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New Fuel for an Old Narrative: Notes on the BP Oil Disaster

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Gulf coast, summer 2010, [Photograph: Richard Campanella]

Mud, mud, mud ... this is a floating city, floating below the surface of the water on a bed of mud - Benjamin Henry Boneval Latrobe, describing New Orleans, 1819

One day this city, rapidly increasing ... in wealth and consequence, will be swept into the Gulf of Mexico, if the Mississippi happen[s] to rise [while] the south-east winds raise the sea James Edward Alexander, on New Orleans, 1832

[T]o all men whose desire only is to be rich, and to live a short life but a merry one, I have no hesitation in recommending New Orleans.

- Henry Bradshaw Fearon, 1819

Geography addresses the questions of where phenomena are located, and why, and how those spatial patterns affect our perceptions of place. The BP Deepwater Horizon oil disaster, which has been headline news since April 20, offers clear answers to the first two questions: The drilling of the well in the Gulf of Mexico, which began in December 1998, targeted the Mississippi Canyon 50 miles southeast of the mouth of the Mississippi River because millions of years of geochemistry had created a vast deposit of petroleum miles below the sea surface, and because 100 years of diminishing petroleum reserves lured corporate suppliers for an energy-demanding society into drilling that far down and off-shore to extract it. The leak that sprung from that planetary puncture occurred because of a poorly understood sequence of engineering mishaps for which this particular corporation has developed a notorious reputation — and for which eleven men paid with their lives. It is probably true that this disaster could have happened anywhere in the world where these factors aligned, particularly when no relief wells are excavated, when executives cut corners and skimp on safety, when machinery malfunctions, and when government oversight is lax.

Where the disaster did happen sheds light on the third geographical question, regarding how we perceive differences among places. The explosion occurred off the shoulders of one of the world's best examples of a major river-dominated delta, a geomorphology especially conducive to both the formation and extraction of offshore petroleum. [1] It spewed oil into the same general vicinity that came to world attention five years earlier for the tragic consequences of Hurricane Katrina and its levee-busting storm surge. It took place in the same region crisscrossed by the paths of hurricanes Ivan, Rita, Gustav, and Ike — all major storms making destructive Gulf Coast landfalls, all within four years. It exacerbated the estuarine "dead zone," an area deprived of oxygen by the decomposing algae spawned by excessive Mississippi Valley fertilizer runoff. It idled the same generations-old crab, shrimp, oyster and fishing operations that saw their infrastructure destroyed repeatedly by the recent hurricanes. It sullied the shores of the single most environmentally beleaguered region on the continent: the eroding, subsiding, drowning, contaminated Mississippi Delta. Add to this a surplus of invasive species, a deficit of river-borne sediments, an excess of salt water intruding inland through a labyrinth of manmade canals, a Mississippi River that "wants" to jump channels into the Atchafalaya [2] — plus rising seas and potentially stronger and more frequent tropical storms — and the Gulf Coast seems to have a hemispheric target draped upon it.



Fire boat response crews battle the blazing remnants of the offshore oil rig Deepwater Horizon, April 21, 2010. [Credit: 100421-G-XXXXL- 003 U.S. Coast Guard]

And at the bull's eye sits the only American metropolis that humans managed to sink half below sea level. Once the third largest city in the nation, New Orleans lost 30 percent of its population between 1960 and 2005 and another 22 percent since Katrina. It now ranks around the fiftieth-largest American city. Despite all the Crescent City's cultural glories, it suffers entrenched social and economic ills in addition to extraordinary structural and environmental challenges. Denizens despair at their city and state consistently ranking at the bottom of the "good" lists — healthiest places to live, longest life expectancies, best jobs — and near the top of all the "bad" lists — crime, disease, dropout rates, even laziness. [3] The region in general has been stigmatized as America's Third World, and the Gulf Coast ranks as something of a geographical afterthought: the forgotten third coast of a nation seen by many as bracketed by only the Atlantic and Pacific.

