AMERICA'S INTRACOASTAL WATERWAY

Understanding the nation through narratives about infrastructure

[Received April 13th 2023; accepted August 5th 2023– DOI: 10.21463/shima.204]

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ABSTRACT: Traversing the Atlantic and Gulf Coasts of the United States, the Intracoastal Waterway comprises 4828 km of protected canals, with 3218.7 km running from Boston to the Florida Keys, and 1609 km running from Carrabelle, Florida to Brownsville, Texas. Often used by commercial vehicles, especially in the transportation of petroleum and petroleum products, the canal gets understood and discussed within American society in a variety of ways. Reading across different texts, I explore how the Intracoastal Waterway has been narrativised, including within a lineage of settler-colonialism, as an ecologically disruptive infrastructure project and as a space for life-affirming encounters. Among these texts I find two dominant modes of narrativising this infrastructure project, each of which impact our understanding of it and, by extension, the nation. Hegemonic narratives emphasise the canal's place within a nation-wide history of colonisation, while local narratives emphasise the ecology, history, and people surrounding the canal. Altogether, by considering these different approaches we get a complicated understanding of how America gets understood, both locally and at the national level, through the stories told about its infrastructure.

KEYWORDS: Infrastructure, Intracoastal Waterway, Canals, Narrative, Environment

Introduction

Like fingers of water extending into land, rivers are often used as means of connection, drawing together disparate locations as well as ocean and interior. America's Intracoastal Waterway extends these possibilities by using relatively short human-made canals to interconnect existing natural rivers, bays and sounds. Traversing from Boston to Brownsville, TX, the Intracoastal Waterway is actually two separate waterways, the Atlantic Intracoastal Waterway, completed in 1947 (Parkman, 1983, p. 75), and the Gulf Intracoastal Waterway, completed in 1949 (Alperin, 1983, p. 36). The Atlantic Seaboard section of the Waterway runs from Boston to Norfolk (Virginia) and is more open to the ocean before moving into the heavily canaled southern section, which extends to the Florida Keys. The Gulf Intracoastal Waterway does not begin until Carrabell (Florida) leaving a gap in the Intracoastal Waterway along the west coast of Florida. Taken together, these canals offer 4828 km. of protected waterways, with the Atlantic Intracoastal Waterway traversing 3218.7 km. and the Gulf Intracoastal Waterway traversing 1609 km. (Figure 1). Far from being a single monolithic infrastructure project, the Intracoastal Waterway was constructed piecemeal, starting in the early 1800s as individual canals with the goal of protecting the passage of goods along the coastline's interior, as well as allowing inland towns and cities to become seaports. Dominant usage of the Waterway significantly differs between Atlantic and Gulf sections, with the

Atlantic section being mostly used by private pleasure craft, while the Gulf section is heavily used by commercial vehicles (Hezlep, 2019, p. 9, 36). Averaging 30.5 m. wide, generally of brackish water, the depth of the canal is intended to be a minimum of 3.7 m., though in places it may be only 15.25 metres wide or 1.5 m. deep (Bradley, 2011, p. 22). For up-to-date information on the Intracoastal Waterway, including its precise route and the yearly tonnage of goods transported on each section, I recommend *The United States Coast Pilot* series, produced by the National Ocean Service (NOS) and the National Oceanic and Atmospheric Administration (NOAA) and made freely available online.

