RECLAIMING THE MOUNTAINS: A LEFEBVRIAN ANALYSIS OF NATIONAL PARK SPACE DURING A FEDERAL SHUTDOWN

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ABSTRACT

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National park space is intrinsically tied to the stability of the nations in which it is established. In December 2018, the federal government of the United States began a 35-day partial shutdown, destaffing national parks across the country in a de facto governance lapse. This study uses a political ecological analysis to examine how instability in the federal government allowed space to be reappropriated by different environmental agents in Great Smoky Mountains National Park during the 2018-2019 partial shutdown. Interviews with park staff, community members, adjacent governmental institutions and non-profits were conducted and revealed a novel set of relationships between human and non-human actors and how governance failures contributed to the production of new social and physical landscapes. As federal authority waned during the 35 days that the park was left open but unattended, volunteer stewardship of some areas of the park was undertaken by local communities and non-profits while wildlife freed from human oversight remade the landscape to meet its own needs. Moreover, a pervasive normative reality led the park to be reinterpreted in a manner inconsistent with its status as a federal monument and historical inequalities were reproduced in the communities surrounding the park. This study ultimately situates the shutdown in Great Smoky Mountains National Park within a wider historical context to examine how destabilizing governance failures at the highest levels

of the United States government intersect with the material history of the park, revealing novel social interactions and new reproductions of old disparities.

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CHAPTER ONE

INTRODUCTION

I. Uncertainty

The residents of Townsend, Tennessee greeted the news of the impending federal shutdown on December 22, 2018 with great concern. The partial closure of the federal government meant that the adjacent Great Smoky Mountains National Park would be closing down indefinitely and likely taking with it all of its associated tourist traffic. As the main economic driver in the region, the park's closure meant that the small community on the park's border could expect to see traffic in town come to a grinding halt and the revenue streams that fed local businesses and civic infrastructure alike begin to dry up. Especially concerning was the memory of the 2013 federal shutdown that had closed the park gates for 16 days at the peak of October leaf season, leading some Townsend businesses to close their doors and never open them again. Local government officials, desperate to reinvigorate their flailing communities, had been so distressed by the 2013 shutdown that they had begun planning to cut the locks on the park gates and staff the 500,000 acres of park space with local police. As the most recent news from Washington rolled in just three days before Christmas 2018, the community of 443 permanent residents braced itself for the uncertainty ahead.

Inside the park, a different scene was playing out. While some rangers remembered previous shutdowns and had even filed for unemployment during earlier closures, the scene in 2018 was one less of trepidation and more of preparation. While the park administration reconfigured itself into an incident command structure (ICS),

frustrated individual department heads reached out to local nonprofits to get timesensitive work covered for the foreseeable future. With a communication blackout
looming, some rangers exchanged personal cell phone numbers and contact
information since their work phones would be unavailable for use, and all over the park
voicemail messages were re-recorded to reflect the rangers' impending absence. While
some rangers were already on annual leave due to the upcoming holiday season,
others had contracts nearing their renewal period, and park interns in graduate school
wondered how they would financially navigate a disruption in their meager stipend. As
the park employees prepared to leave their posts, the park gates remained open as per
the Department of the Interior's orders, a new and untested mandate from above.

High on a ridge in the center of the park, a remote climate station stood stoically in the frost and blowing wind. It was recording air quality as part of a decades-long study of pollution in the region and although its maintenance and data collection period was coming up soon, it would not be serviced during the shutdown. Deeper in the park below the hoary peaks, wild pigs snuffled in the undergrowth for mast crops, searching for winter sustenance. The National Park Service's culling period of these hogs was upcoming, but like every other park program, it would not proceed as long as the federal government was closed. While the hogs roamed the lower elevation areas of the park in search of cover and food, bears slumbered in their seasonal torpor unaware of the changes in the world of human politics. Townspeople, rangers, pigs and bears alike would all be affected by the shutdown in their own ways, and some would even find new ways to remake park space. This thesis probes the question of how park space was

reclaimed during the thirty-five day shutdown that began on December 22, 2018, and what lessons can be learned from that closure.

II. The Longest Shutdown

On December 22, 2018 the federal government began a thirty-five day partial shutdown as the result of a budget impasse, placing 380,000 employees on temporary leave and requiring another 420,000 to work without pay (Frazee, et al. 2018). The shutdown resulted in the cessation of numerous government services, ultimately delaying a total of 18 billion dollars of discretionary spending and costing the government 3 billion dollars (Congressional Budget Office, 2019). When it ended on January 25, 2019 it became the longest shutdown in the country's history but far from the first- since 1976, the United States federal government has shut down twenty-one times (Frazee, et al., 2018: see Appendix 1). Each of these shutdowns has manifested differently across the range of federal agencies depending on which enjoy continuous funding and which are supported by alternative revenue streams. Drawing from numerous studies which seek to understand sudden, impactful transformation at various scales of governance, these shutdowns meet the definition of 'political instability'.

In the case of the 2018-2019 partial government shutdown, the impacts of lapsed governance were felt particularly acutely in the National Park Service as 80% of staff (16,000 employees) were furloughed but the gates to the national parks were left open. This left a vastly reduced labor force to manage 84.4 million acres of protected areas within the park system (Douce, et al. 2019), although each of over four hundred

National Park Service units experienced the shutdown on its own terms. Great Smoky Mountains National Park (GSMNP), one of the largest parks in the Eastern United States, and the most highly visited park in the entire system, experienced this shutdown within its own constellation of unique ecological, historical and cultural contexts and is the focus of this study.

In one sense, the 35 days that the park was closed represent a de facto governance lapse on federal lands, and in another, an opportunity for new social interactions and new spaces to emerge in the abandoned park. This study examines what spaces were transformed and what new ones were created during the shutdown in Great Smoky Mountains National Park using a Lefevbrian conception of the social production of space (Lefebvre, 1991). Lefebvre speaks of entities such as national parks as spatial 'monuments' where federal power is reproduced and history is erased as the raw material of nature is transformed by social actors. This interpretation of space underpins both the ontology and the methodology of this work, and informs how the park is understood to exist and how it may be interrogated in the context of a federal closure. A political ecological framework is also employed to understand the social and historical context of the shutdown in order to identify the role of power and to examine the role played by the wilderness imaginary present in GSMNP. By uniting a spatial understanding of federal lands and a contextualized history of the national park within its rural landscape, the effects of a lapse of federal authority at GSMNP can be given meaning and understood relative to its surroundings.

III. Historical Context of Great Smoky Mountains National Park

The 500,000 acres that make up Great Smoky Mountains National Park is situated within the Southern Blue Ridge Ecoregion where a unique combination of geologic and ecological characteristics has produced an exceptionally diverse biophysical and anthropological landscape. As Wolf (1972) notes, the ecological context of a human community widely determines its political economy, and in turn its social relations. In the case of GSMNP, this ecological context begins with the Southern Appalachian Mountains, which are an ancient mountain range in the Southeastern United States where unique geologic characteristics and highly-weathered, acidic soils contribute to exceptional biodiversity (Pitillo et al. 1998). As these mountains were never glaciated during the Pleistocene, many pre-Pleistocene taxa were able to persist in the region to this day. Furthermore, cool high-elevation sites allow for flora species commonly associated with more northern climates to flourish; consequently, the region contains a vast number of different ecosystems. The US National Vegetation Classification counts 136 different communities based on vegetation types (Lee et al. 2016) with some of the most prevalent being the spruce/fir and beech gap forests of the highest elevations, and the cove hardwood forests of lower elevations.

Great Smoky Mountains National Park is the most biodiverse park in the U.S. National Park System with over 19,000 observed species of plants, animals and fungi living in the park, and an additional suspected 80-100,00 species yet to be documented (NPSc, 2020). Sixty-eight species of mammals reside in the park, which serves as a source population for black bears, squirrels and raccoons, and white-tailed deer. Two species reintroductions have successfully taken place (elk and river otter) while a third

species reintroduction (red wolf) was unsuccessful (Linzey, 2016). A notable nonnative species is the European boar, which escaped into the park from a local hunting preserve in 1912 and has been the target of over a century of culling efforts (Peine, 1990). Additionally, 74 species of fish are endemic to the park, ranging from brook trout to gar, with an additional 5 nonnative species present. The park is also known colloquially as the 'Salamander Capital of the World', with 30 species of endemic salamanders, including the massive 'Hellbender' species which can grow to 29 inches in length (NPSd, 2019).

Human beings have also long been an integral part of the landscape in the Southern Blue Ridge Mountains. Three thousand years ago human-initiated fires resulted in the dominance of the oak-chestnut forest type across the region (Delcourt and Delcourt 1998) and resulting vegetation changes at fine to medium scales contributed to overall biodiversity of the landscape. Prior to the Indian Removal Act of 1830, the area was home to numerous indigenous tribes who made their homes, hunted and cultivated the land (Dunn, 1988). The arrival of European settlers in the region postremoval marked a transitional period in the social-ecological systems of the Southern Blue Ridge Mountain Ecoregion as land use patterns shifted from those of the indigenous Cherokee people to a system of private land ownership, large-scale forest clearing, and centralized government control (Young 2006). Human use of fire also ended, with fire suppression becoming the dominant paradigm (Le et al. 2016) as indigenous practices were effectively erased from the landscape. From the future park lands' subsequent occupation by European settlers in the 18th Century until the park's opening in 1934, the 500,000 acres that would become Great Smoky Mountains

National Park generally followed regional trends with respect to technological advancement and land use changes. Drainage systems transformed lowlands into arable cropland, timber was harvested for export, and an economy built on natural resource extraction and smallholder farming sustained the communities of the region (Dunn, 1988).

The most recent significant change in the landscape was marked by the displacement of the human residents when Great Smoky Mountains National Park was established. Activists interested in seeing a Western-style national park in the East lobbied the states of North Carolina and Tennessee to purchase land in the Southern Appalachians and donate it to the federal government. Reasons for the establishment of a park in this region ranged from the purely financial to the healthfully restorative, and in 1924 the Southern Appalachian Park Committee determined that the Smoky Mountains were the best site for this new Eastern park. One year later in 1925 land purchases began, as over one thousand families' properties were bought out in order to evacuate the newly formed park space (Young, 2006). Some residents acquiesced easily to the buyout and moved from the region, but others felt bound to the place and refused to sell their homes and land. The displacement of former park residents was completed from 1929 to 1935 as the state of Tennessee invoked eminent domain and forced the final residents of the new park to relocate (Young, 2006), leaving behind mills, schools, post offices, smitheries, homes and cultivated farmland (Williams, 2001). All told, over five thousand individuals were displaced through the park's establishment (Van Dyke, 2009) making it the single largest displacement in service of a national park in United States history (Williams, 2001). Some former residents stayed in the park as tourist attractions

per agreement with the National Park Service, but 1934 largely marked the end of human residence in the GSMNP landscape (Dunn, 1988).

The original intention of the Park Service was to allow the new park to revert to 'wilderness', as it began removing structures even before displacement was complete and allowing fields to regrow to forest, but in 1935 a change in plan took place, altering the environment even further. Building from an upswell of visitor disapproval, park ranger interest, and the 1935 Historic Sites Act, park administrators made the decision to selectively edit the landscape and document the lives of the park's former residents (Young, 2006). This final turn resulted in the imaginary of the park that exists today as a 'frontier wilderness' with restored cabins dotting the landscape and selected agricultural fields preserved as mown pasture (Van Dyke, 2009). Williams (2001) identifies this as an act of 'cultural taxidermy' where the culture of the Smokies was killed in order to be preserved, and then transformed to reflect the story of a quaint and isolated people.

IV. Modernity

In modern times, the Southern Blue Ridge Mountain Ecoregion in which the park sits maintains diversity both ecologically and geopolitically. Current land ownership patterns include public and private ownership with just under 35% of the 9.4 million acre region under public ownership (TNC 2000). The area is host to two National Parks, seven National Forests and one tribal government. The overall population of human beings in the region is approximately 1.3 million (Brenner 2001), meaning that Great Smoky Mountains National Park exists within a patchwork of publicly and privately

owned land with overlapping jurisdictions and unique relationships between these social interactors. A 2001 stakeholder analysis by Brenner (2001) identifies a complex matrix of actors that support and interact with the park that includes the institutions mentioned above as well as a number of highly involved non-profit organizations such as the Friends of the Smokies, The Great Smoky Mountain Association and Discover Life in America. These nonprofit non-governmental organizations (NGO's) represent a diversity of interests from fundraising for the park to directly aiding scientific programs, and form a constellation of supportive entities in a phenomenon widely known as 'network governance'. Network governance generally refers to a shift in resource management and delegation federal governance structures in the United States wherein federal entities contract out responsibilities and mandates in an effort to achieve greater efficiency and capabilities (Sørensen, 2002).

These relationships can be understood as either formal or informal (Folke et al. 2005) and may take different forms during periods of uncertainty or crisis (Chaffin and Gunderson 2016). Some attention in the network governance literature is given to the phenomenon of informal networks emerging in response to system shocks or crises by York et al. (2010) who demonstrates that new, complex arrangements between actors may emerge when faced with exceptionally challenging problems. Specifically, when a shock is applied or a crisis is experienced by the system, alternative structures may arise that assume new precedence in how the system functions (Gunderson and Holling 2002). This phenomenon is widely referred to as 'emergence' and may represent the previously mentioned formal or informal networks becoming new system drivers (Folke et al. 2005). Additionally, Chaffin and Gunderson (2016) posit that informal networks,

such as those seen in the network governance of national parks, are able to emerge during times of crisis when more formal institutions' controls may be compromised and that there is a temporal quality to the relative formality of a system's response to shock. Consequently, governance patterns of a system such as GSMNP and its surrounding landscape cannot be viewed merely as the result of rigid, formal laws and institutions, but as complex systems involving networks of formal and informal entities, responding to exogenous and endogenous stimuli. In this light, acknowledging the informal and local institutions present in the Great Smoky Mountains National Park is extremely important to understanding how space transforms when placed under stress such as federal shutdowns.

V. Research Statement and Questions

This research will primarily examine what actors reappropriate national park space during federal government shutdowns and the consequences of their spatial reproduction. By reinterpreting national park space as a politicized landscape playing host to human, non-human, and marginalized actors, new chains of explanation and hidden themes may emerge. If the nature of shutdowns can thus be more fully comprehended, then the popular crisis narrative that has consumed discussions of national parks during shutdowns can be challenged or confirmed, leading to a better objective understanding of how and if park space is transformed. Building from the political ecology thesis that protected areas are already the sites of uneven power and coercion, it is the secondary goal of this study to identify injustice manifested by

government shutdowns in Great Smoky Mountains National Park and to propose entry points for corrective actions. The following research questions have guided this work and will be answered over the course of this thesis:

- 1. How is social space transformed and reproduced within U.S. National Parks during government shutdowns?
- 2. What are the enduring consequences of these reproductions of space?
 - VI. Theoretical Approach: Political Ecology

This thesis will employ a political ecology framework in order to investigate the cross-sectional effects of the 2018 government shutdown in Great Smoky Mountains National Park. Political ecology is a community of practice that examines politicized understandings of landscapes, ecology, and social interactions to better understand diverse phenomena. Given the focus of this project on the production of space within the politicized park landscape, engaging with this framework is especially relevant in that it offers the opportunity to critique dominant cultural narratives that have arisen regarding shutdowns and to understand which actors benefit from shutdowns and which may be disproportionately harmed. The broad definition of political economy employed by political ecology gives an opportunity for commonly apolitical landscapes to be understood as existing within larger trends and to be composed of far more complexity than other analytical tools. Scholars have employed political ecology to write widely on

the relationship of protected areas to their adjacent and displaced communities, representing an essential body of literature for understanding how landscape 'imaginaries' are constructed and the effect this has on local populations. Incorporating this framework ultimately allows power imbalances between social relationships to be discovered, and 'winners' and 'losers' in a given geography identified.

One other unique attribute of this theoretical framework is that it makes room for highly diverse actors to be included in the understanding of a geographic space's material history, nonhumans included. While landscapes are held to be highly political as they represent contested spaces, beings that exert charisma and can act independently are contained within this landscape and are seen to also have the ability to reappropriate space (Notzke, 2013). Expanding the material reality of a landscape to include animals, rocks, trees, and waterfalls is not an exercise in anthropomorphism so much as it is an attempt to understand the full breadth of actors that may appropriate and remake space. Political ecology makes room for this understanding, but does not seek to attribute motive to ecological/nonhuman actors.

While political ecology can be employed to examine any number of questions in a given context, this study will utilize the framework to address three distinct nodes of understanding: the social construction of Great Smoky Mountains National Park, the political economy of the park and its environs, and the role of nonhuman actors in the park. Each of these has a strong precedent in the theoretical literature and will be described more fully in Chapter 2 of this thesis.

VII. Organization of this Thesis

This thesis has been organized into six chapters to describe the theoretical foundations of the research question being asked and to ultimately provide insight into the results of the collected interviews. Following this introduction and description of the theoretical framework being employed, a literature review describes the theoretical foundations and the social construction of Great Smoky Mountains National Park. This literature review elaborates upon how parks may be understood as socially produced spaces as well as the body of research concerning national parks and rural development. An additional focus of this literature review is to investigate the phenomenon of political instability, and how shutdowns may be understood in the context of wider shifts in American politics. Chapter 3 sets out the methodology employed to examine the research question, and Chapter 4 details the results of the interviews at the heart of this study. The penultimate section of this work, Chapter 5, contains a discussion of the accumulated dialogical data utilizing the political ecology framework in order to best understand hidden themes and chains of explanation. A final chapter comprises the conclusion of this study which contains both a summation of the findings as well as a list of recommendations for NPS staff, nonprofits, park-adjacent communities, and future scholarship.

CHAPTER TWO

LITERATURE REVIEW

This chapter expands upon the theoretical foundations of this study discussed in the Introduction and initially describes how parks may be conceived of as socially produced monuments which are the product of multiple social interactions. These landscapes are then shown to be infused with differential power relations through an explication of the political ecological framework that is employed by this thesis in order to understand the roles of the actors who produce national park space. Following this description of parks as socially produced spaces with differential power relations, an outline of the known literature regarding protected area establishment and its effects on rural communities follows. Lastly, a discussion of government shutdowns as a form of 'crisis', and the impacts of political instability on conservation outcomes brings this thesis up to its current moment of inquiry: the 2018-2019 partial federal shutdown in Great Smoky Mountains National Park.

I. Protected Areas as Socially Produced

U.S. national parks are social productions of space which are unique in their conception and subsequent reproduction. Numerous geographers have approached the discussion of space along these terms (Soja, 2013; Massey, 2005; Dovey, 2014) with Henri Lefebvre (1991)'s seminal work *The Production of Space* serving as a starting point for understanding how ongoing social interactions give rise to the shared space

that humanity inhabits. Lefebvre (1991) describes the social production of space as a process beginning with the conceptualization of all space inherently derived from the 'raw material' of nature, which is both material and unreflective. While natural spaces may not include humans and their institutions it should still not be understood as an empty void- natural actors (wildlife, insects, plants) inhabit this space but lack the selfawareness and innate capacity to produce their own sort of space consciously. When human actors and entities begin to interact with each other in this spatial arena they begin to produce Lefebvre's definition of social space- a collection of interactions, interpretations of interactions and layered self-reflections that constitute a network of spatial realities. These social interactions co-create a shared reality between actors which is ultimately spatial in that it is bound by physical space and is enacted within specific locales. The material world and its natural laws constrain these social interactions, but specific spaces are molded and reproduced over and over again as social actors come and go and trade the institutional power to control space. In this way, a landscape bears the marks of social spaces made in the past while it is simultaneously transformed by social actors in the present- the social is always intrinsically spatial.

Lefebvre characterizes space as occurring in three manifestations: the *perceived,* the *conceived,* and the *lived* which refer respectively to the spatial environment that can be apprehended visually, the abstraction of space (such as in the case of maps), and the physical medium through which the human form moves over the course of its life (Gottdiener, 1993). Lefebvre builds upon these three manifestations to create a unitary theory wherein these three spatial experiences are represented by three types of space

which, rather than being reductionist, are fluid and inform each other through their interactions. The first of these three types of space is spatial practice, the external, material world. Lefebvre calls the second of these representations of space, which refers to the conceptual models such as physical and mental maps which are used as proxies for the material world. The last type of space is the space of representation (with an emphasis on the 'of'), which is best conceived of as the arena of lived social relations between individual actors. Through these three types of space, the physical, the mental, and the social are united in their ebbs and flows and in that they each inevitably influence each other (Gottdiener, 1993). Understood in this manner, spatial phenomena are the product of actors both near and far, differing in levels of power, and most importantly, either immediately present or in absentia. These spatial moments collectively form a triad that allows for a conception of living space as socially produced and created by different actors in unique ways to be studied. This analysis will engage with national park space using this conception of space as socially produced to understand what happens when one set of actors (the federal government in this case) removes their authority, essentially causing a shift in all the spaces that it previously touched.

A useful way to understand this transient production of space is to consider a natural landscape. While it is formed through natural objects, it is a reflection of the actors who have inhabited and controlled it over time. Natural objects (trees, stones, animals, etc.) are rearranged or placed according to the whims of actors who move and behave according to numerous motivations. Over time, the physical space becomes a 'mirage', a constituent amalgamation of multiple spatial impositions accumulated over

time which is regarded by new actors over and over again. This space is 'social' in that it is produced by social actors who hold the capacity to further interact within it as well as those who perceive and ascribe meaning to it, thus reproducing space through their continued actions. Lefebvre calls this type of social space a reproduction because it can be copied and manufactured in different physical arenas over and over again. This is the manner in which familiar spaces such as the nation-state, the household, religious spaces and national parks can be seen as both reflections of layered historical imaginations and current extensions of existing institutions. An important note between these diverse spaces is that they operate on vastly different 'scales', each inhabiting their own spatio-temporality that should not be taken as an epistemological given (Macleod and Goodwin, 1999), but rather as a unique social production situated within its historically material reality (Harvey 1990). Upon appreciating the material conditions under which space is reproduced, Harvey (1990) notes that this conception of space is necessarily political in that it invites a certain conception of the relationship between space and time. Since space is not exclusively 'that which can be mapped', but represents the arena where social actions happen over time, the critical question must be asked of 'who we are' and 'what we might be struggling for'. Furthermore, as social space is contested, new transformations in social relationships take place and spatial barriers can be eliminated, leading to changes in the material world as new world systems and state effects assume dominance. These questions are inevitably located within a historical and material context which informs which actions are taken when, or rather, the imposition of politics onto the social production of space. An example of how the material conditions of a geographic area produce certain relations which are in turn

reproduced as unique spaces is described by Wolf (1972) in his descriptions of the natural conditions underlying Swiss farm ownership that led to geopolitical conflict.