Into this circumstance arrived BP's poisonous discharge — and right behind it, the world's media, dutifully reporting to international audiences Louisiana's latest filthy, tragic mess. Along with images of pathetic pelicans and overturned turtles, their cameras communicated the cultural curiosities of the Gulf Coast. Good television it was: The exotic French toponyms. The Slavic, Isleno and Acadian surnames. The "bayous," "pirogues," "battures," and "po-boys." The odd accents and a sampling of Cajun French. The photogenic foodways. The multiple, sequential traumas. The spirited festivals that carry on nonetheless. The rugged, salty characters, their prickly defiance, and their inspiring resilience.

The resulting narrative exported to the world was one of extraordinarily tragic traumas pounding a special, one-of-a-kind place and people. Amid all the death and destruction, the BP oil disaster, like Katrina, breathed new life into the area's oldest historical impression: that *something different happens here*. Call it the exceptionalism narrative: the received interpretation that the greater New Orleans region in particular, and Louisiana and the Gulf Coast in general, occupy the fringes of the

national bell-shaped curve. That narrative has appeared repeatedly in 18th-century colonial reports, in 19th-century travelogues, in 20th-century tourism brochures, and on 21st-first-century cable news coverage. While the judgments passed by those pundits have spanned the spectrum from outrage to fascination, the overall assessment has been remarkably consistent: New Orleans and Louisiana, we are told, are unique, different, distinct, *sui generis*. The BP oil catastrophe of 2010, I contend, will, for better or worse, reinvigorate this ancient interpretation.



Sand berms under construction by the State of Louisiana, summer 2010, in a desperate but dubious attempt to prevent BP's oil from reaching shore. [Photograph: Josh Lewis, special thanks to Tor Tornqvist]

Physical Origins

The perception of exceptionalism rests on the physical geography of this region, and it is in this realm that the narrative comes closest to being empirically validated. Southeastern Louisiana occupies not the ancient hardened lithosphere of the rest of North America, but rather a dynamic, fluid deltaic plain aged only seven millennia. New Orleans proper has existed for roughly six percent of the entire lifespan of its underlying geology — 292 years out of around 5,000 — a remarkably high ratio that few other cities, resting on earth usually millions of years old, can claim. New Orleans' terrain ranks as the youngest of any major American city, while southeastern Louisiana forms, as Mark Twain put it, "the youthfulest batch of country that lies around there anywhere." [4]

Urbanizing deltaic alluvium is, of course, hardly exceptional. Cities like Alexandria on Egypt's Nile River Delta, Shanghai on China's Yangtze, and Dhaka on Bangladesh's Ganges are home to hundreds of millions of people. What is extraordinary about New Orleans is that it occupies a river-dominated delta (as opposed to a tide- or wave-dominated system), which forms in those rare circumstances when rivers bear enough water and sediment to overpower the dynamics of the receiving sea, enabling the channel to meander, jump, send off distributaries and build land faster than tides or waves can sweep it away. The resulting alluvial depositions protrude ("prograde" in geological terms) dramatically into the receiving water body, like "a gigantic arm projecting into the sea and spreading its fingers on the surface of the water," in the words of geographer Elisée Reclus. [5] Tide- or wave-dominated deltas, on the other hand, tend to be flush with their adjacent coasts, and thus generally more sheltered. River-dominated (or fluvial) deltas are more common in lakes than in seas, because few of the world's rivers are large enough to overpower coastal currents. The Mississippi Delta ranks as one of the best examples of exactly that: a river-dominated multi-lobe delta prograding into the Gulf of Mexico.

Deltas and deltaic deposits often produce rich energy reserves because they introduce vast quantities of sediment and organic matter onto continental shelves in a manner that traps the biomass in reservoirs and seals it under high heat and pressure — ideal conditions for the formation of peat, coal, lignite, gas and oil. River-dominated deltas also represent a "geomorphologic bulge which projects seaward and allows land and shallow offshore drilling rigs to reach deep targets [ordinarily] reached by more expensive rigs in deeper water areas...." [6] Deltas, in other words, deliver the right ingredients to the proper places, store them in optimal conditions, and provide a convenient perch

from which the resultant fossil fuels may be extracted. The Mississippi Delta and Gulf of Mexico rank among the most prolific hydrocarbon reserves on earth.