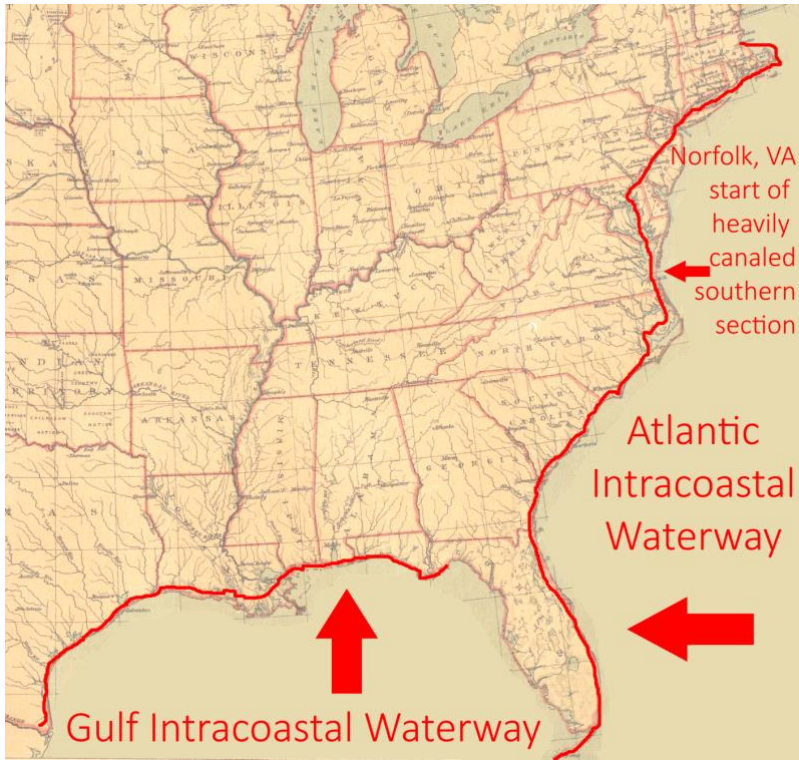

Figure 1 - Map of the United States defining the gross areas of the states and territories 1881 by Lionel Pincus and Princess Firyal (Map Division, The New York Public Library - modified by Aaron Pinnix, June 2023[1]).

As a national infrastructure project, the Waterway performs a substantial economic role, but it also is part of the story of America, both historically and contemporaneously. As I have found, there are two common, but importantly different, narratives that are frequently presented about the Intracoastal Waterway. The first is a nationalistic, hegemonic narrative, produced and published by the government, which approaches the waterway as a large-scale infrastructure project, emphasising its economic value while overlooking its local environmental effects, as well as the peoples and histories that do not easily fit a grand narrative of nation-building. The second type of narrative about the Intracoastal Waterway that I consider is noticeably more local. Such narratives often emphasise how the canal

[1] Available at: https://digitalcollections.nypl.org/items/32e72b10-58f9-0134-7360-00505686a51c

affects the environments and people around it, as well as attempting to uncover the hidden histories behind the canal. Exploring these differing narratives reveal the operations of power, since considering how a large-scale infrastructure project like the Intracoastal Waterway gets discussed, and what is or is not included in these discussions, can reveal how large-scale infrastructure projects entail a wide range of social and environmental impacts, as well as how different groups and people may have different vested interests for understanding the infrastructure in a certain way.

In this article I consider texts selected for their different approaches to narrativising the Intracoastal Waterway. By this, I mean that in these texts the Waterway is, in some way, the focus of the text. Necessarily many worthy texts are not discussed here, and my goal in selecting the works discussed here is to provide a sampling of how the Waterway gets transmitted and represented in stories, in turn revealing how narratives about the canal are wrapped up in America's understanding of itself as a nation. As mentioned above, I discovered two common modes of representing the Waterway, with one approach narrating the canal as a massive infrastructural project with nationalist implications, and the other being more local in nature and often considering the specific environments and people around the canal. In reading through various texts about the Intracoastal Waterway I looked for *how* the Waterway is depicted and discussed – for instance how is the history and labour of creating the canal represented and what roles does the canal play in the text. In this article I first discuss two texts produced by the government, or as I describe them hegemonic narratives, that emphasise the Intracoastal Waterway within a narrative of nation-building. These two texts are pamphlets produced by the US Corps of Engineers at the behest of Congress: Aubrey Parkman's *History of the Waterways of the Atlantic Coast of the United States* (1983) and Lynn Alperin's *History of the Gulf Intracoastal Waterway* (1983). While doing excellent work in presenting information about the early development and ultimately federalisation of the canals, important aspects remain absent, affecting how we understand the canal as a nation-building project. I then consider locally-attentive pieces, including biologist Roy Sawyer's discussion of how one section of the Intracoastal Waterway impacted a North Carolina swamp's ecosystem in *America's Wetland: An Environmental and Cultural History of Tidewater Virginia and North Carolina* (2010), Virginia McGee Richards photographs of a South Carolina section of the Waterway and the people who live near it, nature writer David Gessner's short piece 'Clappers' (2012), on how an encounter with a clapper rail bird while kayaking the Waterway inspired him, and the biography *Gib's Odyssey: A Tale of Faith and Hope on the Intracoastal Waterway* (2011), about a man's solitary journey on the Atlantic Intracoastal Waterway in the face of declining physical ability. Reading across these diverse works I explore how different narratives about an infrastructure project can help us to better understand the relationship between narratives and power, or alternatively, what sorts of information make it into what stories, and for what purposes. These differing narrative models reveal an important conceptual difference in what histories and experiences are understood as a part of America, and for whom. As I show, we can read through narratives about infrastructure in ways that reframe our understanding of the interplay between the national and local, and the roles of infrastructure in mediating these relationships, since, after all the Waterway traverses 4828 km of the USA.