Politics can take multiple forms in this social reproduction, from the explicit such as in Lefebvre's discussion of spatial representations to the implicit, such as described by Macleod and Goodwin (1999). These authors state that as governments become more involved in dispersing power through public-private partnerships and novel regimes, 'governance' assumes an outsize role in the creation of political space, behind which the 'shadow of government' resides. This is an important point to make with regard to national park space, as national parks are federal institutions that are necessarily political. The institutionally produced nature of national parks makes them a specific kind of space, according to Lefebvre's definition. Established through labor, displacement and the imposition of state power on a landscape, these types of spaces are called 'monuments' in that they serve to create a kind of space that invites the inhabitant or visitor to perceive themselves as part of a whole, in an area that is separated from historical context and the nature of its creation (Lefebvre, 1991). Additionally, these monuments are state-based in nature, deriving their power and effect from a dominant authority, and in doing so reproduce a sort of hegemony. Hegemonies can represent numerous types of powerful ideas that become implicit in social interactions, but in the case of national parks most often refers to a 'regime of publicity', wherein the park is fundamentally open and accessible, but rife with unspoken rules about acceptable behavior (Sevilla-Buitrago, 2017).

This definition of monumentality has been present in the justification of national park creation since the establishment of Yellowstone National Park in 1872, even

though the motivations for producing this type of natural-social landscape are often obscured (Germic, 2001). The impetus for national park creation can range from the capitalistic to the nearly religious, and in each case the monumentality of the park institution transcends national boundaries as these landscapes are reproduced worldwide. Runte (1997) provides excellent context for the establishment of national parks in America, describing how while the initial conception of national parks was one of 'wise use' and conservation, it was a capitalistic desire of railway owners to expand further Westward which led to their ultimate creation. In this, the monumentality and sublime natural beauty of national parks-to-be was employed to justify the cost of laying rail to remote corners of the United States. A more local example to this study can be found in one of the motivations for the establishment of Great Smoky Mountains National Park, wherein prominent members of local automobile clubs were instrumental in 'selling' the park to the governments of North Carolina, Tennessee, and the United States in their efforts to reproduce the sprawling national parks of the West, and drive automobile sales (Brown, 1992). This phenomenon reveals not only that the impetus to create the park was rooted in a desire to allow for more opportunities for automobile enthusiasts of the time, but that the erasure of the space's history was essential in order for the park to be created, one of the attributes of monumentality described by Lefebvre.

This reproduction of space can allow narratives of native environmental degradation to be perpetuated (Walker, 2015), institutional power to be strengthened (Luo, 2016), imagined ideals of natural spaces to be created (Neumann, 2003), and national identities to be manufactured (Germic, 2001). National parks are thus made possible through the power and influence of the state, entities that are as socially

manufactured as the parks themselves. Soja (2013)'s discussion of social space as oftentimes antagonistic is useful in this instance, should the social production of space be wrongly conceived of as a purely collaborative venture. Furthermore, the idea of contested space is especially useful when interrogating the role of non-human actors in national parks, as the social production of space theory put forward by Lefebvre grants relatively little discussion into how non-perceiving actors that nonetheless co-inhabit the material world may be seen as consequential actors. An addendum to the aforementioned social production of space is then furnished through political ecological thought, that demonstrates that non-humans do in fact serve as spatial actors (Sudibyo, 2019; Rikoon, 2006) in their own "beastly universe" (Notzke, 2013), although an understanding of their conception of space may be elusive, or even impossible. Just as we have noted that conflicts in parks represent the intersection of different spatial realities, nation-states can contain this conflict on a larger scale, causing spatial shifts in the landscapes they control. Understanding national parks as institutionally-created monuments which rest upon previous spatial realities marks the point of departure for this research.

II. Political Ecology and National Parks

Political ecology is a community of theoretical practice that utilizes a widely-defined political economy to analyze social relationships and landscape change, giving an opportunity for the relationships between different actors in a politicized landscape to be understood. With questions of power, influence, marginalization and degradation all at play in the 2018-2019 government shutdown, this theoretical framework is uniquely

suited for addressing and interpreting the question of how park space in GSMNP was transformed in the 35 days that the park was left open but unattended. As a theoretical framework, it employs discursive understandings of power, landscape change, conservation and wilderness to arrive at conclusions that reveal power imbalances and marginalization. Most importantly, rather than starting from an essentialist viewpoint that appreciates phenomena as objectively real, political ecology focuses on how nature and culture are both produced reciprocally, and views landscapes as social reproductions that are created by multitudes of actors (Robbins, 2011). This represents a metatheoretical view of reality as fundamentally 'anti-essentialist', in which the concern is with how different regimes (collections of individuals) coalesce to produce a shared, articulated reality (Escobar, 1999). This constructivist appreciation of interrelated apprehensions of nature and society fits neatly with the social production of space that also holds that reality is jointly produced by different interactors. Put another way, political ecology explores how social inequality is experienced by different demographic groups and how these marginalizations intersect with nature-human relations (Biersack, 2006). Drawing from a foundation of historical materialism, critical environmental research and cultural ecological techniques, it is well situated to examine how high-level government actions drive landscape change, such as in the case of government shutdowns in national parks.

Blaikie et al. (1987) refer to political ecology as 'widely defined political economy', specifically acknowledging the importance of encompassing numerous geographical scales and social hierarchies in the comprehension of a given phenomenon. By defining a 'regional political ecology' approach that makes allowances for regional factors,

environmental contradictions and changes over time, Blaikie et al. offer a theoretical approach sufficiently complex to capture the many boundary organizations and diverse actors that interact with the park as an institution. The social-management context within which the park unit operates is highly hierarchical and dependent upon upper-level political actions and is well suited to this approach that sees specific management regimes as existing within local landscapes but nonetheless at the behest of larger social-political systems. This analytical vantage point is especially salient in the context of national parks, which over time have come to increasingly rely on non-governmental entities in the form of public-private partnerships to complete many of their mandates, a phenomenon sometimes known as "network governance" (Goldsmith and Eggers, 2005). Political ecology expands upon the political economic understanding of network governance to include regional and global trends, the disparate power between network actors, and the historical materialism that underpins modern relations (Robbins, 2011).

A political-ecological approach also allows the role of power in the landscape to be considered with respect to social constructions. In regards to protected areas such as national parks, this means looking at how dominant powers' establishments of such areas affects local populations both immediately and over time. Svarstad, et al. (2018) note that this historical interest in territorial struggle and conflict has employed multiple theories of 'power' over time, but that a singular strength of political ecology is that it allows multiple perspectives of power to be utilized. Since the 1970's political ecological case studies of the 'People and Parks' problem have examined the deployment of state power by examining local groups' displacement (Adams and Hutton, 2007) and the reformation of local identity (Sundberg, 2004) in response to the establishment of

protected areas. Viewing political economy widely enough allows theories of power and a 'state effect' to enter the natural and social landscape and the effects of this imbalance to be studied. Building from the observation that power can lead to landscapes being manipulated, Robbins (2011) notes how all landscapes represent social constructions where a uniquely unilateral ideal has been made in the real-this is sometimes referred to as a "wilderness imaginary". Wilderness imaginaries are best conceived of as the 'fantasy' of a landscape, whether as a sacred grove, an inspiring vista, or a hostile frontier (Robbins, 2011). These imaginaries come laden with ample political baggage, and exert a force of their own in creating social relations-political ecology often argues that the vantage point of these conceptions is highly nonobjective, and as Adams and Hutton (2007) state, 'conservation has to be understood in the historical context of the wider political structure'. International examples abound of how wilderness imaginaries constructed by colonial powers have served to displace and disenfranchise local populations, but this study will confine itself to political ecological analyses of American national parks. Many of the 'crown jewel parks' in the American National Park System have wilderness imaginaries that are emblematic of 'Edenic' untouched wilderness, and in this, Great Smoky Mountains National Park (GSMNP) is highly unique from many other protected areas in the country. This park has largely been imagined as a primeval 'frontier' of a forgotten common past since its inception (Van Dyke, 2009) and has been selectively edited through building removals and displacements to reflect this imaginary (Young, 2006). Utilizing political ecology allows this imaginary to be observed and dissected, as the constituent viewpoints that manifest this social reality can be identified. Put another way, the ontological constellation of

individuals who hold and reproduce this fantasy of a landscape is essential to the method of analysis employed in this study.

Boyd et al. (2001) observed that the unique qualities of natural systems produce surprises and externalities unanticipated by the institutions that seek to manage them. By scrutinizing the interplay of biophysical processes and park managers through a political ecology framework, this study aims to build on the existing understanding of how national parks in the United States function during periods of failing governance with regards to flora, fauna, and geophysical realities. By treating national parks as social ecosystems where humans, nonhuman actors and biophysical factors (such as snow and rivers) interact through dynamic processes, linkages can be discovered and changes at multiple scales can be explained (Blaikie and Brookfield, 1987). This theoretical approach's usefulness in understanding how political and social machinations impact environmental management has been well demonstrated in numerous studies (Adams, et al. 2007; Neumann, 1992; Kay, 1997; Masse, 2016; Rikoon, 2006), but the true strength and novelty of utilizing this framework lies in its broad understanding of ecology. As Collins (2011) notes, the conceptual scope of ecology must necessarily expand to include humans, and the political ecology framework is uniquely well positioned to examine the relationship of social context to environmental science in the National Parks. Widening the scope of inquiry to include nonhuman actors in the question of how park space is reappropriated (and thus reproduced), allows this study to make full use of the framework's strengths.

Duval (2011) demonstrated how human patterns of settlement could invite unique responses from nonhuman entities, and this paper builds upon that

understanding to include wildlife and nonliving entities as actors that may reappropriate space in the absence of human governance. This approach addresses the valid critique that previous political ecological research has prioritized political drivers above existing ecological change and has not sufficiently incorporated natural and non-human actions irrespective of humans into its analyses (Vayda, 1999). Concepts drawn from studies of nonhuman actors in human-dominated landscapes such as 'charisma' and the 'beastly universe' (Notzke, 2013) will be employed in the discussion to capture how the actions of these entities interface with human management without committing to anthropomorphization. These conceptions rely heavily on a concept of 'relationality', wherein nonhumans objectively remake space to suit their own needs, but this inevitably takes place in a context wherein it produces a response from human actors. Rather than seeing natural elements as passive before human actions, political ecology presents an opening for ecological processes to be understood as evolving in response to anthropogenic activity and constituting unique feedbacks.

III. National Parks and Rural Communities

One notable strength of this understanding of social space is that it allows us to investigate current spatial productions through the study of its social actors. Political ecological studies that have applied this methodology to protected areas offer unique views into the history and nature of conservation that go beyond the physical and immediately observable. These studies directly address the relationships of the social to the natural within the context of the protected area establishment and are popularly

known as 'People and Parks' studies. In their seminal paper 'People, Parks and Poverty', Adams and Hutton (2007) explicate this thesis through a political ecological framework, identifying the protected areas as socially constructed spaces and as necessarily relying on power and exclusion to hold one interpretation of the landscape above another. In many cases, this is the result of Western ideas of 'Nature' as apart from 'Culture' and a division between the two both existing and being necessary to maintain. The subsequent exclusion of actors incommensurate with this viewpoint has social impacts in its displacement and economic disenfranchisement of former residents, a fact that has been acknowledged, but nonetheless persists (Adams and Hutton, 2007).

Roth (2008) confronts the classic 'park-people' conflict as a form of spatial reorganization rather than as a destruction of one space in the service of another. This approach that sees the social production of space as evolving and shifting rather than as starkly creating or destroying allows for moments of complementarity and convergence between social actors to be observed. Other political ecological works that have studied the park-people conflict have noted that the challenges inherent in the establishment of protected areas take place against a broader backdrop of the industrial takeover of natural spaces and neoliberal ideology which seeks to commodify ecology (Brockington and Igoe, 2007). This material basis ultimately sets up protected areas as destabilizing and impoverishing forces as evidenced by numerous case studies (Cernea and Schmidt-Soltau, 2008) wherein during conflict between biodiversity preservation and poverty reduction, the displacement of the poor is an option too-often chosen by central governments. Instances of these occurrences are replete in American national

parks' history, including during the establishment of Yosemite National Park, Yellowstone National Park (Germic, 2001), Shenandoah National Park, Mammoth Cave National Park and Great Smoky Mountains National Park (Williams, 2001). Of these examples, Great Smoky Mountains National Park represents the single largest park removal in the United States, with over 5,500 individuals displaced (Van Dyke, 2009). Furthermore, a literature review of eviction and displacements in order to make way for protected areas found that evictions are often part of a pattern of economic and social marginalization, regardless of whether they are found in Africa, Europe, or North America (Brockington and Igoe, 2006). Although conservation proponents are becoming increasingly likely to recognize these historical abuses, economic displacement and continued exclusion continue to be significant issues for evicted populations (Cernea and Schmidt-Soltau, 2008). West, et al. (2006) present an addendum to this body of research, noting that the characterization of displacement is elusive and can be enacted in numerous ways, from a mandated change in use patterns by local populations all the way to full exclusion. Moreover, while certain instances of displacement are highly documented, many studies that employ this concept rely on anecdotal evidence and as such are more ambiguous. Understanding that different conceptions of power may be at play, then, is an advantage afforded to this study by the political ecological framework.

Patterns of marginalization can occur in numerous ways, from the outright eviction of a community to the reformation of closely-held identities. Sundberg (2004) describes how newly established protected areas necessarily lead to the reformation of former residents' identities, as they seek to reestablish their relationship to the protected area and capitalize on their now-exclusionary status. More specifically, the relationship

and role of men and women in this instance were disrupted by the protected area's establishment, leading to new forms of activism and alliances to take shape. Similar social changes due to PA establishment are noted by Vivanco (2001), where new tourist markets gave rise to increasing economic power for women's groups, and by Brockington (2001) who showed how traditional dowry valuations changed due to falling cattle revenues after displacement to establish PAs. An example of this phenomenon of protected area establishment driving social change is also prevalent in the Smokies as Williams (2001) describes how displaced families created new rituals, and in turn, alternative collective histories in response to GSMNP's creation. This turn is described as a unique form of 'traditionalization', as new meaning became ascribed to homecoming rituals and the remaining fragments of human imprint on the landscape by the descendants of displaced park residents.

IV. Government Shutdowns as Crisis

In seeking to understand the effects of the 2018-2019 shutdown in Great Smoky Mountains National Park it is essential to examine the topical perspectives that have evolved around shutdowns in parks and how a narrative of continuing crisis and permanent assault on public lands has risen to prominence (*The Trust for Public Lands*, 2019; *Government Shutdown Still Hurting Colorado's National Parks*, 2019; *It Could Take Joshua Tree 300 Years to Recover From the Government Shutdown*, 2019). This narrative situates public lands as unique victims of the shutdown as rangers were furloughed and the parks were left largely open, leading to protected animals being

poached, infrastructure being destroyed, and natural resources suffering degradation. Joshua Tree National Park became the most emblematic of this pattern of destruction in the popular media, a phenomenon described by Facemire (2020), as trees were cut down and illegal off-roading destroyed park resources. This discourse surrounding the erosion of public lands is far from unique to the 2018 shutdown (*Under Attack*, 2019; *The Undoing of our Public Lands and National Parks*, 2020; Jarvis and Jarvis, 2020) and is reinforced by a more widespread phenomenon of apprehending current ecological, political and economic systems as existing in a continuing 'crisis state' thus providing a platform for certain perspectives to be reinforced and others to be foreclosed upon.

The analysis of crisis narratives by Roitman (2013) and Heslop, et al. (2019) both include the observation that as historical understandings of crises are produced, certain storylines are excluded and a re-examination of the concrete effects of specific events becomes necessary. Roitman (2013) also identifies 'crisis as cognate', wherein periods of upheaval or disruption offer a time when alternative views or a pursuit of alternative paths may occur, even as others are suppressed. Harvey (1990) notes this connection especially clearly, stating that as spaces become contested, they begin to take on new definitions and meanings as new social formations arise. This phenomenon has been termed 'emergence' by scholars of social-ecological systems who describe how during times of uncertainty and crisis changes in governance may occur, especially with regards to collectively managed natural systems (Chaffin and Gunderson, 2016). Solnit (2010) expands upon this idea of new systems emerging in the wake of disaster in her book *A Paradise Built in Hell*, and enumerates several instances of new forms of

management and social organization becoming apparent in the wake of disaster. The question of new governance forms in the wake of crisis is not value-neutral however, as Solnit (2010), Roitman, (2013), Mirowski (2013) and Heslop (2019) all note- often, specific narratives and governance structures are deployed to advance the interests of already-powerful entities, shoring up influence and attempting to subvert alternative narratives and new social relationships. Germic (2001) makes this link explicit within the context of national parks in the United States and demonstrates how several times over in American history, the federal government has actually created protected areas to establish power and consolidate influence during times of economic and social crisis. Germic's examples of this phenomenon include the establishment of Central Park in response to widespread economic downturn and the creation of Yellowstone National Park to sustain over-extended railway companies. In this way, public lands can be seen as a 'spatial fix' for economic failures in times of crisis, cementing their importance in the framework of disaster and emergence. The idea of a spatial fix is discussed in Soja (2013)'s work 'Seeking Spatial Justice' wherein capitalistic entities appropriate new spaces in order to respond to material constraints on previous accumulation, and in turn transform that space's spatial imaginary. Examples of this are often linked to manufacturing or extractive industries that eventually run into physical constraints as they expand, and turn to producing new products or exploiting new resources (or types of labor) in the pursuit of accumulation and profit.

Since the reopening of the National Parks on January 25, 2018 some analysis of the public lands in crisis narrative has occurred, mostly with respect to online sentiments. Gan (2019) evaluated these sentiments with regard to emotions expressed

and determined that a theme of sympathy and anxiety ran through online posts with relation to furloughed employees and Perry, et al. (2020) noted that online sentiments with regards to the shutdown evidenced a range of emotions including concern, fear, pride, and love, and were spatially distinct. These alternative descriptions of the shutdown can be thought of as Heslop and Ormerod (2019)'s 'insurgent story lines' that challenge the dominant narrative at work and reveal truths about objective reality that have been excluded from popular understandings of a given crisis.

V. Political Instability and Conservation Outcomes

In a departure from the popular American continuing-crisis narrative, significant literature exists on the effects of disruptive political events on protected areas. These studies often employ the term 'political instability' in order to describe irregular events at the federal level, a word that does not yet exist as a boundary term but encapsulates a wide range of political disturbances. Political instability can be understood as manifesting through diverse occurrences and as such can be defined in a number of ways. Early definitions of instability limited relevant conditions to those which led institutionalized patterns of authority to break down and be replaced by violence intended to change the personnel, policies or sovereignty of the political authorities. Later understandings of the concept include interruptions in the regular flow of political succession and the frequency and magnitude of particular disruptive events. Furthermore, instability can exist at multiple concurrent levels- within elite circles, within communal groups stratified by ethnicity, language, religion or territory, and as mass

movements based on specific political programs (Lemco, 1991). These definitions make several important assumptions, namely that instability is necessarily violent and that it comes as a result of conflict between political actors.

An important expansion of this definition comes from Samuel Huntington, who related the historical political process in nation-states to changes in citizen participation. This thesis holds that political institutions exist to absorb citizen demands and that when a dissatisfied citizenry changes the nature of its participation (by participating more and demanding more) the participation outstrips the institutional capacity for change (Huntington, 2006). In Huntington's thesis, political instability is not violent but is increased by changing political participation.

At this point it is important to understand that a difference exists between political change within a system and political instability that tests the adaptive capacity of the system itself. More importantly, that the actions which destabilize the political system in one country may not destabilize another. While instability can manifest in many forms of participation- from the violent and extreme (coups d'etat) to the more symbolic (voter disenfranchisement), the destabilizing effect of a political occurrence is most dependent upon the level of an action's deviance from established patterns (Ake, 1975). In other words, the irregularity of a political change begets its destabilizing effect.

Analysis of political instability in developed countries has been widely focused on the deleterious impact of irregular occurrences on economic growth as described by Alesina (1996) and Aisen (2013). A more nuanced analysis by (Jong, 2009) breaks instability into four categories: politically motivated violence, mass civil protest, instability within the political regime, and instability of the political regime. It was found that

instability of the political regime was closely tied to impacts on economic growth and that a strong causal linkage existed. This analysis underscores the importance of understanding that different types of instability have a range of effects on economic certainty depending on the scale of the political action.

Feng (1997) offers what can be seen as a synthesis between the political change definition and the economic effect wherein 'Irregular' change is understood to represent regime shifts at the highest political levels and hold the capacity to slow down and reverse economic growth, while 'Major' and 'Minor' regular changes within the framework produce higher economic uncertainty in the short run with lower levels of uncertainty in the longer run (Feng, 1997). As such, political instability can exist at different scales concurrently with a range of effects on economic certainty depending on the regularity of political actions within their respective contexts. Furthermore, instability is not restricted to violent actions or elite-level actions and is highly framework dependent.

The impact of political instability on protected areas has been examined in numerous countries and common themes within this literature point to flexibility of field interventions, community support, mediation of poverty, and increased park protection as factors that improve conservation area outcomes while political instability and its effects negatively impact protected areas (Hamilton, et al. 2000; Schwitzer, et al. 2014; Kideghesho, et al. 2012; Debonnet, et al. 2004; de Merode, et al. 2007; Gandiwa, et al. 2013). The manifestation of instability in these studies ranges from civil war to economic decline and the impacts on protected areas take the form of poaching, bushmeat hunting, illegal fires, exploitation of medicinal plants and fragmentation of habitats.

