shaped both the physical and ideological landscapes of the war. The kinds of interactions taking place would affect how the landscape was viewed, used, and modified. In the case of the Seminole Wars, there was both hostile and non-hostile contact between these groups, which changes how landscape use should be interpreted. For instance, fortifications play a unique dual role. Their primary purpose is military in nature, as an aggressive display of strength and ownership of the area through occupation. However, forts also served as sites for peaceful negotiations and rallying points for the Seminoles to gather prior to deportation. Trade and commerce between the Seminoles and the soldiers would also have taken place. In the analysis of war, it is easy to overlook the non-conflict functions these structures would have served, but which are equally important for deciphering the complex relationships between the groups.

Conclusions

The Second Seminole War serves as an ideal model for expanding how a small war can be investigated by using modern military theory in conjunction with historical accounts to form a more complete understanding of the complex nature of nontraditional warfare. I have attempted to show how multifaceted war is, and that one cannot simply apply modern military theories to past events without modification. The Seminole Wars were fraught with so many difficulties that it would be impossible to incorporate them all into a single model. Problems ranged from a Congress that declined to provide adequate money and supplies to a military complex that had never fully grasped irregular warfare. My findings demonstrate that using KOCOA as a predictive model provides a first step for more complex analyses of the war. KOCOA can be enhance by incorporating more abstract concepts, such as how the military training of the time affected the decision-making processes that led to the successes and failures of this lengthy
engagement. Using these concepts, we can generally conclude that the U.S. was unsuccessful in its military objective of eliminating or removing the Seminoles from the Florida territory because of the officer training at West Point; its rigid European concepts had the following faults:

1. Followed linear warfare and failed to adapt to the local terrain.
2. Failed to adapt to guerrilla-type warfare.
3. Forts were supply depots and not tactical; they were designed for defense, not offense.
4. Marches were encumbered by cannons and large baggage trains that hindered rapid movement in the swamps. To compensate for this, roads had to be built, thus creating points of ambush.

Despite not meeting this objective completely, there are plenty of small successes gained by the military while in Florida. Some of the Seminoles were in fact relocated out west. Officers did learn about diseases and moved some forts away from standing water, and then eventually learned to withdraw troops during the sickly season. So while some officers saw Florida as a failure and as damaging their reputation causing them to quit, often after barely a year in Florida, there is in fact a spectrum of success and failure rather than definitive examples of failure. All failures would have influenced the military in some way, it becomes a matter of teasing out what those effects were if it was not success, remains to be determined.

Through the use of GIS modeling, I created a more comprehensive model of the Second Seminole War that allowed for an interconnected analysis rather than one that was site-specific. Conflict has been studied in isolation, but in reality it is a symptom of interactions between people and places. Divorcing conflict from this network of causes and effects limits the depth of research questions that can be asked. The use of modern military theories to investigate the military’s past allows for that history to be read “with the grain” and archaeology provides a method to “read against the grain”. This multivocal approach to the past allows for unique questions about the role of education in the ability to adapt to an environment to be asked.
Future Directions

This study provided a preliminary view of how KOCOA could be broadened to investigate more complex research questions such as the role education plays. Future directions for this research model include investigating how the experiences in Florida may have shaped how officers responded in later conflicts. For example, several officers in Florida are sent to Texas straight from Florida to assist in stopping the Texas Revolution. Perhaps the officers took lessons learned in Florida to Texas. While it was difficult to show adaptation of military tactics in Florida, perhaps evidence for this adaptation is available in how the conflict in Texas was carried out. Another interesting area of research would be to incorporate more logistical data into the model presented here. Detailed post returns are available for each fort and were submitted every month. These returns list number of troops and rations available at each fort and how many men were on sick roll. A model could be created showing troop numbers and movement through time across the Florida landscape to determine if troops were placed as strategically as possible or if there was some other driving force behind troop movements. Monthly weather reports are also available for some of the forts and can be factored into this approach as well.
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Reeve, Mary-Elizabeth 

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Robbins, James S.