My approach in this article is influenced by a recent infrastructural turn in the Humanities, in which infrastructure has become understood as entailing more than just material things like dams and roads, but also the cultural meanings such projects entail (Levine, 2010; Rubenstein, Robbins & Beal, 2015). First used as a French railroad engineering term in the mid to late 19th century to refer to the land, embankments, and bridges over which railways ran (Carse, 2016, p. 27), the term infrastructure entered the English language in 1927 in

reference to underground military constructions like tunnels or culverts before being applied to a broader web of civilian structures like roadways and waterways (Bowker, 2018, p. 212). In the late 1950s, NATO began to use the term to refer to heavy-construction projects in Western Europe, and the term morphed into the meaning it holds today, including referring to the structures and related services that organise and undergird our lives, such as roads, electrical, and water and sewage systems.

Recent critical discussions in the Humanities have highlighted how the meaning of infrastructure can also include its immaterial effects, what anthropologist Brian Larkin describes as infrastructure's "poetic mode" (2013, p. 335). Larkin defines infrastructures as "built networks that facilitate the flow of goods, people, or ideas and allow for their exchange over space," and notes that infrastructures "comprise the architecture for circulation, literally providing the undergirding of modern societies, and they generate the ambient environment of everyday life" (2013, p. 328). Infrastructures also function as "aesthetic vehicles" that "emerge out of and store within them forms of desire and fantasy and can take on fetish-like aspects that sometimes can be wholly autonomous from their technical function" (2013, p. 329). This "poetic mode" of infrastructure is more than infrastructure's purely technical function, but how "representations" of infrastructure are understood as "social facts" (2013, p. 335). As such, any infrastructure is more than simply the thing itself or what it accomplishes, but rather also how it is discussed and understood within society. Thus, considering the various social meanings of an infrastructure project can be a productive approach for exploring social mores and values. As I show, while a canal like the Intracoastal Waterway may suggest linearity, as an infrastructure project it also functions as a nexus for importantly different stories.

Alongside a growing interest in infrastructure within the Humanities, there has also been a growing interest in understanding America through its infrastructure. For instance, in his monograph *Empire's Tracks: Indigenous Nations, Chinese Workers, and the Transcontinental Railroad*, Manu Karuka explores America's transcontinental railroad as a history of continental imperialism, as a model of US authority built on the dispossession of Indigenous sovereignty, and as infrastructure for organising locally-situated economies (2019, pp. xii-xiii). Similar approaches of understanding America through its infrastructures are proliferating, such as Jessica Hurley's *Infrastructures of Apocalypse: American Literature and the Nuclear Complex* (2020), which considers the United States' nuclear infrastructure through literary representations produced by minoritised subjects. Describing the books' approach, Hurley argues for an "an intersectional understanding" of how infrastructures and environments "have been structured by, and in turn continue to structure, existing distributions of power along axes of race, class, gender, sexuality, ability, and indigeneity," modes of distributing power that Hurley proposes might also themselves be considered as infrastructural (2020, p. 11). Hurley's argument here aligns with my own discoveries, namely that infrastructures, the environment, and social identities are intimately entangled with narratives about infrastructures.

In addition to recent texts that consider infrastructures as a means of better understanding American culture, there have also been interesting texts that explore America's waterways in relation to American identity. For instance, the collection *Canal Fever: The Ohio & Erie Canal, From Waterway to Canalway* (Metzger and Bobel [Eds.], 2009) gathers a wide range of academic essays that argue for the titular canals' importance to American history and culture. Gerard Koeppel also provides a robust exploration of the Erie Canal as a nationalist project in *Bond of Union: Building the Erie Canal and the American Empire* (2009), while *Enterprising Waters: The History and Art of New York's Erie Canal* (2020) by Brad Utter,

Ashley Hopkins-Benton, and Karen E. Quinn, explores the Erie Canal through visual culture. In her 1996 monograph *The Artificial River: The Erie Canal and the Paradox of Progress, 1817-1862*, Carol Sheriff provides a fascinating look into how the creation of the Erie Canal was wrapped up with ideas of progress, as well as conversations about water and land rights. Moving to the Mississippi River, Walter Johnson's *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom* (2013) explores the river's role in the cotton trade and the creation of vast wealth. Similarly, considering the Gulf Coast in particular, Jack Davis's Pulitzer Prize winning book *The Gulf: The Making of an American Sea* (2017) presents a robust argument for considering America's Gulf Coast, through which much of the Intracoastal Waterway passes, as central to the history of the United States. Taken together, these various works show how canals and rivers were a part of America's narrative of westward expansion, the displacement of Native Americans, and frequently the use of slave labour, topics that similarly make up the history of the Intracoastal Waterway. While the Intracoastal Waterway has not received much academic attention thus far, it takes part in a similar history, and we might similarly understand the history of the Intracoastal Waterway as an important part of the history of the nation.