Given the extremity and easily understood nature of political instability in these African countries it is not surprising that research investigating the impact of instability on protected areas has not been extended to western countries such as the United States. It is worth noting, however, that given the definition of political instability discussed earlier, instability nonetheless exists in countries not experiencing violent conflict that still seek to manage protected areas. This myopia represents a serious knowledge gap in the study of conservation management, especially considering that the single most highly correlating factor between management practices and effective outcomes is that of infrastructural needs being met (UNEP-WCMC 2008), a condition highly dependent upon political stability. In another study of protected areas in 11 Central African countries, inadequate government funding and support were found to most seriously compromise conservation goals while increased financial support of law enforcement, longevity of funding and monitoring programs were most strongly correlated with protected area success (Strusaker, et al. 2005).

The role that stable governance structures play in producing desirable outcomes is directly explicated in the field of adaptive management, a theory of conservation management has been shown to correlate strongly with desired outcomes in protected areas (Leverington, et al. 2010). Adaptive management prescriptions are clear in their requirement of stable political environments in order for their objectives to be met (Prato 2006) and one analysis of adaptive management in a large-river setting found that institutional instability directly presented a barrier to the achievement of long term objectives (Prato 2003). Lee (1994) lists institutional stability as one of ten factors necessary for the successful application of adaptive management strategies due to the

relatively slow responses of ecosystems to human interventions. Prato (2006) elaborates on this by characterizing national parks as institutionally stable but points to factors such as turnover in upper management and declining budgets as sources of external instability.

Political instability in the United States of America is poorly understood but it has not been wholly unexamined. Empirically speaking, the United States ranks within the 50-75th percentile for political stability on the World Governance Indicator tool developed by the World Bank (World Bank, 2018; see Appendix 2), an aggregate measure that includes indicators such as orderly transfers of power, social unrest, business costs of terrorism, security risk rating, internal conflict, ethnic tensions, protests, and civil war (Kraay, et al. 2001). For context, this is the same percentile range as Chile, Namibia, and much of Western Europe. Studies relating specifically to the Department of Energy have noted the impact of instability on the long-term success of environmental management goals and have identified instabilities as manifesting in the form of transitions between administrations, inconsistent funding and variable political climates. These transitions are often irregular enough to deeply complicate long-range environmental planning and occasionally lead to institutional disruptions and failures (Burger, et al. 2009). The manifestation of political instability in this literature does not necessarily imply violent upheaval and can refer to politically-motivated changes in park staffing and appropriations, both of which are occurrences observed within the domestic National Park Service (Hughes, et al. 2019; Gilbert, 2019). The linkage between highlevel political change and the reappropriation of protected space by different actors is well-established in case studies from other countries (Hamilton, et al. 2000; Schwitzer,

et al. 2014; Kideghesho, et al. 2012; Debonnet, et al. 2004; de Merode, et al. 2007; Gandiwa, et al. 2013) and illustrates how corruption, civil war, economic downturn, and international conflict in particular circumstances dictate which actors appropriate formerly protected areas and how this impacts wildlife conservation and natural resource stewardship. An appreciation of the dominating (and hence subverting) crisis narrative in the U.S. National Parks in tandem with the existing chains of explanation in international literature elides to the fact that government shutdowns in the United States have likely left public lands open to unforeseen spatial reproduction and changed conservation outcomes.

In the United States the challenge of political upheaval has been studied with regards to federal institutions in several discrete contexts. Burger et al. (2009) provides the most comprehensive of these overviews with the Department of Energy as a case study and notes that the federal work climate with changing political administrations, regulators, requirements and concerns makes managing long term environmental concerns difficult, especially when the resource to be managed operates on exceptionally long time scales. Prato (2006) makes this concern even more explicit and relates political instability to river ecosystem management, stating that a lack of predictability and anticipation of rapid transitions prevents effective management of national park ecosystems. Within the National Park Service, certain guidelines do exist to govern how parks respond to shutdowns- these are contained within the Antideficiency Act, overseen by the Office of Management and Budget. These guidelines are known as contingency plans and detail how the agency is to respond to funding gaps. During the 2018 shutdown, one of these contingency plans was executed,

although it was unique in the respect that it allowed for much more visitor access in the parks than previous contingency plans had (Comay and Vincent, 2019). Additionally, there is an established growing consolidation of unilateral power in the executive branch and a corresponding inertia in Congress towards producing needed legislation (Kovacs, 2019), representing a growing deviance from regularity. Burger (2009) notes that internal factors related to high-level political appointments cascade down management chains causing shifts in funding, personnel, schedules and expectations to change as often as every two years. Furthermore, external events such as terrorist attacks, changes in public perception and the world economy have impacts on the political processes of the United States which can shift the funding and management of federal programs in irregular manners.

By initially describing national parks as socially produced spaces which exist in a state of 'monumentality', this literature review has sought to provide a context for Great Smoky Mountains National Park during the 2018-2019 shutdown. A further contextualization using the political ecological framework allows for the spatial element to be understood to exist within a constellation of politicized relationships and the park to be seen as the social product of diverse actors' relationships. The shutdown itself has been shown to fit the criteria of a popular 'crisis', and to be part of an ongoing process of political instability in the United States, with particular consequences for conservation objectives. These explanations and reviews of the existing literature provide the point of the departure for this thesis as it makes the turn from examining what is known about the park and the shutdown to generating new knowledge about its effects.

CHAPTER THREE

METHODS

I. Qualitative Interview

To best answer my research question ("How do governance lapses materialize in Great Smoky Mountains National Park?"), I generated dialogical data through semistructured phone interviews. These interviews were recorded, transcribed, and analyzed through the assignment of codes to uncover hidden themes and chains of explanation. I conducted this research with the understanding that interviews are jointly constructed conversations between individuals with unique subjective viewpoints (Warren, 2002) and that my interview transcripts only partially represent complete interpretive data (Mason, 2002).

Interviews with human subjects were an appropriate method for this study because they support the ontological framework of the social construction of space that informs this study's understanding of park space. Social spaces such as national parks are jointly constructed by actors' interactions and perceptions and qualitative interviewing holds these interactions as legitimate representations of social reality. Furthermore, the political ecology framework underpinning this research holds that knowledge is situational (Blaikie and Brookfield, 1987), and qualitative interviewing allows for dialogical data to be generated with respect to positionality, individual experience, and differing social explanations (Mason, 2002). An important assumption of this research technique is the supposition that interview respondents are able to

accurately recall phenomena in the past and that individuals are subject matter experts on their lives and experiences.

Following the procedures outlined by Warren (2002), I broke my main research question into three 'mini'-research questions that addressed covert categories (granular areas of interest within the larger question) and assigned specific questions within each of these categories (Appendix 3). These mini-research questions and their respective specific questions were laid out to reflect the interview protocol outlined by Carspecken (1996) for ease of use in the field. Each area of interest was given a lead-off question, which was broadly designed to minimize ego threat, encourage free association (Gorden, 1992) and democratize the research process (Carspecken, 1996). The specific questions that followed became increasingly narrow in order to tease out the chronology of events and were sometimes indirect in order to further minimize ego threat to access information that may otherwise be withheld (Gorden, 1992). During the actual interviews in the field I relied on Gorden (1998)'s advice on the use of probes to elicit further information from respondents and Adler (2003)'s directions to overcome reluctance in interviewees.

Validity and reliability are two additional concerns that must be addressed in any study relying on dialogical data. Validity relates to the quality of the interview, the quality of the transcription, and the quality of the claims made by the researcher (Rosenblatt, 2002). Understanding that interview data represents a co-construction of reality by the interviewer and respondent and that subjective truths are assumed by both parties, I made a concerted effort during the interview process to separate my assumptions from my data collection. This took form through the process of debriefing my respondents

post-interview in order to understand their perceptions of my questions and interview technique (Rosenblatt, 2002). In this, I inquired as to what I may have missed in my questions and if their impressions of my questions' focus were appropriate and reflected their experience during park shutdowns. An important aspect of the political ecology framework employed in my study is the explication of power relationships and the privileging of subaltern perspectives, and as such, pursuing traditional agreement is not appropriate to this study (McDonald, et al. 2019). Therefore, the immediate 'check in' with interviewees post-interview allowed me to move towards greater reliability as I was able to ask my respondents if the manner in which I understood their responses

II. Selecting Respondents

I began my selection of respondents by reaching into my research on GSMNP as a social-ecological system and identifying park personnel and non-NPS stakeholders in the proximity of the park. I reached out through public channels (published email addresses and phone numbers) in order to make primary contact and followed approved NAU IRB procedures for confidentiality and transparency in conducting my interviews. After my initial contact with GSMNP, it was requested that I apply for a park research permit, and upon completion of this process my contact information was forwarded to park personnel. My intention in conducting this research was to employ the 'snowball sampling' method of locating further respondents using established contacts as described by Warren (2002) but this method did not prove fruitful, and as such all of

my interviews represent a primary contact. Many of my interviews were ultimately the product of directly contacting public access numbers or email addresses and asking to speak with specific individuals. In total, I interviewed eleven respondents which represented a cross-section of NPS personnel, local government officials, non-profit employees, gateway community business owners and park-interest organizations between May 25, 2020 and August 25, 2020. Of the eleven, three were female and eight were male, and total interviewing time amounted to 517 minutes of recorded time. After an interview had been conducted, I assigned the recording a number in order to ensure confidentiality and transcribed the audio into text with the aid of Otter.ai software. All of the audio and text conversations were stored on an external hard drive for the duration of this research.

III. Data Analysis

Coding is a method of categorizing qualitative data that allows it to be interpreted such that theories may be developed and themes may be uncovered (Flick, 2002). Methodological and epistemological agreement is central to validity in qualitative research (McDonald, et al. 2019) and as such it is necessary to reiterate the theoretical framework of this study. Political ecology holds that environmental knowledge and politics coevolve together (Forsyth, 2008) and that social context is essential to the understanding of land degradation (Blaikie and Brookfield, 1987). Furthermore, political ecology focuses on the unique social and ecological factors that determine how exogenous factors are felt locally (Prudham, 2004). A method of analysis that can

accommodate a wide distribution of social perspectives around a central event is then necessary- thematic coding is appropriate to this need and supports this situational viewpoint. The theoretical foundation of thematic coding holds that differentiated and unique social worlds (spaces) are created by diversely situated individuals and is emblematic of a constructivist approach (Flick, 2002). Both the framework and the method hold relationships and contexts as essential elements of constructing and understanding reality and seek to understand the conditions, actor interactions, strategies and consequences of a given case.

After the interviews had been fully transcribed, I separated out my respondents' replies to be grouped by the question asked. I then assigned open codes line-by-line to the text to allow the responses to be understood by theme and spatial orientation. This method of breaking contextualized interview texts into individual concepts and then relating those concepts to each other in order to understand a phenomenon under certain conditions fits closely within a political ecological framework in the service of answering my research question. I then condensed my codes into relational groups (e.g., all codes relating to specific questions grouped together) such that chains of explanation ('the story of the case') might be revealed (Flick, 2002). The list of codes used can be found in Appendix 4.

CHAPTER FOUR

RESULTS

This chapter presents the results of the interviews conducted with study respondents. Data results are presented in three subsections aligning with the subtopics in the interview protocol and are presented in a descriptive format. Discussion of these findings with the political ecology framework applied can be found in Chapter 5.

I. Social Interactions

During the shutdown respondents identified numerous instances where the 'distance' between typically disparate actors was shortened, frequently with regards to the initiation of contact that was outside of their normal interactions. This represented both a collapse of remote individuals into the same space, and the emergence of new forms of governance in the absence of National Park Service (NPS) leadership. These incidents took place mainly with regards to the refocusing of national attention on the small communities bordering the park, the lavishing of attention on local nonprofits by high-ranking politicians, and the efforts of regional constituents to reach further afield to make their voices heard. Numerous nonprofit respondents identified the presence of a 'national spotlight' on Great Smoky Mountains National Park (GSMNP), which was borne out in material reality by new interactions between local government officials with their congressional representatives during the shutdown and the presence of congressional delegates at events post-shutdown.

Instances of novel communication came in the form of the direct phone calls between local officials and national and state representatives that became frequent during this time period, with topics mainly revolving around the economic impact of the shutdown. This collapsing of space was further reflected in the acknowledgement by several respondents of the effects of a national crisis narrative in producing a preventative response by local actors in GSMNP. Additional incidences of new social interactions that represent a 'shortening' of spatial distance can be found in the underthe-table employment of several park rangers by local entities to capitalize on skilled labor without publicity, and the appeal of local constituents to park staff to reopen parts of the park at their discretion. This under the table employment was kept secret on social media and in the local community for fears that it would be met with criticism and would jeopardize the reputation of the organization and the park employees who were hired. In a somewhat ironic turn, the park rangers who were hired by the nonprofit actually spent the shutdown doing work that involved renovations and enclosing space, giving the social space being produced an entirely literal element.

"Now for us the shutdown created a couple of maybe interesting things... We had to get permission from the higher ups in the park, but we actually hired three of the.. teams in the National Park to work during the shutdown. We certainly made no mention of it, of hiring the people in the park. We made no mention of that in any of our, on Facebook, or publicly, nothing at all."

Local nonprofit leader

The interactions between the local community and the furloughed park staff also largely represent the creation of new social spaces where donations were made to park staff by local businesses to ease the financial burden of the furlough, and in some cases dinners were held so as not violate ethical donation policies.

One dinner held in honor of park staff, however, speaks to a larger issue concerning social interactions during the shutdown. During shutdowns, park staff are prohibited from using their work email or phones, meaning that a total communication blackout occurs:

"The people that you work with, they can't work with you anymore. Their emails are shut down. Their company phones are shut down. And the group that you work with all the time and supporting and things are going on, all of your programs stopped. You know, that was just a, complete, you know, just one day you're working fine and then it's complete, you know, they're gone overnight. It's like a death."

- Nonprofit employee

This means that internally, NPS supervisors may struggle to communicate with their departments, it is difficult for park affiliates to reach their points of contact inside the park, and NPS colleagues cannot legally reach out to each other through official channels. As such, one local nonprofit held a 'community-wide' dinner and then spread news of it exclusively through word-of-mouth such that NPS employees would have an opportunity to legally meet up and have contact with each other. This literal and socially constructed new space is in keeping with the consequences of not only a governance

lapse inside the park but an infrastructure failure that is dependent upon that governance.

In addition to the formal communication blackout, park administration assumed an 'Incident Command Structure' during the shutdown, an organizational form that can respond quickly and efficiently to crises, and in doing so changes its points of contact with outside-the-park affiliates.

"Our agency partner [NPS] went into the incident command structure and that affects my organization because I have to figure out who are my points of contact, because they might change from the way that we normally operate."

Nonprofit employee

This Incident Command Structure is notable because it is also employed during non-shutdown crises such as wildfires, high traffic weekends, and major incidents. The reconfiguration of park administration meant that decisions could be made much more quickly by a smaller group of individuals, but also that the park administration began to mimic the structure of paramilitary or first-responder scenario.

Governance changes were not limited to the NPS, and at least one local nonprofit also shifted its governance perspective to respond to the unfolding shutdown. Since the shutdown was challenging the nonprofits' abilities to reach out to their normal contacts and make decisions quickly enough to respond to situations in the park, the nonprofit assumed a facsimile ICS structure, suspending the need for its board of directors to sign off completely on every decision. Between the communication blackout and the new NPS command structure, it became impossible for the park to

communicate beyond the formal statements through the Department of the Interior, and unable to provide guidance to would-be visitors. One local non-profit leader, however, did note that the park administration reached out behind the scenes to inform them of how to respond to media inquiries, representing at once the collapse of one social space and the creation of a new one.

"The National Park Service here was not available to comment to the media. So I became a very visible spokesperson to local media about what was going on in the park, much to my dismay... even though the National Park Service was not reporting to work, I was in frequent communication with my contacts on the National Park Service leadership team for this part. And they were a source of information for me when I was fielding, you know, concerns about trash and everything they were able to tell me no, here's what we're really seeing, because they still have law enforcement Rangers out patrolling."

- Nonprofit leader

Negative cases do abound, however, and two are worth noting. Despite the new social interactions and the spaces that they created, several respondents from both NPS staff and park affiliate organizations also noted that in some ways the shutdowns were no different than the usual functioning of the park, highlighting the various range of perspectives and constructed realities that the shutdown produced. This was attributed to the holiday season, the poverty already experienced by some park employees, or the intrinsically non-human character and longevity of the park. The inherency and timeless nature of the park was demonstrated in commentary that portrayed park space as having remained unchanged since the time when it was inhabited by indigenous tribes,

so perturbations such as shutdowns did not have the power to change the fundamental nature of park space. This shows the extent to which the park is seen as transcending white/colonial 'caretaking' even in the failure of those systems, even though this characterization is deeply ironic due to the indigenous removals that preceded the evacuation of the white settlers that allowed the park to be created.

"You get up on Gregory's Bald or Spence Field where the azaleas are blooming, they've been blooming there since, I mean the Indians, you know, the Cherokees... I mean that, the park is itself, it'll be there long after we're all gone, and it's been there a long time before we ever got here"

Local government official

"Most of the park is a natural system in our case, and it's been progressing, whether we've been here, or the visitors have been here or not, and doing what it does. It's not as much for the park to recover from."

- Park Ranger

Several park affiliate respondents also noted that the park can be closed for any number of 'cataclysmic' events and so financially planning for a range of closures was necessary. In this, the shutdown was likened to catastrophic fires, rockfalls and road failures, all of which were noted to be unpredictable and cause a similar economic impact. Sentiments that noted that the shutdown did not represent a change from the usual mainly focused on natural cycles present within the park boundaries and the inabilities of humans to change these patterns.

Another important discrepancy that arose with regards to social interactions is the manner in which the shutdown was described, namely whether as a federal or a local issue. NPS staff, nonprofit leaders and government officials alike noted that it felt as if the park were a political pawn in a larger game at the federal level, but others identified the park as a local entity with a measure of discretion in how 'closed' the park truly was. While the sentiment that the park was 'closed' was extremely common, some park rangers noted that certain facilities were opened up during the shutdown at the request of local governments, and a number of nonprofit actors pointed to the porous boundaries of the park that remained accessible. In many of the cases where the park was referred to as being 'closed', it was identified as a federal structure at the mercy of a national crisis, whereas incidences of it being 'open' were more likened to local phenomena or to its intrinsically porous boundaries. A dual-nature form of jurisdiction was referred to by several local government officials who viewed the park as existing in both a federal and local space, which is captured well by one officials' claim as to how illegal actions in the park would be met:

"I'm gonna say this, is one of the things about it, that's federal, federal land. It's actually in Blount County, but it's federal land. I mean, you don't even know, if something happens in the park, they don't bring you to Blount county jail or Sevier county jail, they take you to federal prison. I mean, they take you to the federal, you go in front of a federal judge on that. And that's pretty serious. I mean, that's, people around here, whether it be the judges or the attorneys or the jury do not take very kindly to doing anything inside those parks"

Local government official

Whether the park was understood as a federal or local space also seemed to fluctuate frequently, with some respondents living historically adjacent to the park boundaries acknowledging the federal designation of the park to exist concurrently with a local claim to the land where their families previously settled, despite the fact that the removal of indigenous tribes allowed for these mutual spaces to overlap. As many individuals identified the park as a federal space when describing the park as 'closed', but referred to it as a much more local fixture when it was open, the governmentality of GSMNP is thus seen as fluid to a degree, and exists largely in relation to the potential of the park to be used as a social or economic resource. In a crystallization of the collapse of social space and the dual nature jurisdiction of GSMNP, one respondent described how they are flooded with calls from their concerned local constituents when the park shuts down because the closure limits the ability of individuals to visit the grave sites of their relatives.

"You know, lady calls and says, 'My, my grandmother is wanting to go up and see her mom and dad's grave and you know, they're, it's up at the Methodist Church, and we can't go and grandmother's, we've gone up ever every week or every two weeks we go up'. She puts her mom's or grandmother's favorite flowers on the grave or something like that. I mean, can you imagine sitting and hearing and not being able to tell her that she can't do that?"

Local government official

This respondent in particular also noted how in a prior shutdown they, along with other local officials, had been ready to cut the locks on the gates to the park and staff it with local law enforcement, further blurring the jurisdiction under which park space exists.

The discretion with which park employees could act during the shutdown was another point of contention, with many employees describing the shutdown as a clear prevention of their ability to make decisions and act independently. Many park employees described their role during the shutdown of one as staying close to the park and waiting for it to reopen so they could go back to work. While some had strong opinions about whether the park should be open or closed, nearly all were hesitant to identify the cause of the shutdown as originating from Congress, although several did suggest that if the government were run 'like a business' then shutdowns would not occur. The overarching sentiment from many rangers then, was that the shutdown was both preventable and unfortunate, not in the least because of how it changed the perception of the park by American taxpayers.

"...they may not end up valuing the park if they don't see it as a place that they can come for emotional, psychic, physical renewal... I think we need to have people enjoying the national park and enjoying what their tax dollars paid for. It is a frustration to not be able to allow people to do that."

Park ranger

Despite this, corruption and 'laziness' were claimed to be driving forces for the opening and closure of the park by one individual, primarily at the behest of concessionaires in the park who stood to lose or gain due to a shutdown. This park affiliate was adamant that GSMNP staff were emblematic of government corruption and were responsible for

determining the degree to which the park shut down. While their view of the park was specifically federal, the rangers were seen as autonomous individuals with regards to how the park functioned.

The park rangers themselves described a range of occurrences with regards to their month-long furlough, the most frequent being that they did not know what took place within the park. They frequently referred to law enforcement rangers as the ones with true insider knowledge of the shutdown and stated that they were personally ignorant as to the goings-on in the park during the shutdown, instead choosing to describe the mental health challenges associated with the park closure.

"We love what we do. We value what we do. We believe in that and it is hugely frustrating to, to not be able to do it. You have people asking you 'why are you closed, why are you not letting me enjoy my national park?'. And well that, that's the biggest impact that I personally feel, the lack of being able to do what I feel is very important to the protection and enjoyment of our park."