Rockman, Marcy and James Steele,

Rogers, Robert

Ross, Steven

Schene, Michael

Schortman, Edward M.

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Zirker, Daniel, et al.
## APPENDIX A: West Point graduates that fought in the Seminole Wars

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<tr>
<th>Name</th>
<th>Class #</th>
<th>War</th>
<th>Years Fighting the Seminoles</th>
<th>Class</th>
<th>End of Service</th>
<th>Status</th>
<th>Notes</th>
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238
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<td>After the failure of the Armistead campaign of 1840 against the Seminole Indians, Colonel Worth was assigned, with Wright as his selected Adjutant-General, to terminate this tedious and expensive war amid the pestilential swamps of Florida. The success of our arms was in no small degree due to Wright, whose efficiency won for him the esteem and confidence of the Army, and the brevet of Major from the Government for his &quot;zeal, energy, and perseverance.&quot;</td>
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<td>John D. Bacon</td>
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<td>1108</td>
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<td>John Newton</td>
<td>1112</td>
<td>2</td>
<td>1853-54</td>
<td>1842</td>
<td>1866</td>
<td>retired</td>
<td>taught for many years, supervising engineer of improvement of St. Johns River, of Haul-over canal, and repairs of St. Augustine Sea-wall; fortifications and light houses Pensacola harbor Fl, 55-58, examine Pensacola dock</td>
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<td>George W. Rains</td>
<td>1113</td>
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<td>1856</td>
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<td>Martin L. Smith</td>
<td>1126</td>
<td>3</td>
<td>1859-61</td>
<td>1842</td>
<td>1861</td>
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<td>John Pope</td>
<td>1127</td>
<td>2</td>
<td>1842-44</td>
<td>1842</td>
<td>1866</td>
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<td>Asst. Top. Engineer on the Survey of the Northeast Boundary Line between the United States and the British Provinces - is this FL?</td>
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<td>Abner Doubleday</td>
<td>1134</td>
<td>3</td>
<td>1856-58</td>
<td>1842</td>
<td>1873</td>
<td>retired</td>
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<td>George Sykes</td>
<td>1149</td>
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<td>1842, 42-43</td>
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<td>Earl Van Dorn</td>
<td>1162</td>
<td>3</td>
<td>1849-50</td>
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<td>Years Fighting Seminole</td>
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<td>Served in FL</td>
<td>End of Service</td>
<td>Status</td>
<td>Notes</td>
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<td>James W. Abert</td>
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<td>55</td>
<td>3</td>
<td>1856-57</td>
<td>1842</td>
<td>1864</td>
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<td>Top. Engineers (transferred 1843)</td>
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<td>Roswell S. Ripley</td>
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<td>1849-50</td>
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<td>1183</td>
<td>17</td>
<td>3</td>
<td>1849-50</td>
<td>1843</td>
<td>1861</td>
<td>dropped</td>
<td>for abandoning command, joined rebellion</td>
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<td>William K. Van Bokkelen</td>
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<td>other</td>
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<td>Henry R. Selden</td>
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<td>Fredrick T. Dent</td>
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<td>1853</td>
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<td>Josiah H. Carlisle</td>
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<td>3</td>
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<td>1863</td>
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<td>Francis Collins</td>
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<td>Francis T. Bryan</td>
<td>1277</td>
<td>6</td>
<td>n/a</td>
<td>1853-54</td>
<td>1846</td>
<td>1861</td>
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<td>Top. Engineer in charge of survey for Ship Canal across the Isthmus of Florida</td>
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<td>Edmund Hayes</td>
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<td>1849-50</td>
<td>1846</td>
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<td>Edward C. Boynton</td>
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<td>3</td>
<td>1855-56</td>
<td>1846</td>