Shell Beach, near the Mississippi River Gulf Outlet canal in the wetlands of southeastern Louisiana, summer 2010. [Photograph: Ray Devlin via Flickr]

Cultural Rationalization

Centuries before oil-extraction technologies came to bear, French colonials arrived in the Mississippi Delta endeavoring to defend, develop, cultivate, and mine the lands of the Louisiana territory first claimed by René-Robert Cavelier, sieur de La Salle, in 1682. The terrain they encountered confounded them. "All this land is a country of reeds and brambles and very tall grass," rued Pierre Le Moyne, sieur d'Iberville, as he sought to establish that toehold. The year was 1699; the date was March 3, a special day in the Catholic calendar, inspiring him to ascribe "the name Mardy Gras [to] a bend [that the river] makes to the west...." [7] With those words, Iberville introduced the ancient pre-Lenten feast into the colonial society he was about to found. Mardi Gras remains today the single most famous and distinctive cultural trait of New Orleans and Louisiana, the hallmark of exceptionalism. The arrival of the French planted the seed from which the exceptionalist narrative would blossom, because Francophone Louisiana would come to occupy a tiny corner of a continent in which the cultural norm would become all things Anglo.

Isolated from the hearth of Anglo colonial activity, the French colonial port city of *La Nouvelle Orlean*s and its adjacent Gulf Coast enclaves marched to a markedly different beat for two generations before the American nation even formed. While societies of the Eastern Seaboard looked primarily to Protestant England as their cultural source, those of the Gulf Coast referenced Catholic France and later Spain, as well as the Caribbean and Africa. That distinctiveness came into focus when, after a tumultuous era of revolution, agricultural breakthroughs, and the westward expansion of the American people, Napoleon decided in 1803 to sell the entire Louisiana colony to the United States. That pen stroke changed everything. "A vast and unlimited territory [became American]," marveled one sanguine Westerner, "without the loss of a drop of blood." [8]

Anglo-Americans subsequently gravitated into the lands of the Louisiana Purchase, battling and displacing indigenous populations whose ranks had been previously thinned by European disease. En route, the immigrants also encountered settlements left behind by recently departed French and Spanish colonial regimes, positioning Americans, often for the first time, in the backyards of Franco-, Hispano-, Caribbean- and African-Americans: different languages, laws, governments, religions, architecture, customs and foodways. Chief among those culturally divergent places was New Orleans.



Gulf coast, summer 2010. [Photograph: Richard Campanella]

What unfurled in that new American city was a tense and relentlessly competitive intermixing of locally born Francophone Catholics (Creoles) with English-speaking Protestant Anglo-Americans recently arrived from points north. People of African descent, both enslaved and free, as well as tens of thousands of immigrants from nearly every nation, made antebellum New Orleans like few other American cities. With its population doubling roughly every fifteen years, it became the South's largest metropolis, home to the most ethnically, racially, linguistically and culturally diverse population in the nation. Journal-scribing visitors found New Orleans society to be utterly foreign, and many did not like what they saw. This era, and these writers, helped instill cultural exceptionalism into the national discourse of Louisiana in general, and of New Orleans in particular.

Among these visitors was architect Benjamin Latrobe, who wrote in 1819, "Everything had an odd look[;] it was impossible not to stare at a sight wholly new even to one who has traveled much in Europe & America.... [A] curious town it is." [9] Another observer declared in 1842, "Almost entirely unlike any other city in the world is New Orleans.... The shops ... bear a greater resemblance to Paris, than [to] any city in the Union.... The mode of living is widely dissimilar to that of the American.... [U]nlike the cities of the north, street music is tolerated in New Orleans." [10] A journalist for the local Daily Picayune reflected on the city's extraordinary diversity: "When we state that in no city in the New or in the Old World is there a greater variety of nations represented," he reminded his readers, "we are but asserting an established truism. New Orleans is a world in miniature...." [11]