Park Ranger

These challenges were associated only minimally with financial struggles, and had more to do with being deemed 'nonessential', and being unsure of how long the shutdown would last. Many of these respondents expressed frustration not with the park, but with the federal government and its effect on their jobs and self-image. One ranger noted that the hiring season was disrupted by the shutdown, leading some top candidates to pursue employment outside of the park service, while some seasonal employees contracts were not able to be renewed during the closure, leading to their

firing and eviction from park housing. It is worth noting that although the rangers were not allowed to work in the park during the shutdown, they were allowed to inhabit park housing provided their contracts were current. This was especially important for NPS interns who bore the brunt of the financial burden when their stipends were suspended-more than one ranger noted that the NPS community had to pull together to make it through the shutdown, both for mental health and financial resources.

"Everyone's at different places financially and have a family with young people, teens, whatever, some of those folks you know, live paycheck to paycheck... And for some folks it was just more psychological, you know, just, they really got upset about the uncertainty I guess, and what was going on, what that meant for them and their family and that was hard for some people. So just trying to be there to find out what their needs were, whether it was financial, whether it was support, sharing the programs, like their employee assistance program if they needed someone to talk to about any of that."

Park Ranger

II. Use of Park Space

Park space was widely regarded as having been 'closed', although several respondents also noted that the park could have been considered 'open', due to the porous park boundary and significant number of unofficial entry points. While it was widely accepted that in many cases law enforcement rangers were patrolling the park, the extent of this oversight ranged widely, from those who saw it as significant to those who saw it as inconsequential. A number of individuals noted that the essential personnel left on staff were there to prevent life-or-death emergencies, although one

respondent claimed that a death had occurred in the park during the shutdown. This range of responses is generally indicative of the numerous claims made about park space during the shutdown, painting a picture of a great range of occurrences within the park. While some individuals inhabited new roles and responsibilities inside the park boundaries, others claim that nothing at all occurred inside the park, leading to a series of co-constructed realities that directly contradict each other.

One unique aspect of the 2018 shutdown that most respondents agreed upon was that the park was 'closed' in the sense that visitor services were limited, but the roads in the park were 'open'. A few respondents seemed to overstate this closure, and maintained that they would not dare 'trespass', instead opting to frequent nearby national forests instead. Tourists that did visit the park were mainly perceived as being more experienced hikers or as regular visitors to the park. Due to the continued visitation there was a need for restrooms, and one unique space that opened up during the shutdown was due to the efforts of multiple non-profits to open restrooms and visitor centers in high-traffic areas.

"We made a contribution that allowed us to keep the visitor centers open and the restrooms open through January 1, because we knew that that was how long the people were going to be here and then the park went into a full shutdown of visitor services after our funding ran out on January 2."

Nonprofit leader

"One of the things that we have learned through government shutdowns is that if the restrooms are locked, people will do their business outside of a locked building, they'll create sanitation issues if we don't provide them something."

Nonprofit employee

These services were mainly open during the Christmas-News Years Day period, after which visitation was said to fall off, so after January 2, the funding to open the restrooms and service centers ceased. Cades Cove, a popular driving loop, was in particular described as having 'bumper to bumper' traffic during the Christmas season despite the parks' closure, and this created a major need for restrooms. While several restrooms were opened and maintained by the local nonprofits, there was also said to be a high incidence of vandalism outside restrooms, whether intentional or not, with visitors defecating outside and leaving trash by closed toilets. One nonprofit respondent claimed that this occurred as a protest against the parks' closure, although governmental figures and rangers saw this more as a byproduct of the restrooms' closures. The restrooms in the park thus became a touchpoint for nonprofits to engage in reopening the park, and a physical manifestation of the shutdowns effects. Since in the 2018 shutdown visitors were not prohibited from entering the park, the provision of basic services represents the intersection of national policy with local discretion, and an incidence of wholly new space being created within the park, as nonprofits stepped up to serve the new role of service provider. Nonprofit leaders noted that in order to reopen the restrooms, they had to apply to become service providers and to reorganize their financial operations in order to fund this entirely new venture- money that typically went

to educational and science programming was redirected to stocking toilet paper and providing sanitation services.

Trash in the park was another source of contention. Different respondents variously reported that there was substantial trash in the park, that volunteers from local communities acted as park cleanup crews, or that trash pickup continued as it always does because the service is contracted.

"Friends and families would say hey listen, you know that park's been, it meant so much all our lives let's go up there and give something back to that park, and they did, it was pretty, pretty amazing, really."

- Local government official

One thing that is particularly interesting is the claim made in the national crisis narrative that trash was piling up in the parks that served to drive volunteers, and in one case, the respondent themselves, to enter the park to pick up trash, although they ultimately found the crisis narrative to be overstated.

"You know, there were a lot of news reports if memory serves, of other national parks where garbage and trash was accumulating. There was some concern of that here so we actually as a staff drove over to Cades Cove here in the park. Armed with garbage bags and gloves, ready to find trash everywhere to pick it up. And we found hardly any at all. So I don't think that that picture played out here like it did elsewhere."

Nonprofit employee

"We had people who desperately wanted to come in and pick up trash, because they were seeing the reports of what was happening like, in other parks, where trash was overflowing. And we had to explain that, no, there is trash pickup, you know, the trash receptacles are getting emptied."

Nonprofit employee

The multiple incidences of park affiliate organizations opening up the park services is perhaps one of the most notable creations of new space within the park boundaries. Friends' organizations acted not only as spokespeople for the muted park service and as restroom maintenance staff, but raised money to open the bookstores in the park and even served as park guides from their offices when lost tourists stopped by. Some were even sent money in the mail from interested parties with a note to use the funds to reopen the park.

"Well it varied by who it was and everything, but a lot of people would send in, you know, we got a check for 100 dollars and they would say 'this is to keep the park open.' So we would put it into the maintenance fund."

· Park affiliate

In this sense, some of the duties that rangers generally undertake were performed by retail staff and non-profit employees. Not all ranger activities could be easily performed by these respondents, and as such some responsibilities went unfulfilled over the 35 days of the shutdown. The most widely noted gaps in oversight occurred in the aforementioned communication blackout and in those portions of ranger responsibilities relating to more technical roles such as scientific equipment monitoring

and educational programming. Park rangers noted on more than one occasion that their seasonal programming ceased, and in one case this included a cessation of the parks in classrooms program, where rangers visited local schools that could not raise the funds to visit the park. In this case, the park ranger describing the closed activity noted that over the years, the timing of the shutdowns had curtailed several rounds of educational programming of this type, meaning that students from both rural areas and inner-city districts did not have the opportunity to partake in park educational programs. In this case, the space of the park was typically expanded to reach students who would not be able to typically access the physical park, and even this was closed by the shutdown. One other educational program that did not take place during the shutdown was a Wilderness First Responder Course offered by a park affiliate, that resulted in the loss of revenue from the course itself and inability of the would-be attendees to renew their certifications at GSMNP.

The most common unfulfilled ranger duties during the shutdown included the monitoring of remote environmental detection equipment, the deferment of infrastructural maintenance, and the occupation of park service buildings. Each of these cases represented an opportunity for nonhuman actors to appropriate park space and a challenge to the physical occupation of the park by humans. In one case, a ranger stated that abandoned buildings experienced a 'raccoon takeover' in the rangers' absence, with skunks, squirrels and raccoons all preferring to occupy buildings when the rangers were absent.

"Well, you know, raccoons can cause a lot of damage, because when you don't have anyone visiting... it becomes an abandoned building basically. Well in an abandoned building basically, other things are going to get in there... You know, that was a rampant problem."

- Park Ranger

Another ranger described scientific equipment in several park locations breaking due to ice accumulation as it could not be serviced. In other parts of the park, trees fell and blocked roads, and boulders rolled down the mountainsides to make some routes impassible. As none of these routes were the roads that essential personnel maintained during the shutdown, these occurrences represent a reclamation of park space by nonhuman, and sometimes even nonliving actors. One ranger maintained that although the park was left open, some remote areas were closed due to the inability of law enforcement rangers to fully patrol the park, representing a form of triage of closed park space. While it is impossible to attribute motive to boulders, trees and ice, the point remains that in areas where rangers were forced to abandon their posts, natural entities continued to manifest, in some cases directly challenging the infrastructure and maintenance of the park.

A notable thread in respondents' description of paused ranger activities is the annual hog culling program that could not proceed during the shutdown, which is intended to reduce the hog population. Respondents who mentioned this lapse in management identified the wild hogs as an invasive species that is responsible for the destruction of park space. As the culling program was not able to proceed during the shutdown, park affiliates familiar with the program maintained that the failure to harvest

pigs when they moved to lower elevations over the winter represented a significant blow to the park ecology. Several respondents went even further, claiming that the failure to hunt wild pigs during the shutdown introduced added pressure on resources favored by black bears, namely acorn and mast crops. This represents a tension between the human desire to control the landscape to fit a certain imaginary and the refusal of nonhumans to stay within human demarcations and inhabit specific roles, a phenomenon observed by Notzke (2013). In this, then, the 'beastly universe' represents a form of resistance to the Park Service's attempts to control and manipulate the landscape in a specific manner, which was ultimately aided by the shutdown.

"For every day during that season when you're going to be hunting hogs, that you can't hunt hogs, there are more hogs to tear up the National Park... And they also eat a lot of the same things that our native animals, actually they compete with the bears for acorns, and other vegetation that the bears would eat as well. So they don't want them in the park and getting behind on eradicating them."

Local nonprofit organizer

The black bears themselves were also depicted variously, as being in torpor/hibernating by some individuals, as roaming the roads freely by others, or as 'having a party' by still other respondents. In several cases, nonprofit affiliates noted that even if the bears were hibernating during the shutdown, the park closure reduced the number of photographers and tourists imposing themselves upon bear dens in search of a picture. In some cases, this went along with a wider sentiment that the shutdown allowed for the park to 'take a deep breath' and 'get a break' from the rigors of human interaction. This

particular attitude was often rooted in a larger worldview that positioned humans as alien to the park, or at least as a temporary aberration within the area. Strikingly, this attitude was expressed by park rangers, government officials and nonprofit employees alike, indicating that members of each group held a perspective of GSMNP as simultaneously a federal institution and a timeless natural entity.

"I think the parks are, the parks continue, regardless of us being here, particularly if the people in the parks do not do a whole lot of damage and the park is probably quicker to recover than then our human societies and our human constructs"

- Park employee

Damage to the parks in the form of illegal activity was one question that generated a series of disparate responses. While most individuals who referred to rangers patrolling the park during the shutdown noted that it was largely law enforcement personnel who were kept on, the perspective that illegal activities persisted at typical levels was striking. Poaching in the form of illegal animal and plant removal was identified several times as a source of illegal activity that was largely perceived as remaining unchanged during the governmental closure. This was interesting in itself in that rangers who discussed poaching noted that they believed it occurred during the park at all times, and during the closure in spite of the law enforcement rangers' presence. Ginseng, bear, deer, and elk were all noted as possible poaching targets within the park that were seen as at the mercy of illegal extraction during the shutdown:

"So, I'm sure there was some, we make cases here for things like ginseng, and there's poaching cases for deer and bear, sometimes elk... It's just that they don't have people to deal with it. So it's hard to quantify that. I don't know how much of that occurs during this period of time, but I'm sure some of it does."

Park ranger

III. Governance Lapses Over Time

Even if many respondents disagreed about the extent to which the park was open or closed, one common sentiment emerged with regards to governance lapses over time: that the 2013 shutdown was worse than 2018, and the COVID-19 park closure was worse than either.

"When you start saying shutting down the park, it took us back to 2013, 14 when they shut it down at that time in October, which was the peak, peak time of our colors and everything and at that time we're thinking it's gonna be a shut down like that one was where they actually shut the gates and actually just denied people access to the park. This one, they actually never, they never just totally shut the park down. What they did do is they shut down the services, they didn't have rangers there."

Local government official

This theme of the gates being closed in 2013 was mentioned numerous times by different respondents, pointing to the fact that although the Smokies is largely a park with open boundaries and no entrance fee, the restriction of traffic in the park in past shutdowns has had a disproportionate impact. This was mentioned several times to be

related to the fact that the park is for 'windshield tourists', who drive through the park as part of a larger trip and never stop to exit their vehicles. In defining the difference between 2013 and 2018 along the lines of access, many individuals were stating that the ability of tourists to engage in this form of visitation made for the most significant difference over time. It was not uncommon for a respondent to initially respond to a question about the 2018 shutdown by stating that it was not as bad as 2013, as that was when 'the gates were closed' and the park was fully shut down. Another significant difference that was alluded to by a number of local government officials and business owners was that the seasonality of the 2013 shutdown, which took place in October, meant that the park closure coincided with the peak leaf season, and one of the last chances for businesses to make income before the winter season. The park closure at the height of economic activity compounded the financial pain experienced by local businesses, leading to more permanent closure of more businesses in the gateway communities.

A number of park ranger respondents noted that shutdowns had become less shocking over time, and even if not easily anticipated were at least events within the norm. This was not stated as a positive development, but rather as an acquiescence to tragedy, much in the nature of 'school shootings', as one ranger put it.

"...People get callous to those things unfortunately. And I kind of sense that with these shutdowns that have been happening more frequently and people start to think, more or less ignore them, rather than as something that's unique."

Park ranger

This same respondent also noted that he had applied for unemployment in the 1995 shutdown but had grown to see more recent shutdowns as frustrating occurrences, a perspective that was widely shared by NPS respondents. The sentiment that shutdowns are bad for park service morale and it had become important for superiors to reach out to maintain mental health over time was a common thread in this population, whereas the increasing economic strife they created was more common in other groups.

Widely speaking, shutdowns were not seen as predictable events by the park service, although one respondent noted that he advised research colleagues not to schedule anything in the park in October due to the possibility of a shutdown. Nonprofits were more likely to state the shutdowns were predictable and that they had made changes to better prepare for future park closures, mostly with regards to economic restructuring in order to be able to bail out the park. Some respondents stated that more recent shutdowns had been managed better, but most agreed that the seasonality of the 2013 closure made the shutdown much worse. Continuing the theme of communication issues, it seems that in 2013 the Department of the Interior would not even make contact with local communities, which was not the case in 2018 when local entities had an easier time reaching out to national figures. A unique creation of new space also occurred in 2013 with regards to campers who were asked to leave the parkduring that shutdown when the park was fully closed, the campgrounds were evacuated and non-law enforcement rangers were at times asked to oversee the displacement of campers. One ranger described being posted in a campground to evacuate campers during the 2013 shutdown and finding themselves on the receiving end of disgruntlement directed at the federal government.

"Some people would not make eye contact with me, some people gave me a good piece of their mind. All of them were polite enough to not be holding me individually personally responsible. And I was, I felt it was appropriate to to listen as long as they wanted to tell me that they could not, tell me what they wanted to tell me."

Park employee

One interesting phenomenon that came up several times was that in 2013, trespassing was widely seen as a much bigger issue (compared to vandalism in 2018), even though the 2013 shutdown was when the gates were shut and locked. Trespassing was acknowledged as an illegal activity during that shutdown, although it took numerous forms, from the benign to the nefarious. One nonprofit employee noted that during 2013 when the park was closed and programs were cancelled, some visitors who had intended to attend some programming hiked into the park to see where the cancelled classes would have been held, and another park affiliate detailed the story of how a trespasser rode their motorcycle through the park during the closure to take advantage of the empty roads. This individual noted that after the park reopened, the federal government tracked the would-be joyrider down and sentenced them to a fine, reinforcing their assertion that the park was an exclusively and punitively federal space.

"Well, I mean, there's sort of a well-documented story of a guy who rode his motorcycle up and over Parson's Bridge Road, which is an interior gravel road that's closed, so he took advantage of the shutdown to sneak into the park and drive up and over it."

Park organization member

Overall, there was far more agreement between respondents surrounding the subtopic of governance lapses over time, and the 2018 shutdown was identified as both the least painful shutdown, and the one most strongly identified with the popular crisis narrative. References to the 2013 shutdown were far more discrete, and did not involve mention of other parks or a nationwide phenomenon of public land access, with most respondents who invoked the popular crisis narrative confining their statements to the 2018 closure. If any changes can be said to have been made in the way of repeated park closures, it is in the improved financial planning of local nonprofits and the familiarity of the park service with the closures. Park affiliates who had weathered at least one shutdown noted that in the future they intended to replicate their actions from the 2018 shutdown, and that over time they had developed a game plan for how to proceed, whether in the form of quietly hiring NPS employees or diverting funds to open park infrastructure. Local government officials, however, noted that the shutdowns led to business closures in their towns as revenue sources dried up, and that civic infrastructure was regularly impacted by the lost tax base. One official stated several times that even though economic suffering remained with the community even after the park reopened, the parks seemed to 'forget about' the shutdowns:.

"It seems like they, the parks, they do this and then when they open back up, it's just out of sight out of mind and nobody thinks about it anymore."

Local government official

Several important distinctions were apparent between the COVID shutdown and the government shutdowns. In both cases the local communities, nonprofits and rangers alike suffered economically, but in the case of COVID, rangers were still being paid while the other stakeholders suffered disproportionately. For all the stories about aid being offered to rangers during the government shutdowns, no such incidences were mentioned with regards to the park closure due to COVID. That said, it seemed that the COVID shutdown caused internal strife within the NPS, as some employees felt that the park should shut down before it did, leading to disagreements within park staff about at what threshold the park should close. All the park ranger respondents to this study noted that when the park reopened after the COVID shutdown there would be no return to normal, in direct contrast to reopenings after previous shutdowns where there was a rush to make up for lost time and re-establish a familiar workflow. Several park rangers described a hectic scene of returning to work after government shutdowns and having voicemails and emails to return to, but seemed to anticipate a slow and quiet return to a new normal when the park reopened after COVID. Similarly to how a national crisis narrative was referred to several time by nonprofits with regard to the 2018 shutdown, several respondents invoked a COVID crisis narrative when describing the 2020 park closure. This narrative was one that situated the park closure within a larger scope of tragedy and did not describe GSMNP as a federal space as much as one that fit into a narrative of uncertainty.

CHAPTER FIVE

DISCUSSION AND ANALYSIS

The previous results section of this study offered an initial insight into how interviewee's perceptions of how park space was utilized and inhabited during the 2018-2019 shutdown but further consideration of the dialogical data through the lens of a political ecological framework is necessary for hidden themes to be understood. This chapter presents a discussion of the results of this study in a historical and theoretical context so that chains of explanation may be established.

I. The Collapse and Creation of Space

As GSMNP represents a socially constructed monument of federal authority, then it stands to reason that as its governance lapsed during the shutdown, the nature of the space implicit in its governmentality was reorganized. This section refers most widely to this spatial reorganization as a 'collapsing of geographical space' with an additional discussion of new spaces that were created during the shutdown. The 'collapsing of geographical space' has been discussed widely along the lines of technological advancement's ability to link disparate locales (Cliff and Hagget, 2004) as well as with regards to how the modern world has become increasingly homogenized (Withers, 2009). Harvey (1990) employs a somewhat different conception of the collapse of space that posits that as social space is contested, spatial barriers can be eliminated and a revolution in spatial and temporal relations occurs. The term 'collapse

of space' is then deployed in this analysis to understand the shift in social relationships that occurred during the shutdown which served to revolutionize the 'distance' between far-off centers of power (Washington, D.C.) and the local, more marginal communities on the receiving economic end of the closure as identified by respondents. While the material distance (miles, kilometers, etc.) between Washington, D.C. and the park did not change, spatial barriers were eliminated during the shutdown due to changed social relationships. Striking examples of this collapsing of governmental space can be seen in responses to the question of what would happen if the park closed again: respondents noted that they would be upset with the federal government, with one individual even stating that there would be 'people with pitchforks in the federal buildings'. The theme of frustration with the federal government occurred numerous times, and often in relation to the sense that the park and its environs were being used as political pawns. Political geographers have employed a similar concept of collapsed 'political space' that focuses on the nature of territorialization and governance changes (Ferguson and Jones, 2012), conceptualizing changing governance and the landscapes it produces as part of a process undergoing a shift in scale (Macleod and Goodwin, 1999). These processes are made up of changing state capacities which influence constituents in new ways, specifically through the formation of new linkages between governmental agencies and various responsibilities (Macleod and Goodwin, 1999). While this analysis employs a similar conception of collapsing space, the focus on the re-forming of social relationships as the basis of collapsed space is unique. In short, the collapse of space analyzed in this discussion is built from an understanding that space is initially produced through social interaction, and as those interactions change, so does the lived space. In

other words, as the shutdown drew far-off actors into more local concerns, the park space and its environs changed.

MacLeod and Goodwin (1999) make the case that in order to understand the relationship of central and local governments (i.e., geographically distant centers) to each other, it is essential to undertake a multiscalar analysis that incorporates the unique socio-spatial relationships of these twin entities. The collapsing of natural, regional and local space into a much smaller area as described in the shutdown is indicative of this realization, and was borne out in the interview data as respondents repeatedly described close encounters with typically distant powerful actors. This shortening of chains of social interactions occurred in a number of incidences, from the conversations between local government officials and their congresspeople, the national spotlight cast on the fate of local communities, and the new connections established between nonprofit actors and federal park space. In the first case, a county mayor related tales of describing the discrete effects of the shutdown with their congressman as they 'walked into the White House'. In another, a local nonprofit's fundraiser was given the unusual honor of a visit by several congresspeople immediately following the shutdown. Finally, in a striking example of the dissolution of federal authority, another nonprofit leader became a de facto spokesperson for the park. A political ecological analysis frames these occurrences as dynamic changes in scale, which have the potential to remake material reality through a reapportionment of political power and changing networks (Rangan, et al. 2009), a phenomenon borne out by each of these examples. This question of shifts in scale builds from Blaikie and Brookfield (1987)'s 'chains of explanation' methodology which seeks to move through socio-spatial

hierarchies in order to link shifts in relationships to wider phenomena. Although criticized at times for not integrating sufficient complexity or plurality, within the discrete context of this study, this interpretation is sufficient for linking respondents' stated observations and actions to the shutdown. Thus, the collapse of space can be interpreted as a disruption of scale, as social relationships were formed anew in the wake of a destabilized government and abdication of federal authority. These new linkages are unique in that they likely would not have occurred had it not been for the federal shutdown, as they redirected a 'spotlight' onto particular actors who were able to harness elite-level attention. In some cases, such as those built from a reinvigorated network governance, scales were 'collapsed', while in others the collapse of federal power led to a novel break in the interaction between scales.