Hegemonic narratives of the Intracoastal Waterway

America's first coastal waterway navigators were, of course, Indigenous. Archaeological finds have shown that canoes were used 7,000 years ago in Florida (Wheeler et al., 2003). Similarly, the Algonquian were prodigious waterway navigators, and "up to twenty-four paddlers and 3,000 pounds of cargo could be carried in a single birch bark canoe" (Lytwyn, 2005, p. 256). However, many descriptions of the Waterway ignore such histories. Instead, many texts present a historical narrative that begins with European captains exploring the coast, thus connecting America's coastal waterway passages with Europe's colonisation of the Americas. Two good examples of this type of narrative can be found in a series of pamphlets published in 1983 on America's waterways. In 1976 Congress authorised the creation of a National Waterways Study that, in turn, tasked the Corps of Engineers' Institute for Water Resources with reviewing and documenting America's water transportation network. 10 related pamphlets were released in 1983, each focusing on a different section of the nation. The two that address the Intracoastal Waterway are Aubrey Parkman's *History of the Waterways of the Atlantic Coast of the United States* and Lynn Alperin's *History of the Gulf Intracoastal Waterway,* each of which present descriptions of the Intracoastal Waterway's early creation, the unification of canals via federalisation and its traits such as distance and depth. Parkman's coverage of Atlantic coast waterways begins with the sentence "[e]arly in the 16th century, only a few decades after Columbus accidentally discovered America, European navigators began sailing into the Atlantic coastal waters of the future United States" (1983, p. 1) and then continues to narrate the experiences of European explorer-captains, presenting America's water transportation network as an imperialist project in line with Columbus, Ponce de Leon and Verrazano, while also overlooking America's Indigenous populations. In the text, native people are reduced to trade partners with Plymouth colonists (Parkman, 1983, p. 27) and enemies of the American army (Parkman, 1983, p. 46). Similarly, Alperin's *History of the Gulf Intracoastal Waterway* begins with "[t]he earliest settlers in America quickly recognised the advantages afforded by inland waterways" (Alperin, 1983, p. 1). As its usage throughout the text shows, "settler" means European settlers. Both texts perpetuate a too-common narrative of American nation-building as being a defence against violent Indigenous peoples. For important correctives to this form of narrative, please see Roxanne Dunbar-Ortiz's *An Indigenous Peoples' History of the United States* (2015) and Pekka Hämäläinen's *Indigenous Continent: the Epic Contest for North America* (2022).

For one example of how America's original navigators are often relegated to minor roles in national history, we can look to the example of Haulover Canal on the east coast of Florida. As Parkman notes, the Corps of Engineers "cut a small canal in Florida between Mosquito Lagoon and the Indian River at a portage called the Haulover to permit easier movement of Army supplies in campaigns against the Seminole Indians" (Parkman, 1983, p. 46). Of course, the title of Indian River evokes the region's original inhabitants, but we can also see how the construction of infrastructure, here the Haulover Canal, was intended to aid the American military in supressing Indigenous peoples. According to a state historical marker near the site, "Native Americans, explorers and settlers hauled or carried canoes and small boats over this narrow strip of land between Mosquito Lagoon and the Indian River" (The Historical Marker Database, 2017, np.), showing how the local landscape and waterscape were used by the area's original waterway navigators before the portage site became canalised. The marker also notes that "In 1852, contractor G.E. Hawes dug the first canal using slave labour. It was 3 feet (0.91 m) deep, 14 feet (4.3 m) wide, and completed in time for the 3rd Seminole War (1856–1858)" (The Historical Marker Database, 2017, np.), making apparent how slavery overlapped with American military suppression of Indigenous peoples. In other words, while Native American navigators were the first to traverse the rivers and lagoons that would go to on to include the modern Intracoastal Waterway, this history, along with the usage of enslaved labourers in the creation of early canals, remains barely mentioned within hegemonic narratives. The settler-colonialist proselytism of the US Corps of Engineers pamphlets calls to mind Brian Larkin's "poetic mode," in which "representations" of infrastructure become received as "social facts" (Larkin, 2013, p. 335). At the root of my interest here is how the Intracoastal Waterway and the stories we tell about such infrastructures function as a means of directing America's narratives of itself, even while at times largely excising important histories. The narratives contained within the pamphlets validate both themselves and the canal by presenting both narrative and nation as beginning with European colonialism, creating a post hoc normalisation of settler-colonialism and the infrastructures that get wrapped up in this.