Deviation from the norm earns places certain monikers and slogans, so it comes as no surprise that New Orleans boasts more nicknames than just about any other American city. [12] While "Crescent City," "The City That Care Forgot," and "The Big Easy" are the best known today, New Orleans' earlier sobriquets called attention to the city's reputation for frivolity, filthiness and wickedness. Disapproving nicknames reflecting these sentiments — "the Great Southern Babylon," "Necropolis of the South," and particularly "Sodom and Gomorrah" — appeared routinely in literature of the times. An 1812 editorial viewed New Orleans' recent bouts with hurricanes and fires as justice for its reputation as "a second Sodom ... exhibiting, particularly on the Sabbath, scenes of the most licentious wickedness." [13] A minister visiting in 1823 reminded his readers that "New Orleans is of course exposed to greater varieties of human misery, vice, disease, and want, than any other American town.... Much has been said about [its] debauchery, and low vice...." [14] An anonymous booklet authored "by a resident" in 1850 characterized New Orleans as "this Babel of all Babels, this Sodom of all Sodoms ... this modern Golgotha." [15]



Gulf coast scene, summer 2010. [Photograph: Richard Campanella]

The exceptionalism narrative, and the moral judgments exacted therein, survived even as Creole and Anglo cultures gradually hybridized after the Civil War, and the forces of Americanization began to overwhelm Louisiana's outward distinctiveness. The interpretations of Nathaniel Bishop in 1879, for example, struck the same notes as his antebellum predecessors: "New Orleans [offers] the best opportunity for the ethnological student, for there strange motley groups are always to be found. Even the cries are in the quaint voices of a foreign city, and it seems almost impossible to imagine that one is in America." [16]

Exceptionalism Amid Assimilation

What entrenched exceptionalism in 20th-century interpretations were not the fleeting commentaries jotted down by passing travelers, but the typeset pages of professional narrative historians and local color writers such as George Washington Cable, Kate Chopin, Charles Gayarré, Grace King and Lafcadio Hearn. So influential were Hearn's cultural observations that scholar S. Frederick Starr credited him with having "invented" the New Orleans we recognize today. [17] The local color literary era of the turn of the 20th century helped stoke the rise of leisure travel and commercial tourism; by the 1910s, professional marketers were promoting "Quaint Historic New Orleans" as "The City Care Forgot" and "America's Carnival and Convention City." [18] To this day, the perception of cultural uniqueness remains the bedrock of the New Orleans tourism industry, the foundation upon which rests all the particular commodified peculiarities: food, music, history, architecture, festivals, *joie de vivre*.

While hoteliers and writers embraced exceptionalism, others strove to brush aside the peculiarities of the past in favor of assimilation and modernization. Progressive Era reforms brought to the region professionally engineered Mississippi River levees, sophisticated municipal drainage technology, water treatment and distribution systems, and manmade navigation canals making port calls faster and cheaper. Those advances coincided with electrification, telephony, expanded streetcar networks and automobiles, as well as the rise of a modern Central Business District surrounded by an immigrant-dominated zone, leafy garden suburbs for the prosperous, and a "back-of-town" for the entrenched poor. Cultural Americanization would only intensify later in the 1900s, as California-style suburbs arose on drained swamps, modern transportation arteries scored historic neighborhoods, middle-class whites fled the inner city, and New Orleans' old heterogeneous racial geography spatially disassociated to form the more segregated patterns typical of most American cities. Increasingly, New Orleans and Louisiana conformed to the trends, patterns and appearances of the rest of the nation. Street evidence for exceptionalism diminished with each passing year.



Louisiana coast, BP oil on containment boom, summer 2010. [Photograph: Josh Lewis]

Modernization also created an ever-increasing nationwide demand for fossil fuels, which Louisiana's geography had stored in great quantities onshore and offshore. The state's first commercially viable well was drilled in Jennings in 1901, and within a decade, oil pipelines, oil refineries, oil jobs, oil law and oil money became integral to the local and national economy. A poor state eager to attract whatever investment it could, Louisiana willingly collaborated with the oil and gas industry, accepting investment, revenue, and jobs in exchange for massive environmental intrusions upon its landscape in the form of wells, pipelines, refineries and thousands of miles of access canals. That tradeoff, one that wealthier states could reject outright or at least negotiate for more favorable terms, struck Louisiana's political and commercial class as a deal too good to pass up. Onshore deposits ran dry within a generation, sending the search for oil into nearshore areas starting in 1947, then farther offshore in the 1950s and '60s, then into the mile-deep waters of the Gulf of Mexico in the 1980s.