The communication blackout on the part of the park itself, where employees were prohibited from utilizing their government emails or phones to communicate with each other or with park affiliates represents a different sort of 'collapse', one where a center of national power disappears entirely. In the first case of the collapsing of space, the world can be said to have been made smaller, and in the second case where the park was deprived of its communication apparatus, a vacuum was opened up. Prato (2003) makes note of similar types of vacuums opening up due to governance failures with regards to natural systems, but without explicitly describing if and how such a void is filled. It is into this question of how new interactions remade space in the absence of federal authority that a theory of 'network governance'- in which the national park is part of an enmeshed private-public constellation of partnerships- becomes useful. Network governance is a pattern of resource management and delegation that represents a long-

term phenomenon within federal governance structures in the United States (Sørensen, 2002). In this form of governance structure, federal entities contract out responsibilities and mandates in an effort to achieve greater efficiency and capabilities. In the case of GSMNP, multiple non-profits, a dedicated volunteer base, and far-reaching civilian interest all buttress the administrative infrastructure of Great Smoky Mountains NP during its normal functioning, and many of these served in new roles during the shutdown.

What this represents then, is a temporary radical democratization of park space as new centers of political power engaged in management decisions and filled the vacuum left by the absent rangers. As volunteers entered the park to pick up trash, nonprofits opened visitor centers and restrooms, and community members opened new channels of communication for NPS staff to use, the park was dramatically localized even as it was increasingly identified as a national entity due to the federal origins of the closure. In this then, the political economy of the park became less narrow and far more networked, enmeshing itself in a local landscape in entirely new ways. Macleod and Goodwin (1999) refer to a phenomenon such as this on a larger scale as the 'denationalization of the state', although over a much longer time period and across territorial boundaries. In this theoretical framework, the networks that make up the governance of an area take over more responsibility over time as state power is reorganized. What makes the shutdown in GSMNP so unique with respect to this theory is twofold: how quickly the reorganization occurred and how localized the denationalization of the park was. Brenner (1997) most notably describes the social reproduction of state spatial scale over the course of decades, whereas in Great Smoky

Mountains National Park, this restructuring of state power took a matter of days and weeks. The local nature of the denationalization can be seen in the particular network of actors who stepped up to remake park space- local nonprofits, local citizen groups and local governments were the ones who assumed new roles in the denationalized national park- a distinctively geographically close assortment of entities.

The democratization of space opened up during the shutdown should not be overstated however- while nonprofits, volunteers and community members all hold the capacity to serve as political actors, they are not necessarily democratic actors in and of themselves. An especially salient example of this comes in the form of the nonprofit that reorganized itself into a facsimile Incident Command Structure, streamlining decision making within its internal organization as it assumed new authority within the park. Not beholden to American citizens, local government or even its own board of directors, this particular imposition of new power can be said to have exerted a less-democratic authority over GSMNP in its efforts to keep the park open. As the head of the nonprofit in question assumed the role of steward of portions of the closed park and as the sole spokesperson to national media, they inhabited the void left by the lapsed infrastructure although they were neither elected nor appointed by an elected official. Thus, the denationalization of the park resulted in a reduction in the democratic process within the organizations that stepped in to govern the park, even though the overall pattern of network actors entering assuming ranger roles democratized park space. This phenomenon has been noted in the network governance literature (Sørensen, 2002) and is one of the common byproducts of democratic structures turning over management authority to private network actors. What is unique with regards to

GSMNP in this case is that the nonprofit assuming a leadership role in the park was acting outside the bounds of their normal responsibilities, and even expressed a feeling of acute monachopsis- of being uncomfortably out of place. This represents the formation of an entirely new space as this entity went from one supportive role in the park to a far more extensive, authoritative position with regards to park leadership.

Another instance in which the park was dominated by a covert authority can be seen in the effects of the crisis narrative promulgated in the national media. This narrative, which positioned all protected areas in the country as being at risk of vandalism and destruction informed the actions of numerous volunteers local to GSMNP and even one nonprofit who entered the park during the shutdown to save the park from destructive actions. As the crisis narrative that simplified and totalized the fate of national parks across the nation reported tales of toppled trees and broken gates, concern that GSMNP would undergo a similar fate prompted new material reactions within the park. In this, a narrative that was not born out of local objective reality was implicit in coercing a local response although the threat to park space did not apparently exist at GSMNP. Crisis narratives are unique in that they do not simply state that an issue is at hand- they also demand action. Roitman (2013) describes this as "Crisis as Cognate", or rather, crisis as a watershed event that invites reaction and response. The invocation of a narrative of 'public lands in crisis' can then be seen to have produced a unique motivation within local groups to act, collapsing space and inviting new actors to enter the fray when they were *not* part of an established network governance structure. Local government officials spoke proudly of the citizen groups from the local community who drove the park roads, jumping cars, directing traffic and picking up trash, and

several of the rangers identified concern that their workplace would be undone as other parks such as Joshua Tree had been. When compared with the reality on the ground as expressed by individuals in the park, however, it is clear that a crisis narrative, and not observable destruction, motivated this response.

II. Non-human actors

Although several spaces in the park were reclaimed and remade by local actors, not all duties of park rangers were easily assumed, especially in the case of natural resource management. While restrooms and bookstores were opened and roads were patrolled, ranger duties that extended to controlling and mediating the effects of the natural world were not reproduced, leading to novel roles for nonhuman actors. Political ecological theory often depicts protected areas as the imposition of a political geography over an ecological geography (Robbins, 2011), and this case, the opposite occurred- a governance lapse allowed for the political geography to be temporarily stripped away, creating opportunities for non-human actors to reimpose themselves on the landscape. Studies that have attempted to understand the motivations of animals in how they interact with humans and their landscape often fall back on viewing them as proxies for human interaction, but this study aims to include a more realist viewpoint that inquires as to the nature of nonhumans themselves, held apart from human social construction. Studies in Indonesia and Western Canada are particularly instructive in this capacity for viewing how concepts such as the 'beastly universe' and physical reclamation of space can be understood to represent a form of spatial reappropriation,

which will form the first part of this discussion. The constructivist viewpoint is also important to understand, however, and will be addressed on its own terms when describing nonhumans and how they interact with human attempts at control. In the literature that considers nonhumans in this capacity, the concept of 'relationality' becomes essential for interpreting motivations and actions. Both of these viewpoints are equally valid, but represent two different poles of understanding how nonhumans can be said to socially construct their landscape- as such, both will be addressed. The impossibility of conducting interviews with non-humans renders this portion of the analysis at the border of this study's ontological framework, but is nonetheless instructive in understanding how park space is remade by non-human actors.

From a realist perspective, animals are capable of existing apart from human construction and remain in their own 'beastly universe', remaking space and exerting agency as actors in themselves (Notzke, 2013). This alternate universe of animals can be understood as the projection of intentional spaces that are ultimately the product of a separate ontological reality on the part of the animals, although at times this nonhuman space does overlap with human space. The nature of this 'beastly' place has been understood to be reflective of the 'ways, ends and doings' of animals as they remake their physical space through their own unique energy. These ways of doings occasionally destabilize human space as they trespass boundaries (Collard, 2012) making use of their objectively observable endowed 'capacity to affect' (Braun, 2004). Additionally, nonhumans have been demonstrated to exert this agency with relation to the impositions of the human world, acting as social constructors in their own right. Indeed, animals have been demonstrated to change their habits and food sources

specifically in reaction to the imposition of protected areas on a landscape (Sudibyo, 2019).

During the shutdown in GSMNP occurrences along these lines took place in several observable capacities, namely in the contestation of previously humanfrequented spaces. The park ranger who referred to the 'racoon takeover' of abandoned buildings was inadvertently employing this realist construction, as animals were seen as unique centers of power and agency when spaces were left empty. Not simply engaging in nuisance behavior, these animals were described as having the power to create extra work and defer maintenance for years, leading to a shift in the ability of the NPS to address other projects and needs. In this way, the actions of animals changed when and how rangers were able to exert human influence, effectively extending the boundaries of the nonhuman world into new territory. Extending this realist interpretation of nonhumans, one can begin to see other areas of the park that were reclaimed in a similar manner. The ice that accumulated on and ultimately broke the weather monitoring equipment and the boulders that fell and blocked park roads represent similar instances of realist nature exerting its own 'agency'. Again, rather than representing a simple annoyance to rangers and the visiting public, these instances impacted material space and transportation, destroying research equipment and inhibiting traffic in certain areas of the park. In this case the human world had erected infrastructure and measuring equipment in an area of overlapping human and beastly spaces, but the absence of human maintenance led to a remaking of space on terms fundamentally different from the human world. This is not to interpret the motivations of boulders, ice and racoons, but rather to acknowledge the existence of actors outside the

scope of human control that remade space in response to the park's closure in objectively observable ways.

In a fascinating turn, this attitude was even shared by several respondents who referred to nature as 'needing a break' or 'taking a deep breath' during the shutdown, acknowledging this beastly universe as both liminal to the human world but also as a world unto itself. Sentiments that described the park as persisting in the absence of humans indicate a thread of this realist construction held by locals, who chose to see the park as a social construction on a landscape intrinsically 'apart' from the federal institution. One respondent's descriptions of the blooming azaleas on Gregory's Bald that have been identified as part of the landscape pre-park are particularly evocative of this attitude, as the flowers are seen as a timeless natural phenomenon, existing 'long after' human constructions have gone. A study of stakeholders adjacent to Everglades National Park by Choe and Shuett (2020) found similar attitudes surrounding events such as hurricanes which were thought to 'clean out' the park from human impact, demonstrating that catastrophic or disturbing events can be widely perceived to be beneficial to non-human nature. This analysis represents an answer to Walker (2005)'s call to pursue new understandings of the 'ecology' in political ecology that releases itself from anthropocentric perspectives in the service of better comprehending how spaces are constructed. By viewing natural actors as existing in their own universe and free from human framing, parts of GSMNP can be seen as having been reclaimed, and in some cases, 'remade' by nonhumans during the shutdown within their own agency and apart from human constructions.

A realist construction of nonhumans is useful to a certain point, but does not fully play to the opportunities offered by the political ecological framework. Although natural actors may exist in their own beastly universe, that world is still inextricable from the human world where construction, both literal and figurative, operates constantly. More explicitly, a constructivist viewpoint asserts that in a world where anthropocentric objectives are made materially real the world over, the existence of a wilderness apart from humanity does not exist (Petersen and Hultgren, 2020). The case of the NPS' inability to cull wild hogs during the shutdown is especially relevant in this scenario, as it can be understood to exist within the social construction of the park as an imagined wilderness as well as emblematic of the relationality of nonhuman actors to human actors. During December, wild pigs generally move to lower elevations and are nearer to roads, making it easier for the NPS to initiate culling programs to bring the pigs into desired levels. The pigs, while tolerated in the park at certain levels are understood to transform the species composition and of the landscape when they exist in larger numbers (Bratton, 1974) and are popularly theorized as being able to outcompete other, more desirable species due to their high reproductive rates. Put differently, pigs are understood to not just root up flowers and fields, but to actively play a role in shifting animal population dynamics and have the power to transform landscapes from that of the classic 'primeval frontier' story told by GSMNP to one of overtaken destruction. Pigs in this sense become players in the social construction of space as their agency conflicts with the goals of humans and introduces a new material reality into the commonly-held narrative of what GSMNP is. Bowes, et al. (2015) make the argument that animals act as a manifestation of human desire to control landscapes, and the

unmet desire and mandate to reduce the hog population to preserve a specific interpretation of GSMNP is an excellent example of this phenomenon.

Nonhumans' agency can then be understood to be relational, or as filling a unique niche within the human political sphere (Hobson, 2007), which in this case is a manifestation of the desire to preserve a particular wilderness imaginary frozen in an imagined past. The relational perspective focuses less on the actions that animals themselves are able to exert and more on how nonhumans function as resources or tools of oppression within the human sphere, enlarging the political geography of a space although not necessarily inviting a new understanding of the local political ecology. The hunting of the hogs to keep them at acceptable levels is thus a socially constructed attempt to control a landscape, and the hogs themselves are necessarily at odds with this desire. The shutdown curtailing this attempt at control impacts not only the literal landscape as the pigs were free to roam without being hunted for an entire year, but also challenged the NPS' ability to control and manipulate the landscape.

The concept of 'nonhuman charisma' is additionally useful here, as it describes how the relationality between humans and the animals that they interact with co-create landscapes through their interplay of spatial projection (Notzke, 2013). While variously defined with relation to different types of animals, the charisma at play here refers to "that fleeting, immeasurable, innate quality that turns the head and stirs the soul" (Watson, 1996). Furthermore, charisma implies a relationality between nonhuman actors and their environs (Lorimer, 2007), which is especially salient with regards to the wild pigs due to their established interplay with humans. Since the shutdown was novel and the cease in culling that followed was also unique, this implies that the charisma of

the pigs and the inability to control on the part of the NPS produced a wholly new space in the park. This space was characterized as 'degraded' or 'rooted up' by the respondents, as the pigs turned over ground and disturbed wildflowers in their pursuit of food, actively decreasing the appeal of the landscape. Research into wild pig rooting patterns in GSMNP demonstrates how this landscape disturbance not only renders fields and forests less in keeping with the desired wilderness imaginary, but allows for different types of plant succession to take place over time (Bratton et al., 1982; Bratton, 1974). In this, the pigs can be seen to not only pursue their own objectives in foraging for food, but as actors who challenge the imagined landscape in real time and in the future, transforming real spatial areas into unrecognizable landscapes that no longer reflect the stories told about that landscape or described in its guidebooks (Bratton, et al., 1982). The pigs are thus not a nature 'apart' from human attempts to control where flowers bloom and what stories the landscape is able to tell, but actual players and participants in the ongoing social construction of what the park is and could be. The shutdown serves as a disruptive event in this case, challenging the power of rangers to control the landscape, and tilting the scales in favor of specific animals in the minds of local groups.

These challenges indicate that this charisma in itself was not representative of a positive relationship, but a relationship nonetheless- the pigs were largely seen as destructive actors within the park. Charisma is not limited to interactions with the pigs either, as the black bears in the park were also implicated in this changing relationship due to the shutdown. Black bears were invoked as the victims of the failure to control wild hogs, as they compete with the pigs for food and reproduce at a slower rate, in this

case acting as a proxy for the wilderness imaginary being threatened by the shutdown. The bears were largely described as a desirable, 'native' species that added to the character of the park, and were at risk of being outbred and disadvantaged by an increase in the pig population. Thus, the social construction that underpins the fantasy of GSMNP as a place plucked out of time and in need of preservation is played out between wild hogs and black bears in the minds of park rangers and local nonprofits. These stories about hogs vs. bears thus contain real power as a proxy conflict between control and degradation and influenced how park rangers and local groups talked about the shutdown and its effects.

What this dual-nature discussion of realist and constructivist perspectives of nonhumans reveals is important because it points to two new spaces being opened up in the park during the shutdown without anthropomorphizing nonhuman actors. On one hand, the beastly universe of boulders and racoons proceeded as it always has, although the absence of park rangers allowed new physical space to reclaimed. These entities in particular can be understood to have minimal interaction with humans and were not referred to in a manner that indicated a charismatic relationship, so this retaking of space can be considered to have taken place in a purely material sense. On the other hand, the relational aspect of humans to wild pigs meant that when the park was not able to exert control over the rooting wild pigs over the duration of the shutdown, an existing conflict and proxy challenge was invoked, with the black bears as victims. A constructivist interpretation thus characterizes the imposition of the beastly universe as problematic to the goals of park staff, and opens up a socially constructed space of conflict. In both cases, it is important to note that the power to change space

shifted to nonhuman actors, meaning that with respect to the more-natural world, the shutdown represented a decrease in the ability of the federal government to control park space. This crack in the hegemonic governmentality of national park space took place in both physical and socially constructed space and represents a dissolution of bounded and demarcated territory.

III. Hegemony in the Park

While the park was mostly empty of rangers and NPS staff (aside from a few essential personnel), nonprofits, volunteers, government officials and park affiliates all rushed to fill the roles left vacant by the shutdown. Numerous respondents explicitly identified attempts to reopen the park or provide some version of the open park experience to visitors, speaking to an enduring conception of the park as a specific type of entity that all stakeholders were desirous to reproduce- in other words, an unacknowledged hegemony. Bates (1995) describes Gramsci's original theory of hegemony simply and eloquently- "man is not ruled by force alone, but by ideas". 'Complex superstructures', such as modern nation-states, institute vocabularies and ideas through their governmentality that are carried forward by citizens of the state and made real time and time again. Put another way, the ideas that inform how society and culture function are often the ideas put there by the ruling class and are recreated through social interaction. An environmental hegemony has been acknowledged to exist widely in U.S. national parks (Perkins, 2019; Germic, 2001) and Great Smoky Mountains National Park is no exception. With regards to the shutdowns, this hegemony relates to an idea of GSMNP as perpetually accessible and free to enter that is explicitly outlined in its founding documents, best evidenced by the prohibition on charging a park entrance fee. The origins of this hegemony stem from the initial inspiration that led to the parks' founding (discussed in Chapter 2) which has been historically reproduced through the parks' founding documents, NPS policy, and even the displaced communities adjacent to the park. Some authors have identified this type of environmental hegemony even more precisely, calling it a 'regime of publicity' where certain activities and habits are seen as appropriate within a shared, open space that is generally conceived of as fundamentally accessible but governed by a 'state effect' (Sevilla-Buitrago, 2017). This 'state effect' refers to a balance between a liberality of use and preservation of order, a form of hegemony that remains present even when enforcers of this hegemony are not. Several respondents made statements to this effect: that there were 'appropriate' actions in the park to be followed, and that the park and the country were best served by park space remaining open. The hegemony at work within GSMNP can then be said to be defined by two aspects- a sense of enduring governmentality which dictates appropriate behavior within the park space, and the existence of the park as free and accessible to visitors.

This hegemony was reproduced through the charitable opening of restrooms, the assumption of ranger duties by non-governmental agencies and a substantial influx of volunteer labor. Many of the stories of individuals who were active in the park during the shutdown speak to this implicit ideation, and when analyzed through a political ecological lens reveals how the idea of the park remains as one of fundamental accessibility- all respondents either despaired the change from governance as usual or

were active in asserting their attempt to recreate that governance. None lamented the absence of the rangers, but they did identify that the reduction in services affected the capacity of the park to host visitors. In some cases keeping the park open was explicitly linked to a need to sustain the local tourist economy, but in instance after instance, the impulse of nonprofits and locals alike was to keep the park open and free, so that it could be enjoyed and accessed- even in the absence of the NPS. This was often expressed in terms of keeping the park as it often was during periods of full governance and a desire for normalcy, which can be seen as stemming from the parks' initial status as a federally produced space (Lefebvre, 1991).

In the opening of restrooms and staffing of visitor centers the park was reproduced as a federal space during a federal shutdown, indicating not only that a hegemonic reality of the park as an open space with enduring rules persisted, but that this space could be appreciated as a park, even when free from federal authority. This hegemony is then notable because it positions the park as a type of 'monument in itself', or as a space which is federal in origin, but not necessarily in reproduction. This creative remaking of the park as a unit of space to be preserved and accessed was common among many park affiliates and ultimately identifies GSMNP as a spatial entity that can be appreciated apart from its federal designation, even if that hegemonic status is where its power as unit is ultimately derived. While attempts to maintain the park as it was during the shutdown were extensive, the contestation over space that was evident during prior shutdowns points to the limits of this freedom from national governmentality. While locals were able to identify the park as a resource 'in itself' during the 2018 shutdown, the 2013 shutdown with its closed gates and evacuated campgrounds

produced an entirely different effect. In that case, with no accessibility possible, the park was identified as a highly national space, and even worse, the product of failed governance; a unique strain of counter-governmentality. This identification was explicit in the attitudes of respondents describing the 2013 shutdown, as the discord in the federal government was invoked time and time again to describe why the park was closed. In this, a crack in the monumentality of the space can be seen, as the hegemony of the park was exposed and subsequently disdained. Hegemony necessarily stems from positions of power, meaning that it has an origin, and in 2013 this original source of hegemony was verbally targeted while in 2018 it was simply reproduced.

One park ranger in particular referred to this phenomenon, as in 2013 they were assigned to evacuate a campground in the park during the shutdown, and became the receiver of numerous individuals' anger over the shutdown. Standing by the park gate to supervise the exiting campers, they described how time and time again, they were subjected to abuse and grievances directed at the federal government, a clear awareness and challenge to the hegemony that informs the imaginary of the park.

Jessop (1997) notes that governance 'operates in the shadow' of government, and even in the presence of a network of non-institutional actors inhabiting governmental space, the power of the state is at play; in 2013 this power came to be identified and resisted.

Access to the park seems to have largely determined the perception of the spaces' governmentality, with the shutdown in 2013 eliciting more responses indicating that the park was seen as overbearing in its federal authority, and corresponding ire directed at federal institutions and figures. Interestingly, when respondents were asked about what

would happen in the case of future shutdowns, resistance to the federal government was often invoked in a hypothetical scenario. This suggests that while the hegemony of the park as an independent space existing apart from federal authority has persisted while unacknowledged, the governmentality that drives shutdowns has not escaped notice.