Much like Indigenous waterway navigators are obfuscated in these narratives, so too are the enslaved labourers who built much of the older canal sections, especially in the South where much of the Waterway is found. Slavery is *never* mentioned in Parkman's and Alperin's coverage of the Intracoastal Waterway, however it was a major force in early canal creation. For instance, we can consider the oldest section of the Waterway, which runs through the Dismal Swamp in North Carolina. With dense foliage and swampy terrain, the Dismal Swamp challenged colonists' incursions. Historically inhabited by various Indigenous groups (Morris, 2022, p. 87), after around 1680 the Dismal Swamp became increasingly populated by escaped slaves (Sayers, 2014, p. 2). In the 1760s, advertisements began appearing in newspapers for people who had escaped bondage and made their way into the swamp (Morris, 2022, p. 88), and the experiences of formerly enslaved peoples in the swamp inspired the anti-slavery poem "The Slave in Dismal Swamp" by Henry Wadsworth Longfellow (1842) and the anti-slavery novel *Dred: A Tale of the Great Dismal Swamp* (1856) by Harriet Beecher Stowe.

The canalisation of the Dismal Swamp began in 1793 with the goal of providing North Carolina with short, sheltered access to a deepwater port (Parkman, 1983, p. 24). George Washington and other wealthy investors were involved in the project, and slaves spent 19 years digging the canal. As J. Brent Morris notes, canal construction through the Dismal Swamp entailed especially intense physical labour:

> *Between 1794 and 1805, crews of hundreds of enslaved workers cleared dense underbrush, cane and briars, cut down immense pine, cedar, and hardwood trees and cleared their roots, and shoveled by hand thousands of tons of peat, soil, and general much (dodging alligators and snakes all the while).... The work, as historian David Ceceliski writes, "was the cruelest, most dangerous, unhealthy, and exhausting labor in the American South."* (Morris, 2022, p. 76)

Such challenging labour in turn enabled the extraction of natural resources from the swamp, particularly "enormous old-growth juniper, cedar, and cypress trees," the logs of which were floated out via flat-bottomed barges (Tidwell, 2002). Cedar shingles used for roofing were a particularly popular export, and many workers laboured in both producing the shingles and in constructing new canals that would open up new timber areas (Morris, 2022, p. 127). One important textual reminder of these labourers is *Registration of Slaves to Work in the Great Dismal Swamp, Gates County, North Carolina, 1847-1861*, transcribed by Raymond Parker Fouts (1995), which notes the first name of hundreds of hired men, the first and last names of their "owners," where the owner (and presumably worker) lived, and a description of individuals' physical characteristics, including age, scars, height, etc. (see also Sayers, 2014, p. 96-97). The age of workers ranged from 8 to 72 (Fouts, 1995, p. i). These detailed physical descriptions functioned as an attempt to control the movements of workers and to stem to the escape of labourers into the swamp. This control of enslaved labourers was part of a larger system of American economic growth—as Edward Baptist points out in *The Half Has Never Been Told: Slavery and the Making of American Capitalism*, "slavery's expansion shaped every crucial aspect of the economy and politics of the new nation" (Baptist, 2016, p. xxi) (for more on how slavery undergirded the American economy, see also Quintana, 2018; Rothman, 2007). We can consider both *Registration of Slaves to Work in the Great Dismal Swamp* and Parkman's *History of the Waterways of the Atlantic Coast of the United States* as revealing different but troubling aspects of how infrastructure can be narrativised, with the first text an attempt to control enslaved labourers, while the second erases them and by extension the economic structures and history slavery was a part of. However, in some places the history of the Intracoastal Waterway and the history of slavery are one and the same, and any histories of America and its infrastructures are importantly incomplete without exploring how enslaved labourers built much of the nation's historical infrastructure.

Local narratives of the Intracoastal Waterway

The creation of America's canals has always been motivated by profit. Early canal building in the 1820s in Mid-Atlantic states was often intended to move anthracite, a hard form of coal, to markets in Philadelphia and New York (Parkman, 1983, p. 28). The extraction and movement of lumber, as noted in my discussion of the Dismal Swamp, as well as the movement of dry goods, were also motivators for east coast canal construction. In the South, the movement of cotton, cotton byproducts, lumber, and molasses fuelled early canal construction (Alperin, 1983, p. 12). The discovery of oil on January 10, 1901 in Texas, however, significantly expanded the growth and use of America's canal system, especially along the Gulf Coast (Alperin, 1983, p. 24). By 1983, petroleum, in a variety of forms, made up 76.8 % of the total tonnage transported along the Gulf Intracoastal Waterway (Alperin, 1983, p. 54). In 2016, almost 60% of the tonnage handled in the Texas port of Beaumont, "the nation's largest military staging, shipping and receiving port," was petroleum and petroleum-derived products (Hezlep, 2019, p. 245). Even on the east coast, commercial transportation remains energy-heavy, with petroleum, natural gas, and coal often being transported (Hezlep 2019, p. 40, 183). Part of why the Intracoastal Waterway is so important for energy shipment is that