The oil and gas industry transformed nearly every aspect of life in Louisiana, which in turn bore a disproportionate share of the burden — long-term environmental degradation and pollution — of the nation's fuel needs. The industry also changed the once-isolated Cajun, Creole, and indigenous peoples living in the state's south-central "Acadian Triangle," fast-tracking them toward the American mainstream. Even the New Orleans cityscape grew less exceptional and more typically American with the oil boom, as city leaders widened Poydras Street into a corporate boulevard to compete with Houston, built the Superdome to match the Astrodome, and thrilled to the sight of modern skyscrapers rising above the otherwise 1920s-era skyline. The economy of the state, region and city grew dependent on the extraction, processing and transmission of petroleum, as did the nation on the substance itself. "Offshore oil and gas has always been a dangerous and dirty business, but Louisiana has welcomed it like no other state," wrote journalist David Hammer in a reflective post-BP *Times-Picayune* article. "In a poor state, oil jobs paid well. In a state with weak schools, the oil industry gave workers high-tech skills. In a state with low taxes, it financed the government." [19]



Sand berms under construction by the State of Louisiana, summer 2010. [Photograph: Josh Lewis, special thanks to Tor Tornqvist]

By the time of the 1980s oil bust and the subsequent domination of the tourism sector, the twohundred-year-old process of the Americanization of New Orleans seemed complete. Residents at the turn of the 21st century spoke the predominant national language, indulged in pop culture, surfed the Internet, shopped at big-box chains, bought global imports using Asian credit, and interacted socially and economically with other Americans and the world on a daily basis. The vast majority of New Orleanians spend the vast majority of their lives in ways that would be immediately recognizable to Americans anywhere; outward vestiges of cultural distinction survive mostly in civic traditions such as Mardi Gras and second-line parades, and in a smattering of linguistic and culinary traits. Yet to this day, most people associated with New Orleans — residents, visitors, observers — still read an enduring uniqueness into the ethos of the city and region. While they allow that some distinctiveness has disappeared (the French language, for example, is largely extinct from New Orleans, although it persists in the Acadian region), advocates of the exceptionalist narrative view the greater New Orleans area as a place with its heart still in the Franco-Afro-Caribbean world from which it spawned, resigned only reluctantly to its American fate. They see evidence for New Orleans' uniqueness in everything from music and food to attitudes, race relations, linguistics, architecture and politics. The narrative is an article of faith here; it forms the bedrock of local civic pride, and merely questioning it can earn responses of consternation and reproach. Exceptionlists' predisposition toward reading distinctiveness in all things related to New Orleans reinforces their stance that the city is axiomatically sui generis.

New Fuel for an Old Narrative

Ironically, many of the exceptionalist faithful missed the most convincing pool of evidence for their argument. While the case for *cultural differentiation* was subject to scholarly challenge, proof of the region's *physical uniqueness* had only strengthened in the three hundred years since Iberville ambled amid the brambles. Why? Because anthropogenic interventions had converted the once-vibrant Mississippi Delta into the most troubled environmental region on the continent. Levees erected since colonial times, and greatly fortified in the past century, had strait-jacketed the land-creating Mississippi River and turned it into a garden hose, spewing precious sediment and freshwater uselessly onto the Continental Shelf rather than on the wetlands. Manmade canals — for navigation, drainage and petroleum extraction — scored those wetlands and exacerbated their erosion while allowing salt water to intrude and kill inland freshwater swamps. Municipal drainage allowed dried-out soils in greater New Orleans to sink five to ten feet below sea level, while levees around the city interrupted tidal cycles and further degraded natural systems. The level of the sea, meanwhile, rose by four

inches in the 20th century and is predicted to bloat another forty inches in the 21st. As a result of these and other factors, Louisiana has lost over 2,300 square miles of coastal wetlands — about one-third of the Louisiana deltaic plain — since the 1930s. 25 to 35 square miles of marsh disappeared annually during the 1970s and '80s, a pace of loss well over 20 times swifter than the Mississippi River took to build the delta in the previous 7,200 years. The rate slowed somewhat in the '90s and '00s, not because the problem had been partially solved but because so little land was left to lose. No other region on the continent can make these claims, nor would they want to. Physically exceptional indeed.