Although monolithic in their governmentality, shutdowns cannot then be said to be uniform in the responses that that governmentality produces. The degree to which access to the monument is changed and the 'regime of publicity' is altered seems to be highly indicative of how the shutdown is perceived and of how geographic space is collapsed. The shutdowns in 2013 and 2018 illustrate this point well, as in the first case decreased access to the park provoked anger at the federal nature of the park, while in 2018 the hegemony of the park was charitably reproduced in the park, leading to opportunities for new social interactions to take place. It is through these new social relationships that spaces are produced, which in the case of the 2018 shutdown were spaces that shortened the distance between far-off centers of power and local actors. Respondents described how donations flooded in to keep the unstaffed park in 2018 open, while in 2013 the inaccessible park was met with hostility. In both cases, the normative status of the park as open and free was desired, and the degree to which the government's imposition was apparent appears to have widely influenced how that hegemony was received. The implications of this theoretical framing are that the park clearly embodies a normative power, and while it is generally unseen, certain situations cause it to cast a shadow and to become unwanted. When the park is open for spatial reappropriation during federal governance lapses this hegemony seems to serve as a

useful guide for would-be volunteers, but when those governance lapses close the gates and restrict access entirely, the normative power of the federal government becomes a target for anger.

Other challenges to the hegemony of the park come in more illicit forms, namely through the illegal actions of individuals in the park. These actions were identified by respondents as taking the form of wildlife and plant poaching, trespassing, vandalism and outright theft. While some newspapers noted that donation boxes in the park appeared to have been stuffed to the point of overflowing, one nonprofit leader stated that this appearance was due to the boxes having been tampered with and robbed in the absence of park personnel. Challenges to the institutional hegemony of the park as a federal space in the form of ginseng poaching and theft were stated to occur even during times when the park was not shut down, but vandalism in particular was perceived as being in relation to the parks' closure, particularly with regards to restrooms. One park ranger stated that one particularly distasteful example of this resistance to park authority came in the form of visitors defecating directly outside of locked bathrooms as a protest to the parks' closure. While assigning motive to these individuals is impossible, the perception of the ranger shows that at least a perceived challenge to the normative power of the park took place.

For how much local nonprofits, governments and tourists may wish the park to be a "local national park" as one respondent put it, it is clear that park space is ultimately federal, even in cases where it is left mostly unattended. In those instances, a pervasive hegemony takes hold and invites the park to be reproduced in specific ways by different actors. This reproduction is not limited to the network actors who inhabit the park, as

certain transformations within the parks' administrative structure point to the reproduction of this hegemonic reality. Although working out of local non-profit offices and vastly decreased in numbers, the remaining rangers during the shutdown were largely law enforcement rangers, leading to a uniquely paramilitary reproduction of the parks hegemony. During the shutdown respondents described how access to sensitive and remote areas in the park were curtailed, law enforcement rangers patrolled the roads and park administration adopted an Incident Command Structure, cementing the remaining park infrastructure as distinctively federal and paramilitary. Germic (2001) makes this connection between federal authority and martial rule in national parks clear by describing how the nation's first parks were staffed by the U.S. Army before the NPS existed, and Maciha (2014) notes that the organizational leadership culture and training of law enforcement rangers continues to be highly militaristic. Instances during the 2018 shutdown point to a modern militarization of NPS staff during the parks' partial closure, as exclusively law enforcement personnel were deemed 'essential' and saved from the furlough, and respondents in this study often replied to questions as to what happened in the park during the shutdown by first deferring to law enforcements' experience and authority in the park. Furthermore, the implementation of the Incident Command Structure suggests that the park administration viewed the shutdown as a certain type of 'incident' that required streamlining points of contact and adopting a paramilitary stance. While the specifics of the parks' environmental hegemony with respect to law enforcement officers should not be assumed as this study lacks the data to speak to the attitudes and perceptions of patrolling rangers in the park, respondents with knowledge of the park services' actions during the shutdown repeated that only law enforcement

rangers had inside knowledge of the shutdown. The reality in the park that can be observed, then, points to a reproduction of the hegemonic governmentality of GSMNP by law enforcement personnel through a reification of the federal authority present.

IV. Inequality inside and outside the park

Although the theme of economic loss was present across multiple stakeholder groups, the effects of the 2018 shutdown in GSMNP were not shared equally. Financial disparities were exacerbated, historical marginalization was compounded, and overall inequality was magnified. Inside the park, stipend-dependent interns and seasonal employees suffered disproportionately to their colleagues, and although this fact was widely acknowledged by park service managers, it is clear that little could be legally done due to NPS policy. Outside the park a more subversive form of marginalization played out due to the material history of the region, as the originally displaced communities that make up the tourism-dependent gateway towns were plunged into deeper disenfranchisement by the government's closure. Political ecology is an especially salient tool for analyzing power differentials leading to disparate outcomes (Robbins, 2011), and the 2018 shutdown in the park contains numerous examples of this theoretical construct made real. Although the exaggeration of social and economic disparities by federal imposition has been well documented in numerous cases (Nightingale, 2011; Brockington and Igoe, 2006), the lapse of governance in the case of the 2018 shutdown demonstrates how the immediate removal of federal authority similarly compounds these unequal relations.

Not all employees of the park are hired as full-time, salaried workers- some are dependent upon seasonal contracts that must be renewed during specific time periods, and some are classified as 'interns', individuals who work in exchange for housing, a stipend and job experience. Several respondents noted that while the shutdown was challenging for all rangers from a morale perspective, the heaviest burdens fell on these already marginal employees. Already paid less and in less-stable positions of employment compared to full-time park employees, the shutdown led to suspension of pay for all employees, intern staff included. Although the pay freeze was shared by all employees, ranger respondents noted that this was hardest on the staff members who were likely younger and paid far less. From a political economy perspective, this could be said to be an accident of organizational structure, but a more widely defined view situates the populations likely to hold these positions as already marginalized by their age, lack of financial resources and distance from their support networks, as several respondents noted. From a political ecological perspective, then, the shutdown reproduced unequal social relations, despite the efforts of park supervisors to reach out to their more vulnerable staff. The shutdown also led to the eviction of at least one seasonal staff member from park housing when their contract expired during the park closure and could not be renewed due to the suspension of NPS work activities. While NPS jobs were widely seen as generally stable within the interviewed ranger population, these instances demonstrate the introduction of a form of precarity into the institutional structure of the park employee network, particularly with respect to already vulnerable staff. Additionally, while park staff were widely treated to dinners hosted by the local community and furnished with essential goods such as diapers and gift cards by local

businesses, it was noted that ethics laws prevented any individual park staff from receiving over a certain total amount (\$50), no matter what their initial wages may have already been. Thus, while businesses in the communities surrounding the park attempted to reach out and support furloughed rangers, NPS policy prohibited differentiated financial responses to meet individual rangers at their level of need. While it was reiterated several times that supervisors were aware that some of their staff was more at risk financially than others, the conditions of the shutdown and ethics laws surrounding how much outside aid park employees could receive meant that the material reality of marginalization was compounded by the cessation of government funding.

On a much longer temporal scale, the nature by which the shutdown impacted local communities represented an especially subversive form of disenfranchisement wherein the historically displaced communities around the park were further marginalized by the federal government's closure. The creation of the park and the attendant eviction of local community members from their historical homes meant that the region was forced to evolve into a much more tourism-dependent economy, a marked shift from the diversified economy that existed prior to the park's founding. The shutdowns compounded this marginalization, leading to a discrete and painful hollowing out of the civic infrastructure of the region. It should be additionally reiterated that the white settler displacements of the 1920's and 30's were not the only displacements in this region, as the Indian Removal Act of 1830 led the area to be initially vacated of its indigenous inhabitants (Dunnl, 1988). This section focuses mainly on the impacts of the shutdown on the communities that were displaced in the 1930's, partially because they

were directly related to the establishment of the park, and partially due to the difficulty of contacting individuals in the adjacent Qualla Boundary/Cherokee Reservation to accumulate data. A note of irony is to be found, however, in the framing of 'the park' as an enduring entity by several respondents who simultaneously acknowledged the area's existence and importance to indigenous tribes prior to their removal.

After the displacement of the Cherokee and before the park was founded, the local industry and economies of the region were highly developed and modern relative to the time. Timber milling, blacksmithing, banking and small businesses sustained the communities inside the park, and they operated not as disparate centers, but as enmeshed players within their region (Dunn, 1988). The displacement of these communities in order to acquire land for the park required that these communities change the nature of their industry to survive, and in the case of Townsend, Tennessee on the northwestern border of the park, tourism catering to park visitors became the primary industry. As such, room taxes and food taxes are now nearly exclusively responsible for funding firefighters, police, and schools. This particular change can be best understood through the export-base theory as described by Machlis and Field (2000) who describe the nature by which park gateway communities rely on outside tourism (the export) to maintain public services (the base). Thus, communities such as Townsend, Tennessee rely on a highly seasonal tide of visitors to the park to fund their most basic civic infrastructure. This direct correlation between tourism driven by the park and the ability of local communities to function was mentioned several times in interviews, linking the 2018 shutdown to reduced civic funding. In this, it is important to remember that this export-base problem was created by the establishment of the park

and the displacement of citizens, so the shutdown nearly 100 years later represents the latest incidence in a long line of marginalizing occurrences perpetuated by the federal government on the residents of Townsend. In other words, the historical context of the region means that this community is nearly fully dependent upon the park, making shutdowns a highly localized issue with significant historical precedent. The federal government of the United States has thus come to play a bete noire in the region as its repeated actions first dislocated the communities, deprived them of their local economies and then closed the primary economic driver of the region upon becoming politically unstable. As one community leader put it:

"You know, if you're gonna go in and move people off the land, and take their families and uproot them and move them because you're trying to make a place for, to maintain the beauty of the area and make it available for people all over the world to be able to visit, you know, don't be so quick to shut it down"

- Local Government Official

The problem of national parks and rural development is one with many facets, but the unique historical context within GSMNP and its gateway communities has led to some unfortunate realities. One local business leader noted that Dollywood (a Gatlinburg amusement park half an hour from Townsend) and Great Smoky Mountains National Park are the 'twin poles' of the local economy, meaning that when shutdowns occur, traffic is much more highly concentrated in the more developed areas around the park, leaving smaller, more rural communities to suffer disproportionate economic losses. Furthermore, Townsend is unique among gateway communities to the park in

that it established a collection of trusts, land-use plans and zoning ordinances to preserve the rural character of the community whereas nearby Gatlinburg and Pigeon Forge have undertaken no such plans, and have built up extensive tourism infrastructure that is independent from the functioning of the federal government. This tourism infrastructure has the effect of insulating their tax base, and by proxy, their public services from shutdowns. As Machlis and Field (1999) note, the National Park Service has been complicit in this disparity, working neither to assist nor resist either form of development, whether protective or expansive. As park involvement in local communities' development is widely at the discretion of park administration, it must further be observed that Great Smoky Mountains National Park, as an entity, has played a significant role in the economic fates of the small gateway communities surrounding the park.

The relationship observed between the historically displaced communities around the park and the federal institution itself is compelling because it fits within the wider literature concerning the role of eviction in establishing protected areas, a linkage that is seldom made explicit with regards to Great Smoky Mountains National Park. In their 2006 literature review of eviction and protected areas, Brockington and Igoe note that '...the act of eviction alone [is] but one part of a whole series of marginalizations...' a reality borne out in unique fashion in the gateway communities during the 2018 federal shutdown. While nearly 100 years separate the displacements that made way for the park to be established and the most recent partial closure, a tradition of disenfranchisement and impoverishment remains a core theme in the relationship between the park and its social environs. While such a connection has been observed

and documented in numerous various international contexts, it is revelatory to see this pattern manifest in the eastern United States as recently as 1934, and likely before that in the form of the removal of indigenous populations. Furthermore, studies that have analyzed conflicts between biodiversity conservation and poverty reduction have documented that when given this choice, governments overwhelmingly choose to utilize force to evict residents, and in doing so further a pattern of impoverishment and disenfranchisement. The case of Great Smoky Mountains National Park strongly supports this hypothesis, and shows how the uniquely American context of political instability and federal shutdowns further serves to reproduce this pattern of marginalization.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

"... It seems like they, the parks, they do this and then when they open back up, it's just out of sight out of mind and nobody thinks about it anymore."

Local government official

I. Transformation and Failure

During the 2018-2019 shutdown, park space in Great Smoky Mountains National Park was both shortened and transformed by the reshuffling of social relationships. This took place in both the collapsing of geographical space between local communities and far-off federal structures and the radical democratization of park space by network actors who assumed NPS roles. This collapse of space is best seen in the dissolution of barriers to communication between local and federal figures and the formation of new social relationships, representing the creation of a new, foreshortened space that included figures of marginal and elite power working together. During the shutdown, a narrative of the park as a necessarily open and accessible space was reproduced, and the park's status as a federal structure was reinforced mainly through the continued operations of park law enforcement officers, the sole rangers spared from the furlough. Although this local narrative was subverted in part by a nationally-driven perception of the park in crisis, this wide-ranging crisis narrative appears not to have manifested objectively in the park, but rather compelled individuals to respond in certain ways as

they anticipated destruction of park property. Nonhuman actors in the park continued on in their creation of the 'beastly universe', as they exerted agency over formerly human-dominated spaces, remaking the landscape to suit their needs and requirements. In some cases, this was perceived as simply irritating to park staff, while in others, it represented an invasion of unwanted creatures. In both cases, however, the imposition of non-humans onto novel territories demonstrates how the shutdown allowed for animals and weather phenomena inside the park to serve as unique social actors in the production of new literal and figurative spaces. Outside the park, local businesses suffered directly and indirectly as their revenue sources and mechanisms for civic funding were cut off, representing a significant blow to their local economies. These occurrences represent the latest instances of marginalization in a nearly 100-year history of displacement and disenfranchisement by the United States government.

What is novel about these occurrences is not only the material context within which they take place, but that they are direct consequences of political instability in the United States. This study has sought to improve the understanding of changing park space during shutdowns, but the political context in which these occurrences is essential to understanding them. While federal shutdowns are becoming increasingly lengthy and are threatened in nearly every budget cycle, their regularity should not obscure the fact that they represent a lapse in governmental functionality. For all the cost accounting and post-mortem political analysis that takes place in wake of shutdowns, little attention is given to the material consequences of this instability, and the results of this study should be seen as providing evidence of this phenomenon. The back-and-forth gamesmanship at the federal level that leads to closures was not lost on

interviewees in this study (as referenced in the quote at the beginning of this chapter), and although this work has approached the shutdown as a natural experiment, its status as a failure of governance is of paramount importance. Numerous modern political writers have begun pointing to America's status as a declining superpower, sometimes even repeating a narrative as the United States as a 'failed state' (Sunkara, 2020; Packer, 2020), and while this in itself is a contentious term (Call, 2008), the abdication of federal authority in GSMNP for over a month provides a measure of support to these arguments. Although a particular idea of the park was reproduced during the closure, its differentiation from federal authority is indicative of the overtaking of federal structures by network governance actors as the central governmentality erodes. This is not a question of definitions and verbiage, but rather a critical lens onto what is taking place within the United States of America as its federal government regularly abdicates its seat of power and influence. This study in Great Smoky Mountains National Park is not merely a theoretical exercise, but rather takes the measurement of vacated federal space and its subsequent occupation. Critics of this work may state that such study of political instability in the United States is an oversimplification or even worse, a mischaracterization, but between the examination of this definition in Chapter 2 and the lived experience described by interviewees in Chapters 4 and 5, I believe that I have shown these concerns to be without merit.

Although this study cannot definitively claim to represent the full impact of instability on conservation objectives across the entire National Park Service, it does conclusively demonstrate the impact of failed governance within the context of Great Smoky Mountains National Park. This linking of political instability and the governance

of national park space has significant implications for the American system of government at large, as it represents a novel experiment in a generally understudied field. Significant literature exists that links instability in African countries to failed conservation objectives, but at the time of this writing, few domestic studies of this sort have been undertaken, and certainly none exist that engage with federal shutdowns on these terms. As shutdowns are increasingly frequent and lengthening events, the insights gleaned from this thesis into how park space is transformed sets an important precedent for analyzing how instability at the elite levels of government produce spatial and social transformations in discrete locales. An additional strength of this work is that it has sought to employ the political ecological framework in its fullest incarnation, where actors of all levels of power and across different species collectively produce and influence landscapes. As such, the incorporation of nonhuman actors into understanding how political instability manifests is an important element of this work, and represents a new and unique conception of the social production of space.

What then, is the legacy of the 2018-2019 shutdown in Great Smoky Mountains National Park? With its physical boundaries still intact and rangers back at work, can the 35-day governance lapse be said to have had a lasting impact? Building from an understanding of space as socially constructed, this study argues that yes, the impact of the shutdown transformed park space both during the closure and in its wake. With those social actors still in play in the local landscape and a material history of collaboration and hegemonic reproduction now established, it seems highly likely that in future governmental shutdowns similar social reproductions will unfold and reproduce park space along these predetermined paths. What happened 14 months later then,

represents a terrible and fascinating second natural experiment as the Coronavirus pandemic swept through the nation and caused Great Smoky Mountains National Park to close its gates once again on March 25, 2020.

During the pandemic closure (which lasted for 45 days) the park behaved much as it did during the earlier 2013 shutdown, with no opportunity for network actors to open visitor centers and restrooms. In the case of this closure the fact that rangers were still being paid by the federal government was unique, but the effects on the local communities were devastating and familiar. As the influx of spring tourists ground to a halt, local businesses immediately began to lose revenue and closed their doors to mitigate their financial losses, encouraged employees to file for unemployment, and braced for the hardship ahead. One hotel owner described losing \$30,000 in advance reservations overnight as the closed park and the fear of sickness caused travel plans to shift dramatically. A local nonprofit described how so many small businesses had shut down permanently that long-distance hiking in the region would no longer be possible. Other individuals chose to ignore the park closure entirely and illegally hiked in regardless of the shutdown, returning with tales of emboldened and unafraid wildlife roaming the now-empty park. While the pandemic closure was unique in that it did not provoke a sense of resentment at the federal government, both Townsend businesses and non-human actors assumed familiar roles during the 2020 Coronavirus closure and proceeded to act out a now-rote script of economic hardship and spatial reappropriation.

In this way, the legacy of the 2018-2019 shutdown can be seen the most clearly, as it established patterns of action to be followed by different actors when the park closes. The historically displaced communities understand that when the park is closed

to visitors, whether it be due to a government shutdown or a global pandemic, tourist traffic will become scarce and both business revenue and civic funding will evaporate. This is the long-term effect of the parks' establishment and subsequent removal of communities with independent economies. In the case of nonhuman actors, park closures seem to indicate an opportunity to appropriate formerly human-dominated space and remake the beastly universe with new boundaries. Examples of this nonhuman agency can be seen in the wild pigs that directly transform landscapes through their rooting, and continue to do so at greater levels when hunting ceases, and the smaller animals that invade abandoned buildings when rangers are furloughed. Depending upon the relationship between these actors and the goals of the park, this may be seen as benign or as degrading to park space, but these instances are ultimately important because they represent challenges to the NPS' attempts to tell a specific story about the park and ability to socially reproduce federal space. In either case, it is clear that shutdowns for any reason lead to both loss and reclamation-loss of economic independence and stability for adjacent human communities, and an opportunity for nonhumans to reclaim park space.

II. "What would happen if the park shut down next October?"

Anticipating that actors in and around the park would develop mechanisms to cope with repeated shutdowns, interview respondents in this study were asked to forecast and predict what would happen if the park were to shut down in October 2020 (the deadline for Congressional budget submissions and the month when most

shutdowns occur). The answers reflected awareness of the trends observed during the 2018 shutdown and the Coronavirus closure of economic hardship, frustration, and spatial reappropriation, but did not allude to incidences of planning for shutdowns as a predictable occurrence. While some nonprofits did note that they would likely follow a similar pattern of action as they did during the 2018-2019 shutdown and had set aside emergency funds to respond as such, neither park rangers, government officials, nor local business owners indicated that they had plans to weather future shutdowns more effectively than they had in the past. This finding indicates that shutdowns are widely perceived as unique and unpredictable events, even though they occur regularly and in increasing length. Several interviewees stated this view directly, demonstrating that even though 21 shutdowns have occurred since 1976 (Frazee, 2019) they are still not understood to be a feature of modern American government. It is important to make the additional note that some of the actions undertaken by nonprofits in 2018 were outside the legal scope of acceptable communication with the park service, indicating that the legal structures currently in place are insufficient to respond to shutdowns. Additionally, the openness with which government officials expressed their interest in undertaking illegal actions to reopen the park further emphasizes the inadequacy of current shutdown planning. If the expected pattern for future shutdowns is then one of continued marginalization on the part of local community members and helplessness on the part of park staff, where only illegal and unconventional actions can mediate the damage of closure, it would serve all populations to look to the future and establish new patterns to be followed should future, longer shutdowns take place. The following part of this study draws from my analysis and puts forward several recommendations for

overcoming the current shutdown scripts, focusing specifically on actions that NPS staff, park boundary organizations and local governments can undertake.

Suggested actions for NPS staff

Law enforcement rangers should proactively coordinate directly with local and county first responders to ensure that park roads and boundaries are fully maintained and accessible where appropriate. Numerous discussions with state game wardens and local police officers revealed that a severe communication gap exists between GSMNP rangers and local law enforcement officers due to jurisdictional concerns, meaning that during shutdowns coverage of the park for health and safety is left exclusively up to a diminished federal force. Additionally, comments from local government officials suggest that in the event of a prolonged shutdown there was a desire to staff the park with local law enforcement- since this would amount to a challenge of federal authority, it is important that potential jurisdictional conflicts are proactively addressed. The installation of an annual mid-August meeting (the month before most shutdowns begin to manifest) to delineate ongoing issues, park needs and respective responsibilities during shutdown periods would be an important first step towards improving communication and eliminating questions about jurisdictional conflicts during shutdowns. The main purpose of this coordination would be to establish the role of local officers with respect to NPS law enforcement personnel to alleviate jurisdictional conflicts and ensure that needs are met when appropriate.