<td>1856</td>
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<td>Taught French &amp; chemistry, mineralogy, and geology 1848-55</td>
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<td>Darius N. Couch</td>
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<td>16</td>
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<td>1848-49, 49-50, 56-57</td>
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<td>17</td>
<td>3</td>
<td>1851</td>
<td>1846</td>
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<td>1851-61 taught at Virginia Military Institute - aka Stonewall Jackson</td>
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<td>Albert L. Magilton</td>
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<td>1849-50, 56-57</td>
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<td>19</td>
<td>3</td>
<td>1856-58</td>
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<td>Cadmus M. Wilcox</td>
<td>1325</td>
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<td>3</td>
<td>1849-50</td>
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<td>1335</td>
<td>5</td>
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<td>Orlando B. Willcox</td>
<td>1338</td>
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<td>3</td>
<td>1856-57</td>
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<td>at Ft. Brooke</td>
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<td>John Gibbon</td>
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<td>William W. Burns</td>
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<td>End of Service</td>
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<td>1856</td>
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<td>compiling a map of the Peninsula of Florida, dismissed by the President for &quot;having tendered his resignation under circumstances showing him to be disloyal to the Government&quot;</td>
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<td>1871</td>
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<td>topographical duty in FL Dec 1854, skirmish near Ft. Drane severely wounded, taught at WP after</td>
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<td>John M. Schofield</td>
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<td>7</td>
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<td>Mathew M. Blunt</td>
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<td>artillery, employed in compiling a sketch of South Florida, Aug. 22 to Oct. 22, 1855; on various Staff duties in Florida, Oct. 23, 1855, to March. 15, 1856; Taught, wrote several books/reports</td>
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<td>George Bell</td>
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<td>1870</td>
<td>retired</td>
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</tr>
<tr>
<td>John W. Turner</td>
<td>1690</td>
<td>14</td>
<td>3</td>
<td>1857, 57-58</td>
<td>yes</td>
<td>1871</td>
<td>retired</td>
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<tr>
<td>Francis A. Shoup</td>
<td>1691</td>
<td>15</td>
<td>3</td>
<td>1855-6, 56-58</td>
<td>yes</td>
<td>1860</td>
<td>retired</td>
<td>joined the Rebellion</td>
<td></td>
</tr>
<tr>
<td>Alfred T. A. Torbert</td>
<td>1697</td>
<td>21</td>
<td>3</td>
<td>1856-57</td>
<td>1855</td>
<td>1866</td>
<td>retired</td>
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<tr>
<td>Robert C. Hill</td>
<td>1709</td>
<td>33</td>
<td>3</td>
<td>1856-57</td>
<td>1855</td>
<td>1861</td>
<td>retired</td>
<td>joined the Rebellion</td>
<td></td>
</tr>
<tr>
<td>Herbert A. Hascall</td>
<td>1718</td>
<td>8</td>
<td>3</td>
<td>1856-57</td>
<td>1856</td>
<td>1874</td>
<td>retired</td>
<td>taught</td>
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<tr>
<td>Hylan B. Lyon</td>
<td>1729</td>
<td>19</td>
<td>3</td>
<td>1856-57</td>
<td>1856</td>
<td>1861</td>
<td>retired</td>
<td>joined the Rebellion</td>
<td></td>
</tr>
<tr>
<td>Edmund C. Bainbridge</td>
<td>1730</td>
<td>20</td>
<td>3</td>
<td>1857</td>
<td>1856</td>
<td>yes</td>
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<tr>
<td>Richard Lodor</td>
<td>1732</td>
<td>22</td>
<td>3</td>
<td>1856-57</td>
<td>1856</td>
<td></td>
<td>served during rebellion of the seceding states</td>
<td></td>
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</tr>
<tr>
<td>Thomas E. Miller</td>
<td>1735</td>
<td>25</td>
<td>3</td>
<td>1857, 1861</td>
<td>1856</td>
<td>1862</td>
<td>retired</td>
<td></td>
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<tr>
<td>John F. Ritter</td>
<td>1742</td>
<td>32</td>
<td>3</td>
<td>1856-57</td>
<td>1856</td>
<td>1872</td>
<td>died</td>
<td>served during rebellion of the seceding states, died on leave of absence</td>
<td></td>
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</tbody>
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