a standard barge can transport a large amount of cargo, "approximately 450,000 gallons of liquid commodities" (Hezlep, 2019, p. 5), at relatively little cost. Of course, such shipments depend upon the Intracoastal Waterway being a stable infrastructure that, in turn, requires periodic dredging, the operation of locks, remapping and remarking routes, the maintenance and manning of refuelling stations, etc.

The states surrounding the Gulf of Mexico, especially Texas, Louisiana, Mississippi, and Alabama, form an oil corridor that houses much of America's oil and chemical industry. Petroleum and petrochemical corporations are big business in this area (see Stephanie LeMenager's *Living Oil: Petroleum Culture in the American Century* [2014]). Of course, the Gulf of Mexico was also the location of the 2010 Deepwater Horizon oil spill, the largest manmade environmental disaster in American history (see, for instance, my article 'Surfacing Ecological Disaster: *Poets for Living Waters* and the Deepwater Horizon Oil Spill', 2022). Canals also entail other environmental effects, such as allowing salt into marshes. As Antonia Juhasz points out in *Black Tide: The Devastating Impact of the Gulf Oil Spill,* in Louisiana "some 10,000 miles [16093 km] of canals cut through the coastal marshes to service off-shore drilling sites," leading to a loss of land equal to a football-field area of marsh every thirty minutes. "As the canals create avenues for the salt water to cut in, the salt kills the vegetation, then the soil, until the land itself disappears" (Juhasz, 2011, p. 88). Altogether, it "is widely estimated that oil and gas operations are responsible for some 60 percent of wetland loss and coastal erosion in the Gulf" (Juhasz, 2011, p. 258; see also LeMenager, 2014, p. 108). Of course, these service canals differ from the Intracoastal Waterway, both in size and in purpose, but we can see how canalisation of marsh and swamp land substantially alters the environment. As Joshua Lewis points out in 'Ecological Chokepoints', while canals "intensify the flow and circulation of commodities through the region's waterways," they also "generate connectivity between fundamentally distinct ecosystems—bringing salt water into freshwater swamps or injecting fresh water into a salt marsh" (Lewis, 2018, np.). The effects on the natural environment can be substantial and destructive. Similarly, canals allow increased flooding during hurricanes, and it is believed that the Intracoastal Waterway helped to funnel water into New Orleans during Hurricane Katrina (Sawyer, 2010, p. 151-152).

Canals are always a part of, and alter, the land around them, and we might consider the land surrounding a canal as an important part of the canal infrastructure. In his excellent discussion of the Panama Canal as infrastructure, Ashley Carse considers the canal's forested watershed, the people who live there, and the effects of Panamanian state control of these areas. As Carse points out, "Panamanian forests *became* infrastructure through the multiscale organisational work of linking rural landscapes with an engineered water management system and new national and international institutions" (Carse, 2014, p. 56-57, italics original). Comparing the usage of the watershed forests surrounding the Panama Canal as "not unlike a dam or a highway" (Carse, 2014, p. 57), Carse goes on to clarify that,

> *When a landscape is assigned value in relation to one infrastructure or cultural system of production (transportation) rather than another (agriculture), different services become relevant (water provision rather than nutrient delivery), and the landscape is reorganized to prioritize the delivery of those services and support that system. This calls us to examine the ethics of reorganizing nature as infrastructure and to ask how systems like the canal might be designed in a manner that is more just and equitable for their neighbors*. (2014, p. 58)

While he is discussing the Panama Canal, as opposed to my focus here on the Intracoastal Waterway, we might extend Carse's insights to the Intracoastal Waterway and the environments and people that surround it. The loss of marshes and the canal's effects on the natural environment are frequently considered as part of the everyday operations of the Intracoastal Waterway and are, as such, ignored within hegemonic narratives of the Waterway. Local narratives, however, are frequently attentive to how the canal affects the environments and people around it. In a sense, and in line with Carse's points, the authors of these local narratives are exploring how the landscape has been reorganised in ways that prioritise certain services over others, as well as seeking out models for understanding and valuing the Waterway that go beyond the movement of goods.