- To better respond to the communication blackout, park leadership and individual departments should maintain an alternate communications list that is activated during shutdowns. This will help to coordinate park ranger needs and aid disbursement when use of official channels is prohibited. Interview data showed that this was a significant barrier to communication within NPS networks, and that there was concern of some populations not receiving the support they required, leading to extensive work-arounds becoming necessary. In the interest of recreating a secure and effective communication service, contacts included in this list need to reflect personal email accounts and phone numbers and these lists should be maintained by NPS division chiefs.
- Similar to law enforcement officers, individual department heads should conduct an annual late-September meeting with their network actors and volunteers to give an overview of current activities being undertaken and to delineate responsibilities in the case of a shutdown. It was clear from the patterns of action during the shutdown that numerous boundary organizations and 'Friends' groups were pivotal in navigating the park closure, although most of the turnover of responsibilities happened in the last hours before the park closed. Establishing responsibilities ahead of time ensures that roles are filled quickly and appropriately in the event that park staff are unable to fulfill their duties.
- Department heads would also serve their teams and divisions well by instituting
 ICS training for all the employees that they oversee. A consistent issue that came
 up numerous times in interviews was that law enforcement personnel under the
 Incident Command Structure were the only individuals who knew what was

taking place in the park during shutdowns. Exposing non-law enforcement rangers to this administrative structure would allow for better understanding of how the park is run during shutdowns and significant events such as the COVID-19 closure.

- One of the most concerning perpetuations of injustice during the shutdown came in the form of the disproportionate effects on different National Park Service employees. While some rangers had the resources to weather the furlough, others who were already at a financial and resource disadvantage suffered the highest losses. In order to mediate the worst of these occurrences, park leadership should first conduct a needs assessments of all seasonal and nonpermanent staff to best understand the disproportionate effects of shutdowns, and second, institute corrective measures to reduce precarity during park closures. As declining mental health during shutdowns was an issue repeatedly raised by NPS personnel, contact between park staff and local mental health and social service providers should be coordinated, so that employees suffering due to the shutdown can access the resources that they require. Education about the Interior Federal Credit Union should also be disseminated widely so that loans during shutdowns can be more easily accessed, and general pre-planning to mediate specific issues should be undertaken.
- The most egregious of losses described by park staff were those employees
 whose contracts expired and were subsequently displaced from park housing
 during the shutdown. As displacement has been raised as a serious issue in this
 study, this represents an especially cruel byproduct of the park closure. It is the

feeling of this author that housing should be sacred and that park staff should exercise whatever discretion they possess to prevent such occurrences from happening in the future.

Suggested actions for park-affiliated nonprofits

- While the onus for action should fall on the park to initiate shutdown planning, park affiliated nonprofits should plan ahead for future park closures and develop Memorandums of Understanding to be undertaken when shutdowns occur. These memorandums would formalize the actions to be taken and streamline the points of contact between relevant leadership positions, and provide a form of continuity between shutdowns. The benefits of formalizing this process is that nonprofits will not have to be concerned that they are performing illegal actions and that communication will be clearer. Additionally, such memorandums will allow each shutdown response to benefit from an iterative process of measurement and improvement over time, ensuring that responses are effective and appropriate.
- Nonprofits should consider planning for and initiating a capital campaign to
 reopen the park during shutdowns. As friends of the park-type organizations
 currently bear the financial burden of reopening visitor centers, and a pervasive
 crisis narrative seems to inform the public of how national parks suffer during
 shutdowns, it makes sense to capitalize on and benefit from this confluence of

narrative and needs. Interview data suggests that donations to this effect were received during the 2018 shutdown, and it would be advantageous to formalize and expand this occurrence. Disaster relief organizations such as Team Rubicon undertake successful volunteer enlistment drives during natural disasters, and GSMNP-affiliated nonprofits should examine this financial opportunity.

Suggested actions for governments in park-adjacent communities

The suggested actions so far have focused on enhancing safety in closed parks, mitigating the chaos of park administration handing power over to a network of boundary organizations, and shoring up nonprofit finances. The following recommendations represent a break in these themes to focus instead on mitigating the financial loss and marginalization of gateway communities. One of the normative goals of the political ecological framework is to reduce injustice, and this is the intent of the following suggestions. Acknowledging that local communities lack the power to prevent shutdowns and that few economic options other than reliance on tourism exist in these gateway communities, the focus in these suggestions represents encouragements to reorganize civic structures, provide a form of shutdown insurance, and consolidate political power in an effort to mitigate further marginalization.

 Political instability in the federal government puts tourism-dependent gateway communities at risk, so there is a need to reassess civic and economic structure in order to provide local stability. While financial loss occurs first and foremost in the loss of revenue to local businesses, this ultimately manifests across the entire community in the corresponding lack of taxed income to support civic infrastructure. Local communities and county governments thus need to insulate civic funding from shutdowns by considering incorporation options with non-tourism-tax funded institutions. By consolidating civic funding between tourism-dependent and non-tourism communities in the county/region, some communities will be aided by the increase of tax dollars from gateway communities and gateway communities will have assurances that shutdowns will not put them at such great risk. Incorporation is a significant step that is sometimes conflated with a loss of sovereignty, but if restricted to the most direly affected tax-funded institutions and if introduced in the wake of a shutdown, may become more politically palatable.

with deference to the businesses in gateway communities that are impacted directly by loss of revenue, individual communities should redirect a portion of room and tourism taxes to establish a bailout fund for tourism businesses impacted by shutdowns. An independent shutdown-relief committee should be formed to oversee and disburse these funds, taking applications from affected businesses and distributing grants were needed. The formation of such an organization and mechanism for relief would also allow for an accounting of the economic impact of shutdowns which may aid in applications from further relief from the federal government. An additional focus of this committee should be on educating local businesses of when shutdowns are likely to occur, and how to plan to mitigate exposure to loss. Interview respondents noted that October

shutdowns were especially deleterious because they coincided with higher hotel rates and thus 'cost' more- an initial suggestion of the committee could be to address this issue and put forth suggestions to reconfigure pricing structures to avoid this additional loss of revenue.

• The formation of a gateway community bloc with fully tourism-dependent gateway communities (such as Tusayan, AZ, Springdale, UT, Bar Harbor, ME, etc.) would help to consolidate political power during shutdowns and take advantage of collapsed geographical space. The purpose of such an organization would be to better advocate for the needs of park-centric gateway communities at a time when attention is most focused towards them. This study's results indicate that during and immediately after shutdowns gateway communities enjoy an unusual level of contact with their state and national representatives, and taking advantage of this phenomenon would represent a savvy reappropriation of this collapsed space.

Suggested actions for scholars

This study has sought to examine the consequences of political instability in American national parks, but has done so within a surprising vacuum of recent scholarship into the phenomenon of instability in the United States. This is not to state that the foundations upon this work are insufficiently rigorous, but rather to note that research into instability in the United States is severely lacking. This author would like to recommend that geographers, ethnographers, political scientists and sociologists all make efforts expand upon the existing research into sudden, dramatic governance changes in the United States of America with the goal of understanding its origins, manifestations and consequences. As has been described in the literature review section of this paper, continuing research does not necessarily need to be bound to violent upheaval or federal shutdowns, but by employing existing definitions and conceptions of instability can add to this important field in a domestic context.

- As this thesis has demonstrated, federal shutdowns are complex and dramatic events which are likely to continue. Scholars should approach these massive natural experiments as 'targets of opportunity' and seek to examine them in real-time, rather than conduct post-mortem analysis of archived internet data.

 Positioning research projects to be ready to interview actors, analyze transforming federal space and examine changing networks is an important next step in understanding and mediating these uniquely American phenomena.

 Furthermore, most existing literature on shutdowns focuses on the economic impacts of closed government services, but does not probe the social, psychological, spatial, or environmental consequences of abdicated federal leadership. This author's recommendation is that scholars of different disciplines should develop prospectuses and protocols for iterative research into shutdowns as they occur in order to fill the gaps in our understanding.
- A familiar call within the community of practice of political ecology has been to reintegrate ecology into case studies and not allow it to be subsumed by political

analysis. This study has attempted to do that, but has found that the initial criticism is well-founded, as relatively little modern political ecological writing meets this challenge. As 'the beastly universe' has been a consistent theme in this writing, this author would like to recommend that other scholars continue to probe this understanding of the non-human world, particularly in how it is theoretically constructed and how it relates to other theoretical conceptions of the relationships between humans and animals (actor-network theory, resilience theory, etc.). The social production of space examined in this paper has demonstrated that the beastly universe can be seen to exist, but its construction and material context within the raw material of nature is not well understood, meaning that this is a rich mine for political ecologists who wish to reify the 'ecology' in political ecology. The focus on future scholarship need not be related to shutdowns either, as the beastly universe can be conceived of as existing in all places at all times, meaning that practitioners of this framework should be able to integrate this viewpoint into their research, no matter what field they find themselves working in.

III. Reclaiming the Mountains

On January 25th, 2019, the longest shutdown in American history ended, and with it, the governance lapse in Great Smoky Mountains National Park came to its

conclusion. Rangers returned to their offices to clear out overflowing inboxes and resume hiring for the upcoming summer, the citizens of Townsend began to take stock of their losses, and nonprofits who had opened restrooms and visitor centers during the closure stepped back to evaluate their contributions. The night following the park's reopening, one nonprofit held their annual black-tie fundraising gala and raised over \$600,000 from attending donors. Notably, the event featured rare appearances by two congressmen and the lieutenant governor of Tennessee as guests in a nod to the national prominence that the park attained during the shutdown (16th annual Evergreen ball celebrates Smokies, raises \$629,000, 2019). The following Monday, all 280 NPS staff members were back at work, and along with hundreds of volunteers, began chipping away at the deferred maintenance that had been impossible days earlier (Matheny, 2019). By many accounts, as the season wore on and rangers, townspeople, and animals alike resumed their normal activities, the memory of the shutdown faded like a bad dream- an aberration in an otherwise peaceful landscape. This landscape, however, would continue to bear the impacts of the shutdown, as the social interactions forged and abandonment of park space would not easily be forgotten.

When the park closes down, it is clear that spaces and opportunities open up.

New connections between normally disparate actors are forged, nonhumans remake park space, and the idea of the park is sustained by a diverse constellation of actors. How these occurrences play out is deeply rooted in the material history of the region and is ultimately inextricable from the workings of past actors. The goal of this study has been to understand these transformations within a politicized landscape to identify transformations and social injustices, and this research has shown that the greatest

losses manifested during park closures are borne by already-marginalized populations. To this point, the idea of 'reclaiming the mountains' becomes uniquely useful in understanding how shutdowns unfold in Great Smoky Mountains National Park: nonhumans reclaim space, nonprofits claim new responsibilities, and the government's claim to park space is reproduced by volunteers who step in to reopen the park. Historically displaced communities should lay their own claim, however; in a time of increasing political instability and an established pattern of disenfranchisement and iterative marginalization, there is a clear need to reconfigure their relationship to the park and lay claim to a new future.

Works Cited

16th annual Evergreen ball CELEBRATES Smokies, raises \$629,000. (2019, March 14). Retrieved February 02, 2021, from https://www.themountaineer.com/life/th-annual-evergreen-ball-celebrates-smokies-raises/article_e9be17d6-4665-11e9-a6a2-0b9e18ae0630.html

Adams, W. M., & Hutton, J. (2007). People, parks and poverty: political ecology and biodiversity conservation. Conservation and society, 5(2), 147-183.

Adler, P. A. Adler. P.(2003) The reluctant respondent. Inside interviewing: new lenses, new concerns. London: Sage, 153-174.

Alesina, A., Özler, S., Roubini, N., & Swagel, P. (1996). Political instability and economic growth. Journal of Economic growth, 1(2), 189-211.

Aisen, A., & Veiga, F. J. (2013). How does political instability affect economic growth?. European Journal of Political Economy, 29, 151-167.

Ake, C. (1975). A definition of political stability. Comparative Politics, 7(2), 271-283

Arnold, Amanda. "It Could Take Joshua Tree 300 Years to Recover From the Government Shutdown." The Cut, The Cut, 28 Jan. 2019, www.thecut.com/2019/01/the-government-shutdown-devastated-joshua-tree-national-park.html.

Barnett, Jackson. "Government Shutdown Still Hurting Colorado's National Parks." The Denver Post, 31 Jan. 2019, https://www.denverpost.com/2019/01/31/colorado-national-parks-government-shutdown/.

Bates, T. R. (1975). Gramsci and the Theory of Hegemony. Journal of the History of Ideas, 36(2), 351-366.

Berkes, F., Folke, C. and Colding, J. eds., 2000. Linking social and ecological systems: management practices and social mechanisms for building resilience. Cambridge University Press.

Biersack, A. (2006). Reimagining political ecology: culture/power/history/nature. *Reimagining political ecology*, 3-40.

Blaikie, P., & Brookfield, H. (1987). Defining and debating the problem. Land degradation and society/Piers Blaikie and Harold Brookfield with contributions by Bryant Allen...[et al.].

Bowes, M., Keller, P., Rollins, R., & Gifford, R. (2015). Parks, dogs, and beaches: Human-wildlife conflict and the politics of place. In Domestic Animals and Leisure (pp. 146-171). Palgrave Macmillan, London.

Boyd, W., Prudham, W. S., & Schurman, R. A. (2001). Industrial dynamics and the problem of nature. Society & Natural Resources, 14(7), 555-570.

Bratton, S. P. (1974). The effect of the European wild boar (Sus scrofa) on the highelevation vernal flora in Great Smoky Mountains National Park. Bulletin of the Torrey Botanical Club, 198-206.

Bratton, S. P., Harmon, M. E., & White, P. S. (1982). Patterns of European wild boar rooting in the western Great Smoky Mountains. Castanea, 230-242.

Braun, B. (2004). Modalities of posthumanism. Environment and Planning A, 36(8), 1352-1355.

Brenner, Barbara. 2001. Stakeholder Management and Ecosystem Management: A
Stakeholder Analysis on the Great Smoky Mountains National Park. MBA Thesis
Department of Environmental Economics Vienna University of Economics and Business
AdministrationNEURUS Research Exchange Program 2000/01.

Brenner, N. (1997). State territorial restructuring and the production of spatial scale: urban and regional planning in the Federal Republic of Germany, 1960–1990. Political geography, 16(4), 273-306.

Brockington, D. (2001). Women's income and the livelihood strategies of dispossessed pastoralists near the Mkomazi Game Reserve, Tanzania. *Human Ecology*, 29(3), 307-338.

Brockington, D., & Igoe, J. (2006). Eviction for conservation: a global overview. Conservation and society, 424-470.

Büscher, B. (2016). Reassessing fortress conservation? New media and the politics of distinction in Kruger National Park. *Annals of the American Association of Geographers*, *106*(1), 114-129.

Burger, J., Gochfeld, M., Powers, C. W., Kosson, D., Greenberg, M. and Toffler, B. L. (2009), Managing environmental problems during transitions: The department of energy as a case study. Remediation, 19: 99-122. doi:10.1002/rem.20206

Call, C. T. (2008). The fallacy of the 'Failed State'. *Third World Quarterly*, 29(8), 1491-1507.

Carspecken, P. F., & Carspecken, F. (1996). Critical ethnography in educational research: A theoretical and practical guide. Psychology Press. 154-164.

Cernea, M. M., & Schmidt-Soltau, K. (2006). Poverty risks and national parks: Policy issues in conservation and resettlement. World development, 34(10), 1808-1830.

Chaffin, Brian C., and Lance H. Gunderson. 2016a. "Emergence, Institutionalization and Renewal: Rhythms of Adaptive Governance in Complex Social-Ecological Systems."

Journal of Environmental Management 165 (January): 81–87.

https://doi.org/10.1016/j.jenvman.2015.09.003.

Choe, Y., & Schuett, M. A. (2020). Stakeholders' perceptions of social and environmental changes affecting Everglades National Park in South Florida. *Environmental Development*, 100524.

Cliff, A., & Haggett, P. (2004). Time, travel and infection. British medical bulletin, 69(1), 87-99.

Collins, S. L., Carpenter, S. R., Swinton, S. M., Orenstein, D. E., Childers, D. L., Gragson, T. L., ... & Knapp, A. K. (2011). An integrated conceptual framework for long- term social—ecological research. Frontiers in Ecology and the Environment,

9(6), 351-357.

Comay, L. and Vincent, C. (2019). National Park Service: Government Shutdown Issues. Retrieved from https://fas.org/sgp/crs/misc/IF11079.pdf.

Debonnet, G., & Hillman-Smith, K. (2004). Supporting protected areas in a time of political turmoil: the case of World Heritage Sites in the Democratic Republic of Congo. Parks, 14(1), 9-16.

Delcourt, Paul A., and Hazel R. Delcourt. 1998. "The Influence of Prehistoric Human-Set Fires on Oak-Chestnut Forests in the Southern Appalachians." Castanea 63 (3): 337–45.

de Merode, E., Smith, K. H., Homewood, K., Pettifor, R., Rowcliffe, M., & Cowlishaw, G. (2007). The impact of armed conflict on protected-area efficacy in Central Africa. Biology letters, 3(3), 299–301. doi:10.1098/rsbl.2007.0010

Douce, E., & Garder, J. (2019, January 16). How Is the Partial Government Shutdown Affecting National Parks? Retrieved from https://www.npca.org/articles/2029-Ow-is-the-partial-government-shutdown-affecting-national-parks.

Dovey, K. (2014). Framing places: Mediating power in built form. Routledge.

Dunn, D. (1988). Cades Cove: the life and death of a southern Appalachian community.

Univ. of Tennessee Press.

Duvall, C. S. (2011). Biocomplexity from the ground up: Vegetation patterns in a West African savanna landscape. Annals of the Association of American Geographers, 101(3), 497-522.

Escobar, A. (1999). After nature: Steps to an antiessentialist political ecology. *Current anthropology*, *40*(1), 1-30.

Facemire, C. R. (2020). Leveraging Stakeholders to Cover Budgetary Shortfalls in US National Parks: Lessons from the 2018/2019 Government Shutdown and Joshua Tree National Park. *Case Studies in the Environment*, *4*(1), 1-8.

Feng, Y. (1997). Democracy, political stability and economic growth. British Journal of Political Science, 27(3), 391-418.

Ferguson, Y. H., & Jones, R. B. (Eds.). (2012). Political space: Frontiers of change and governance in a globalizing world. SUNY Press.

Fischer, Alexandra Paige. 2018. "Forest Landscapes as Social-Ecological Systems and Implications for Management." Landscape and Urban Planning 177 (September): 138–47. https://doi.org/10.1016/j.landurbplan.2018.05.001.

Flick, U. (2002). Coding and Categorizing. In An introduction to qualitative research. Sage. 176-195.

Folke, C., Hahn, T., Olsson, P., Norberg, J. (2005). Adaptive governance of social-ecological systems. Annual Review of Environmental Resources 30: 441-473.

Forsyth, T. (2008). Political ecology and the epistemology of social justice. Geoforum, 39(2), 756-764.

Frazee, G., & Desjardins, L. (2018, December 26). How the government shutdown compared to every other since 1976. Retrieved from https://www.pbs.org/newshour/politics/every-government-shutdown-from-1976-to-now.

Gan, L. (2019). Actors, Partisan Inclination, and Emotions: An Analysis of Government Shutdown News Stories Shared on Twitter During Dec 2018 and Jan 2019.

Gandiwa, E., Heitkönig, I. M., Lokhorst, A. M., Prins, H. H., & Leeuwis, C. (2013). Illegal hunting and law enforcement during a period of economic decline in Zimbabwe: A case study of northern Gonarezhou National Park and adjacent areas. Journal for Nature Conservation, 21(3), 133-142.

Germic, S. A. (2001). American green: Class, crisis, and the deployment of nature in Central Park, Yosemite, and Yellowstone. Lexington Books.

Geyer, Robert, and Samir Rihani. 2010. Complexity and Public Policy: A New Approach to Twenty-First Century Politics, Policy and Society. Routledge.

Gilbert, S. (2019, December 3). Trump deploys 'surge' of park rangers to patrol Mexican border. Retrieved from https://www.theguardian.com/us-news/2019/dec/03/trump-deploys-park-rangers-patrol-mexican-border.

Goldsmith, S., & Eggers, W. D. (2005). Governing by network: The new shape of the public sector. Brookings institution press.

Gorden, R. L. (1998). Basic interviewing skills. Waveland Press. 23-41.

Gorden, R. L. (1998). Basic interviewing skills. Waveland Press. 145-165.

Gunderson, L.H. and C.S. Holling (Eds.). 2002. Panarchy: Understanding

Transformations in Human and Natural Systems, Island Press, Washington, DC

Gottdiener, M. (1993). A Marx for our time: Henri Lefebvre and the production of space. Sociological Theory, 11(1), 129-134.

Hamilton, A., Cunningham, A., Byarugaba, D. and Kayanja, F. (2000), Conservation in

a Region of Political Instability: Bwindi Impenetrable Forest, Uganda. Conservation Biology, 14: 1722-1725. doi:10.1111/j.1523-1739.2000.99452.x

Harvey, D. (1990). Between space and time: reflections on the geographical imagination1. Annals of the Association of American Geographers, 80(3), 418-434. Heslop, J., & Ormerod, E. (2019). The Politics of Crisis: Deconstructing the Dominant Narratives of the Housing Crisis. Antipode.

Hobson, K. (2007). Political animals? On animals as subjects in an enlarged political geography. Political Geography, 26(3), 250-267.

Hughes, T., & Chávez, K. (2019, July 9). Death on the trail: More Americans visit national parks, but fewer rangers on patrol. Retrieved from https://www.usatoday.com/story/news/nation/2019/06/29/national-parks-rangers-vanishing-putting-visitors-risk/1503627001/.

Huntington, S. P. (2006). Political order in changing societies. Yale University Press.

Jarvis, Jonathan B, and Destry Jarvis. "The Great Dismantling of America's National Parks Is under Way | Jonathan B Jarvis and Destry Jarvis." The Guardian, Guardian News and Media, 10 Jan. 2020, www.theguardian.com/environment/2020/jan/10/usnational-parks-dismantling-under-way.

Jessop, B. (1997). 1997a: Globalization and the national state: reflections on a theme of Poulantzas, Paper presented to the colloquium 'Miliband and Poulantzas in retrospect and prospect', City University of New York. Copy available from B. Jessop, Department of Sociology, University of Lancaster, Lancaster LA1 4YN, UK.

Jong-A-Pin, R. (2009). On the measurement of political instability and its impact on economic growth. European Journal of Political Economy, 25(1), 15-29.

Kay, C. E. (1997). ungulate herbivory, willows, and political ecology in Yellowstone. Rangeland Ecology & Management/Journal of Range Management Archives, 50(2), 139-145.

Kideghesho, J. R., & Msuya, T. S. (2012). Managing the wildlife protected areas in the face of global economic recession, HIV/AIDS pandemic, political instability and climate change: experience of Tanzania. Protected Areas Management, 65-91.

Kovacs, Kathryn E., Shifting Powers in the United States Government (August 12, 2019). In Public Law (Forthcoming). Retrieved from https://ssrn.com/abstract=3436361

Kraay, A., Zoido-Lobaton, P., & Kaufmann, D. (2002). Governance matters II: Updated indicators for 2000–01. The World Bank.

Le, Markus, Sara Mason, Mark Sowers, and Meredith Wojcik. 2016. "Wildlife in the Southern Blue Ridge Ecoregion: Assessing Management Impacts And," 113.

Lee, K. N. (1994). Compass and gyroscope: integrating science and politics for the environment. Island Press.

Lefebvre, H., & Nicholson-Smith, D. (1991). The production of space (Vol. 142). Blackwell: Oxford.

Lemco, J. (1991). Political stability in federal governments (pp. 3-35). New York: Praeger.

Lemieux, C., & Scott, D. (2011). Changing climate, challenging choices: Identifying and evaluating climate change adaptation options for protected areas management in Ontario, Canada. Environmental Management, 48(4), 675-90.

Leverington, F., Costa, K.L., Pavese, H. et al. Environmental Management (2010) 46: 685. https://doi.org/10.1007/s00267-010-9564-5

Linzey, D. W. (2016). Mammals of Great Smoky Mountains National Park: 2016 revision. *Southeastern Naturalist*, *15*(m8), 1-93.

Lorimer, J. (2007). Nonhuman charisma. *Environment and Planning D: Society and Space*, *25*(5), 911-932.

Luo, F., Moyle, B. D., Bao, J., & Zhong, Y. (2016). The role of institutions in the production of space for tourism: National Forest Parks in China. Forest Policy and Economics, 70, 47-55.

Machlis, G. E., & Field, D. (Eds.). (2000). National parks and rural development: Practice and policy in the United States. Island Press.

Maciha, M. J. (2014). *The practice of leadership: A survey of National Park Service chief park rangers* (Doctoral dissertation, Northern Arizona University).

Macleod, G., & Goodwin, M. (1999). Space, scale and state strategy: rethinking urban and regional governance. Progress in Human Geography, 23(4), 503–527. https://doi.org/10.1191/030913299669861026

Mason, J. (2002). Qualitative researching. 2nd edition. London: Sage. 63-83.

Massé, F. (2016). The political ecology of human-wildlife conflict: Producing wilderness, insecurity, and displacement in the Limpopo National Park. Conservation and society, 14(2), 100-111.

Massey, D., & Massey, D. B. (2005). For space. Sage.

smokies/51-9a00a912-9ddd-40d7-a4b5-79bf6734985d

Matheny, J. (2019, January 28). Thousands of furloughed volunteers back IN SMOKIES. Retrieved February 02, 2021, from https://www.wbir.com/article/news/local/thousands-of-furloughed-volunteers-back-in-

McDonald, N., Schoenebeck, S., & Forte, A. (2019). Reliability and Inter-rater Reliability in Qualitative Research: Norms and Guidelines for CSCW and HCI Practice.

Proceedings of the ACM on Human-Computer Interaction, 3(CSCW), 1-23.

Mirowski, P. (2013). Never let a serious crisis go to waste: How neoliberalism survived the financial meltdown. Verso Books.

National Park Service (NPSa). 2020. "Great Smoky Mountains National Park (U.S. National Park Service)." https://www.nps.gov/grsm/index.htm. Accessed 5/4/2020.

----- (NPSb). 2020. "Visitation Numbers."

https://www.nps.gov/aboutus/visitation-numbers.htm. Accessed 5/4/2020.

----- (NPSc). 2020. "Nature.

"https://www.nps.gov/grsm/learn/nature/index.htm. Accessed 1/27/2021."

----- (NPSd). 2019. "Amphibians."

https://www.nps.gov/grsm/learn/nature/amphibians.htm. Accessed 1/27/2021.

Neumann, R. P. (1992). Political ecology of wildlife conservation in the Mt. Meru area of Northeast Tanzania. Land Degradation & Development, 3(2), 85-98.

Neumann, R. P. (2003). The Production of Nature Colonial Recasting of the African Landscape. Political ecology: An integrative approach to geography and environment-development studies, 240.

Nightingale, A. J. (2011). Bounding difference: Intersectionality and the material production of gender, caste, class and environment in Nepal. *Geoforum*, *42*(2), 153-162.

Notzke, C. (2013). An exploration into political ecology and nonhuman agency: The case of the wild horse in western Canada. The Canadian Geographer/Le Géographe canadien, 57(4), 389-412.

Packer, G. (2020, September 04). We are living in a failed state. Retrieved February 08, 2021, from https://www.theatlantic.com/magazine/archive/2020/06/underlying-conditions/610261/

Perkins, H. A. (2020). Killing One Trout to Save Another: A Hegemonic Political Ecology with Its Biopolitical Basis in Yellowstone's Native Fish Conservation Plan. *Annals of the American Association of Geographers*, 1-18.

Peine, J. D., & Farmer, J. A. (1990). Wild hog management program at Great Smoky Mountains National Park. In *Proceedings of the Vertebrate Pest Conference* (Vol. 14, No. 14).

Petersen, B., & Hultgren, J. (2020). The Case for a 21st Century Wilderness Ethic. Ethics, Policy & Environment, 1-18.

Petersen, B., & Stuart, D. (2014). Explanations of a changing landscape: a critical examination of the British Columbia bark beetle epidemic. Environment and Planning A, 46(3), 598-613.

Pittillo, J. Dan, Robert D. Hatcher, and Stanley W. Buol. 1998. "Introduction to the Environment and Vegetation of the Southern Blue Ridge Province." Castanea 63 (3): 202–16.

Prato, T. (2003). Adaptive management of large rivers with special reference to the Missouri River1. Journal of the American Water Resources Association, 39(4), 935-946. Retrieved from

http://search.proquest.com.libproxy.nau.edu/docview/201329787?accountid=12706

Prato, T. (2006, January). Adaptive management of national park ecosystems. In The George Wright Forum (Vol. 23, No. 1, pp. 72-86). George Wright Society.

Prudham, S. (2004). Poisoning the well: neoliberalism and the contamination of municipal water in Walkerton, Ontario. Geoforum, 35(3), 343-359.

Purnomo, Eko Priyo, P. B. Anand, and Jin-Wook Choi. 2018. "The Complexity and Consequences of the Policy Implementation Dealing with Sustainable Ideas." Journal of Sustainable Forestry 37 (3): 270–85. https://doi.org/10.1080/10549811.2017.1406373.

Rangan, H., & Kull, C. A. (2009). What makes ecology 'political'?: Rethinking 'scale' in political ecology. Progress in Human Geography, 33(1), 28-45. doi:http://dx.doi.org/10.1177/0309132508090215

Rikoon, J. S. (2006). Wild horses and the political ecology of nature restoration in the Missouri Ozarks. Geoforum, 37(2), 200-211.

Robbins, P. (2011). Political ecology: A critical introduction (Vol. 16). John Wiley & Sons.

Roitman, J. (2013). Anti-crisis. Duke University Press.

Rosenblatt, P. C. (2002). Interviewing at the border of fact and fiction. Handbook of interview research: Context and method, 893-909.

Roth, R. J. (2008). "Fixing" the forest: the spatiality of conservation conflict in Thailand. Annals of the Association of American Geographers, 98(2), 373-391.

Runte, A. (1997). National parks: the American experience. U of Nebraska Press.

Schwitzer, C., Mittermeier, R. A., Johnson, S. E., Donati, G., Irwin, M., Peacock, H., & Colquhoun, I. C. (2014). Averting lemur extinctions amid Madagascar's political crisis. Science, 343(6173), 842-843.

Sevilla-Buitrago, Á. (2017). Gramsci and Foucault in Central Park: Environmental hegemonies, pedagogical spaces and integral state formations. Environment and Planning D: Society and Space, 35(1), 165-183.

Soja, E. W. (2013). Seeking spatial justice (Vol. 16). U of Minnesota Press.

Solnit, R. (2010). A paradise built in hell: The extraordinary communities that arise in disaster. Penguin.

Sørensen, E. (2002). Democratic theory and network governance. Administrative Theory & Praxis, 24(4), 693-720.

Sudibyo, D. L. (2019). Komodo Dragon Attacks: The Changing of Human and Environment Relations. Jurnal Humaniora, 31(2), 142-151.

Sundberg, J. (2004). Identities in the making: conservation, gender and race in the Maya Biosphere Reserve, Guatemala. Gender, Place & Culture, 11(1), 43-66.

Sunkara, B. (2020, November 01). America is a failing state. and establishment politics can't solve the crisis | Bhaskar sunkara. Retrieved February 08, 2021, from https://www.theguardian.com/commentisfree/2020/nov/01/us-politics-state-government-democrats-left

Svarstad, H., Benjaminsen, T. A., & Overå, R. (2018). Power theories in political ecology.

Terborgh, J., van Schaik, C., Davenport, L., & Rao, M. (Eds.). (2002). Making parks work: strategies for preserving tropical nature. Island Press.

The Effects of the Partial Shutdown Ending in January 2019. (2019, January 28).

Congressional Budget Office. Retrieved from https://www.cbo.gov/publication/54937

"The Government Shutdown Has Created a Crisis in Our National Parks." The Trust for Public Land, www.tpl.org/parks-in-crisis.

The Nature Conservancy (TNC) and Southern Appalachian Forest Coalition. 2000. "Southern Blue Ridge Ecoregional Conservation Plan: Summary and Implementation Document." The Nature Conservancy: Durham, North Carolina.

"The Undoing Of Our Public Lands and National Parks." National Parks Conservation Association, 10 Jan. 2020, www.npca.org/articles/2171-the-undoing-of-our-public-lands-and-national-parks.

"Under Attack." Public Lands, keepitpublic.nwf.org/under-attack/.

UNEP-WCMC, I. U. C. N. (2018). NGS (2018). Protected planet report.

Van Dyke, C. W. (2009). How far to the nearest arsonist? Representing a national landscape in Great Smoky Mountains National Park. University of South Carolina.

Vayda, A. P., & Walters, B. B. (1999). Against political ecology. Human ecology, 27(1), 167-179.

Walker, P. A. (2005). Political ecology: where is the ecology?. Progress in human geography, 29(1), 73-82.

Vivanco, L. A. (2001). Spectacular quetzals, ecotourism, and environmental futures in Monte Verde, Costa Rica. *Ethnology*, 79-92.

Walker, M. M. (2015). Producing Gorongosa: space and the environmental politics of degradation in Mozambique. Conservation and Society, 13(2), 129-140.

Warren, C. A. (2002). Qualitative interviewing. Handbook of interview research: Context and method, 839101. 83-101.

Watson, J. (1996). Charisma. International Wildlife, 26, 20-39.

Williams, M. A. (2001). Vernacular architecture and the park removals: Traditionalization as justification and resistance. Traditional Dwellings and Settlements Review, 33-42. Withers, C. W. (2009). Place and the "Spatial Turn" in Geography and in History. Journal of the History of Ideas, 70(4), 637-658.

Wolf, E. (1972). Ownership and political ecology. Anthropological quarterly, 45(3), 201-205.

York, A. M., & Schoon, M. L. (2010). Rangeland Collaboration: Effects of the Border Crisis on a Governance Network.

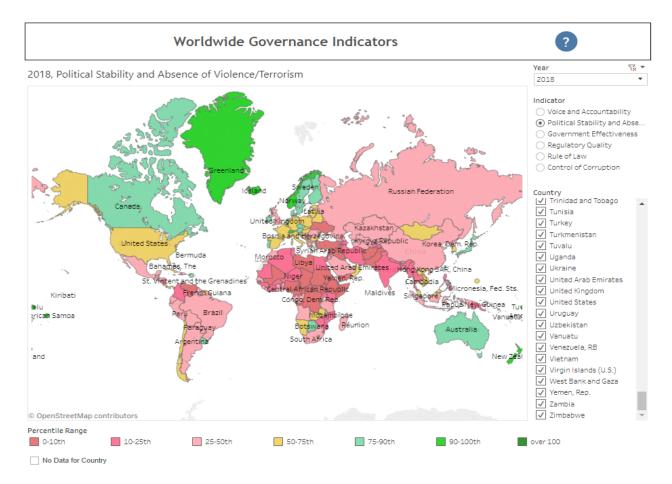
Young, T. (2006). False, cheap and degraded: when history, economy and environment collided at Cades Cove, Great Smoky Mountains National Park. Journal of Historical Geography, 32(1), 169-189.

Appendix 1:

Start date	How many full days?	Over what issue(s)?	How big of a shutdown?	White House led by a	House controlled by	Senate controlled by	Ended with
Dec. 22, 2018	35	\$5 billion in funding for a proposed border wall	Significant partial shutdown. 25 Percent of government was closed, 800,000 federal workers missed a month of pay.	Republican (Trump)	Republicans (until Jan. 3) Democrats (since Jan. 3)	Republicans	Short-term funding bill
Feb. 9, 2018	0 (it was 9 hours)	Deficit spending and recent tax cuts	Technical funding gap only	Republican (Trump)	Republicans	Republicans	Short-term funding bill
Jan. 20, 2018	2	Immigration, DACA specifically	Shutdown but with limited effect, occurring mostly over a weekend.	Republican (Trump)	Republicans	Republicans	Short-term funding bill
Oct. 1, 2013	16	Affordable Care Act	Significant shutdown	Democratic (Obama)	Republicans	Democrats	Short-term funding bill and short-term lifting of the debt ceiling
Dec. 15, 1995	21	Range of issues: Medicare, possible balanced budget law, size and scope of government	Significant shutdown	Democratic (Clinton)	Republicans	Republicans	Short-term funding bills
Nov. 13, 1995	5	Range of issues: Medicare, possible balanced budget law, size and scope of government	Significant shutdown	Democratic (Clinton)	Republicans	Republicans	Short-term funding bill
Oct. 5, 1990	3	The deficit	Shutdown with limited effect, occurring over Columbus Day weekend	Republican (George H.W. Bush)	Democrats	Democrats	Short-term funding bill
Dec. 18, 1987	1	Nicaragua, Medicare spending and rules for broadcasters	Technical funding gap only	Republican (Reagan)	Democrats	Democrats	Short-term funding bill
Oct. 16, 1986	1	Spending cuts, military equipment, and the death penalty in drug cases	Workers furloughed a half-day	Republican (Reagan)	Democrats	Republicans	Full-year funding bill and raising of debt ceiling
Oct. 3, 1984	1	Slew of issues: water programs, Nicaragua, defense	Workers furloughed a half-day	Republican (Reagan)	Democrats	Republicans	Full-year spending agreement and federal crime package
Sept. 30, 1984	2	Slew of issues: water programs, Nicaragua, defense	Technical funding gap only	Republican (Reagan)	Democrats	Republicans	Short-term funding bill
Nov. 10, 1983	3	Defense spending, foreign aid, dairy policy and education funding	Technical funding gap only	Republican (Reagan)	Democrats	Republicans	Full-year spending agreement and appropriations bills
Dec. 17, 1982	3	Two missile programs and a jobs programs	Technical funding gap only. Federal workers were told to work as normal	Republican (Reagan)	Democrats	Republicans	Full-year spending agreement
Sept. 30, 1982	1	Hobnobbing. A White House barbecue and Democratic fundraiser delayed processing of the short-term deal	Technical funding gap only. Federal workers were told to work as normal	Republican (Reagan)	Democrats	Republicans	Short-term funding bill
Nov. 20, 1981	2	Spending cuts	Limited effect, occurring over a holiday weekend. The first modern shutdown. Reagan ordered non-essential federal employees to go home	Republican (Reagan)	Democrats	Republicans	Short-term funding
Sept. 30, 1979	11	Pay raises for congressional staff and abortion	Technical funding gap, no shutdown. Some Pentagon workers got a few days' worth of half pay	Democrat (Carter)	Democrats	Democrats	Short-term funding bill
Sept. 30, 1978	18	Abortion and defense spending	Technical funding gap, no actual shutdown	Democrat (Carter)	Democrats	Democrats	Short-term funding bill
Nov. 30, 1977	8	Abortion	Technical funding gap, no actual shutdown	Democrat (Carter)	Democrats	Democrats	Short-term funding bill and agreement to let Medicaid fund abortions for rape and incest victims
Oct. 31, 1977	8	Abortion	Technical funding gap, no actual shutdown	Democrat (Carter)	Democrats	Democrats	Short-term funding bill
Sept. 30, 1977	12	Abortion. House and Senate divided over whether Mediald should fund abortions in cases of rape or incest	Technical funding gap, no actual shutdown	Democrat (Carter)	Democrats	Democrats	Short-term funding bill
Sept. 30, 1976	10	Spending	Technical funding gap, no actual shutdown	Republican (Ford)	Democrats	Democrats	Congress overrode Ford's veto

(Frazee, et al. 2018)

Appendix 2:



Source: Kaufmann D., A. Kraay, and M. Mastruzzi (2010), The Worldwide Governance Indicators: Methodology and Analytical Issues - https://papers.ssrn.com/sol3/papers.cfm?
abstract_id=1682130

(World Bank, 2018)

Appendix 3

Interview Protocol

Topic Domain One: Social interactions

Lead-off question:

Now, I am interested in hearing your story of the 2018-2019 shutdown. I wasn't

there so I want you to take me through the shutdown like it was a movie, giving

me as vivid a picture as possible.

[Covert categories: What new spaces were created during the shutdown? What

existing spaces were transformed (strengthened or destroyed) during the

shutdown? What spaces that were created during the shutdown have endured?

What mediating factors were critical in the transformation of spaces? How was

the shutdown handled? What are the interviewees perceptions of the socio-

political context of the shutdown?]

Possible follow-up questions

- You say the shutdown was _____. Can you tell me more about that?

- Have you described the shutdown to anyone else, like a coworker or

family member? Can you describe to me what you told them as closely as

possible?

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- How would you imagine someone like a park ranger/local business owner/tourist describing the shutdown like I just asked you to?

You said that _____ caused the shutdown. Can you tell me more about that?

Topic Domain Two: Use of park space

Lead-off question:

One thing that is interesting to me is how the shutdown affected so many parks.

Can you tell me about Great Smoky Mountains National Park during the shutdown? Who did what?

[Covert categories: What actors (human and nonhuman) assumed novel roles during the shutdown? How did wildlife behave during and after the shutdown? Was park space repurposed during the shutdown? Have shutdown uses of park space changed how it is used normally? What mediating factors affected how park space is used? What efforts to control what happened in the park were employed and did they work? What should have happened?]

Possible follow-up questions:

- Some newspapers said that during the shutdown parks were like 'The
 Wild West'- how does that match with your experience?
- Bears are such a big issue normally in the Smokies, how do you think the shutdown affected them?

- If someone wanted to do something illegal in the park, would they have gotten away with it?
- I know that the campgrounds opened late this year, why do you think that is?
- Joshua Tree National Park got a lot of press during the shutdown, why do you think that might be?

Topic Domain Three: Governance lapses over time

Lead-off question: I've made a short timeline of every time I'm aware of Great Smoky Mountains National Park shutting down in the past 25 years- do you think I got it right? I'd like you to take me on a tour through the timeline and explain what happened each time. If I missed anything important, feel free to add it.

[Covert categories: Was one shutdown worse than another? Do shutdowns have a political flavor? Who is to blame for shutdowns? Are shutdowns getting worse? Are local actors getting better at dealing with shutdowns? Who benefits from shutdowns? Who suffers the most as a result of shutdowns? Is the federal government shutting down parks good or bad? Does local culture play a role in how shutdowns are experienced?]

- What changes have been made immediately following the shutdowns?
- How do you think the local community/park is dealing with the last shutdown?
- If the parks shut down this October, what would happen?

- How do different types of shutdowns compare to each other? How is
 Covid-19 different or the same?
- What can you count on every time the parks shut down?

Appendix 4

List of Codes Used in Analysis

CLOSEACCESS: the park is inaccessible/less accessible during shutdowns

COMMONPROP: identifies the park as common American property

COVIDDIFF: federal shutdowns are different from the COVID shutdown

COVIDSAME: federal shutdowns are the same as the COVID shutdown

CRISISNARR: refers to or repeats the public-lands in crisis narrative

ECONLOSS: economic loss was caused by the shutdown

FEDJURIS: the park is identified as federal property

FRUSTRATE: the shutdown was frustrating

ILLNEVER: people did not commit illegal actions during the shutdown

ILLNO: people did not get away with illegal action

ILLPOACH: people poached during the shutdown

ILLTRESPASS: people trespassed during the shutdown

ILLVANDAL: people vandalized property during the shutdown

ILLYES: illegal actions occurred/people got away with them

LOCALJURIS: the park is identified as local property

LOCALUSE: refers to the specifically local use of the park

MGMTCHALL: the shutdown presented challenges to the parks' objectives

NATLATTN: national attention focused on the Smokies

NATRESOURCE: refers to Smokies' unique context

NEWSPACE: new spaces were occupied due to the shutdown

NODIFF: during the shutdown this was the same as it usually is

NPSCORRUPT: the NPS is a corrupt agency

OPENACCESS: the park is identified as an 'open' resource

PARKDISC: park staff discretion employed

POLPAWN: the park is used a political pawn

PUBLICUSE: public/non-local use of the park

RANGERSKNOW: only the law enforcement rangers know about illegal actions

RANGERSPATROL: ranger oversight continued during the shutdown

RANGERSHUT: ranger oversight was not present during the shutdown

RESOURCEHAZ: park resources became hazardous during the shutdown

SHUTINFRA: specific issue related to closed park infrastructure

SHUTSHOCK: shutdowns are random events

STEPUP: individuals/organizations occupied new roles to support the

park during the shutdown

UNEQUAL: the effects of the shutdown were unequal

WILDBAD: the shutdown was bad for wildlife

WILDGOOD: the shutdown was good for wildlife

WILDNEWTERR: wildlife occupied new spaces during the shutdown