Returning to America's east coast, in *America's Wetland: An Environmental and Cultural History of Tidewater Virginia and North Carolina,* Roy Sawyer includes a chapter that explores how one North Carolina section of the Intracoastal Waterway, called the Alligator-Pungo canal, has affected the people and environment surrounding the canal. Sawyer brings together a wide range of evidence to argue that due to its environmental impacts the canal should be closed and the area made part of a protected wildlife zone (Sawyer, 2010, p. 154). To support this argument, he looks back to the opening of the Alligator-Pungo canal as a means of showing how the canal affected the region. As Sawyer notes, in the 1930s "old-timers who had lived along the Alligator River all their lives expressed concerns about increased river salinity, which, they claimed, became noticeable only after the last link of the intracoastal waterway was completed" (Sawyer, 2010, p. 152). Similarly, as an effect of the increased salinity, "Spring runs of river herring on the Alligator River declined markedly in the 1930s" (Sawyer, 2010, p. 152). Interestingly, the new canal also brought with it a malaria outbreak, and as Sawyer points out, "It is probable that some boats using the newly opened intracoastal waterway brought infected people or invasive mosquitoes from farther south" (Sawyer, 2010, p. 150). By looking back to the 1930s to show how the opening of the Intracoastal Waterway affected the local area, Sawyer is able to argue that the negative environmental effects of the canal outweigh its economic benefits.

We might understand Sawyer's approach of looking back to the 1930s and how opening the canal affected river salinity, herring populations, and introduced new diseases, as being a response to what ecologists call "shifting baseline syndrome," in which the current environment and landscape become normalised and understood as the standard. Drawing on the foundational work of fisheries scientist Daniel Pauly's concept of "shifting baseline syndrome" in reference to declining fish population sizes (Pauly, 1995, 430), Anna Tsing *et al.* revisit this concept in their introduction to *Arts of Living on a Damaged Planet*,

> *As humans reshape the landscape, we forget what was there before. Ecologists call this forgetting the "shifting baseline syndrome." Our newly shaped and ruined landscapes become the new reality. Admiring one landscape and its biological entanglements often entails forgetting many others. Forgetting, in itself, remakes landscapes, as we privilege some assemblages over others.* (Tsing *et al.,* 2017, p. 6)

Essentially, the environment that we encounter now obfuscates preceding ecologies that have been erased, such as the destruction of old growth forests and the ways that the secondary forests that replace them become understood as "forest." Interestingly, first-person descriptions of the Intracoastal Waterway often note the dead trees that line the canal, victims of the introduced saline water (see Sawyer, 2010, p. 152). As Tsing *et al.* point out in their discussion of shifting baseline syndrome:

> *Yet ghosts remind us. Ghosts point to our forgetting, showing us how living landscapes are imbued with earlier tracks and traces.* (Tsing et al., 2017, p. 6).

In the evocative short piece 'Ghost Forest: Atlas of a Drowning World', Anne McClintock describes Louisiana's saltwater-fuelled tree loss:

> *Ghost forests mark the invisible flood-line of the salty tides. The skeletal trees are visible emissaries of the planetary upheavals of the Anthropocene, but like other ghosts they also point to places of half-buried, concealed, or erased violence.* (McClintock, 2022, np.).

Even in the environment, or perhaps especially in the environment, we find important remnants of what once was.

One project that grapples with ghosts in the landscape is Virginia McGee Richards' photographic collection, 'The Inner Passage', which depicts the South Carolina Lowcountry section of the Intracoastal Waterway. Presenting contemporary people and locations, Richards uses a mid-1800s photography process, wet-plate collodion, to construct gauzy black and white photos that appear historical (Richards, 2023). By presenting the people, land, and waterway as thick with history, Richards' photos provide us with a lens for understanding the histories hidden within the Intracoastal Waterway. The project is particularly interested in the canal's relationship with slavery, including people's usage of the canal to escape slavery. As Richards writes of her project:

> *The images ask us to consider how we visualise the past. Do events from hundreds of years ago leave a trace that can be seen from a new vantage point, or has the past disappeared entirely?* (Richards, 2023, np.; see also Perry, 2022, np.).

In line with my earlier discussion of "shifting baseline syndrome," we find an ambiguous question here regarding the possibility of finding the past within today's environment.

Another environmentally attentive consideration of the Waterway can be found in David Gessner's short piece 'Clappers', in which Gessner offers a poetic rumination on clapper rail birds that inspire him to find value in a life poised between recognition and irrelevance. Describing having recently moved to a new house, Gessner notes how:

> *I decided to transport our two kayaks from old house to new by paddling them, since the houses are connected by the Intracoastal Waterway. A friend paddled the second kayak, and at the halfway point we camped for the night on a dredge spoil island. The next morning we continued our trip north, finally ducking into the creek that led like a winding path to my new home. We were halfway up the creek when I saw the strange new bird…* (Gessner, 2012, p. 10).

Here, the Intracoastal Waterway and a feeder freshwater stream become the landscape (or waterscape) for the author's encounter with the clapper rail bird that supplies the piece's title. Similarly, the author and his friend spend the night on a dredge spoil island, a literal human-made island created from dredging the canal. My point here is not to critique Gessner's experience, but rather to note how Gessner's encounter is value-laden. In this instance, the Intracoastal Waterway functions not as a means of transporting goods or

extracting natural wealth. Rather, the canal routinises and makes accessible an encounter with a new (to the author) species. As the 'About' section of the *Ecotone* journal, which Gessner is editor-in-chief of and which published 'Clappers', notes, "An ecotone is a transition zone between two adjacent ecological communities, containing the characteristic species of each" (*Ecotone*, 2022, np.). Here we might think of Gessner's experience as occurring within an ecotone between the human and the natural world, with the Intracoastal Waterway functioning as an altered, or even created, environment that contains both humans and the clapper rail bird, creatures that coexist here within a brackish transition zone of fresh and salt water. Of course, the Intracoastal Waterway functions as a transition zone for its entire length.

I conclude my discussion of local narratives about the Intracoastal Waterway with a text relevant to disability studies. The nonfiction book *Gib's Odyssey: A Tale of Faith and Hope on the Intracoastal Waterway* presents the travels of Gib Peters, who sailed alone along the Atlantic section of the Intracoastal Waterway while grappling with amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease). The book interweaves Peters' descriptions of his journey with sections by his neurologist Walter Bradley that provide context and additional details. Peters' challenges included not being able to speak, having trouble breathing, holding up his head and exerting control of his right arm (Bradley, 2011, p. 199-200). Peters' narrative of sailing the Waterway alone brings together a wide range of genres, as history, geography and mariners' knowledge overlap with first-person descriptions. The text functions as an interesting mariner's tale in which the Intracoastal Waterway is both passageway and backdrop for Peters' "final goal," as Peters passed away soon after completing the trip (Bradley, 2011, p. 34). Both David Gessner's encounter with the clapper rail bird and Peters' experiences narrativise interesting life-changing and life-affirming aspects of the Intracoastal Waterway.

Conclusion

Altogether, in these various texts we discover how an infrastructure like the Intracoastal Waterway has been narrativised in varying ways that reveal the operations of power. From hegemonic narratives that situate the Waterway within a lineage of settler-colonialism to local narratives that emphasise the Waterway's effects on people's lives and the environment, considering *how* the Waterway gets represented reveals a complex interplay between the national and the local, in which infrastructure itself serves as a central means of narrating these different foci. While hegemonic narratives are selective in the histories they present, often obfuscating certain histories in favour of emphasising a narrative of European nation-building, local narratives often attempt to recuperate, or at least discover, how the Waterway has affected specific people and environments. Overall, these local narratives about the Intracoastal Waterway clarify the infrastructure's social impact by reasserting a focus on local contexts, in turn emphasising topics that hegemonic narratives may prefer to avoid, such as the problematic ecological effects and histories of the canal.

This article's approach of considering how an infrastructure project like the Intracoastal Waterway has been narrativised, and what meanings are embedded within each narrative form, could productively be applied to other infrastructures. Each roadway, train track, and power line is embedded within local communities and environments and in turn affect nearby lives and environments in ways that can be both positive and negative, as David Gessner's encounter with the clapper rail bird and Roy Sawyer's discussion of how the

Alligator-Pungo canal affected the environment around it, prove. Looking into how infrastructures are narrativised can reveal underdiscussed and perhaps conflicting histories and effects. By considering and analysing a range of texts we can better understand how hegemonic narratives may overlook relevant histories and experiences in favour of large-scale claims of nation building, while local narratives often seek to explain the histories and environments discovered in the process of inhabiting a place. In other words, infrastructures are importantly embedded, and this embeddedness is as much an aspect of the infrastructure as the larger roles that the infrastructure is understood as fulfilling. Here, I have considered an infrastructure project that traverses 4828 km of America, but it could be similarly fascinating to apply this approach of considering local and hegemonic narratives and how they differ to other infrastructures and nations, in turn gaining ever greater insight into how a society can be understood through the stories told about its infrastructure.

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