Top: Gulf coast town, summer 2010. [Photograph: Richard Campanella]

Bottom: A Shoreline Cleanup and Assessment Team removes oil from a beach in Port Fourchon, Louisiana. [Credit: U.S. Coast Guard photo by Petty Officer 3rd Class Patrick Kelley]

Then, in late summer 2005, cultural exceptionality roared back to life in the most terrible of ways, as Hurricane Katrina's surge wreaked havoc upon stranded citizens. Observers who viewed New Orleans as an outpost of the Caribbean saw shocking validation in the chaos that followed. Those who viewed the city and region as a Third World society ("Louisiana —Third World and Proud of It," reads a popular T-shirt) reeled from jolting confirmation. Those who saw New Orleans as a depraved and immoral place (just like 19th-century observers) interpreted Katrina as all-too-deserved spiritual castigation. Those who saw those same alleged sins as evidence of irrepressible joie de vivre delighted in the fact that Bourbon Street clubs were among the first businesses to reopen. Those who viewed Louisiana politicians as incorrigibly corrupt launched admonitions even before any fraud occurred. The sight of unattended corpses in the streets reminded seasoned journalists of war zones and other places on the fringes of normalcy and modernity. Katrina reinforced popular perceptions of New Orleans' exceptionality, exponentially.

Fast-forward four years and eight months. An explosion in the gulf; eleven men dead. Then the rig sinks and the oil spews, for days, weeks, months, in quantities that defy measurement. World media, many of them Katrina veterans, descend on the region, seeking the characters of the latest drama to play out on this tired wet old stage. Comparisons to the previous episode — "an ecological Katrina," "Obama's Katrina's," etc. — abound in blogs and editorials, as do allusions to exceptionalism. *Nation's biggest oil spill, greatest environmental disaster, largest clean-up effort* ... and all this at the beginning of a tropical storm season predicted to be especially busy.

BP's oil thus added yet another chapter to an old story. It also had the effect, as geographer Julie Hernandez has observed, of spatially unifying a city and a region that, quite often throughout history, viewed themselves as quite different and disassociated from each other. Few things unify like a shared trauma: consider the effect of World War II or Sept. 11 on the American people, or how a family comes together in times of strife. Likewise, the oil disaster helped urban New Orleanians discover their ties to rural coastal populations, and Louisianians to feel solidarity with Mississippians and other gulf residents. That CNN's Anderson Cooper repeatedly broadcasted gulf oil stories against a downtown New Orleans skyline further abetted the perceived spatial coalescence of these places — each of which have been portrayed, to greater and lesser degrees throughout history, as exceptional to the national norm. [20]



Richard Campanella: Mapping Exceptionalism. Click image to enlarge.

Blessing or Curse?

Exceptionality cuts both ways. Being different can be an asset and a liability; it can alternately draw or spurn attention, incur fascination or indifference, attract sympathy or scorn, and yield judgments of victimhood or culpability. New Orleans' geographical distinctiveness enriches local society with fisheries, fertile soil, strategic location and petroleum, yet threatens it because human action has made it vulnerable to contamination, tropical storms and sea level rise. New Orleans' cultural

distinction inspired many Americans to aid the rebuilding of the postdiluvian city, yet incited others to protest the allocation of scarce resources to a place so troubled, hopeless — and for some, *wicked*.

Even locals betray a certain schizophrenia about exceptionalism, boasting about being different from other Americans even as they pointedly remind national leaders that they too are American citizens. A New York Times oil spill article highlighted the tension with the headline, "Louisiana Wants U.S. Help, and Its Own Way." Mayor Mitch Landrieu, who embraced exceptionalism in his tireless advocacy for developing Louisiana's so-called cultural economy, abandoned it when it came to funding post-Katrina recovery. "You certainly won't be able to grow New Orleans back if America thinks that we're just some outpost that doesn't belong to them," he explained to a national journalist. "But if, in fact, they see [us] as American citizens ... it might get them to a different place." The New Orleans Convention and Visitors Bureau, for its part, accepted BP money for an ad campaign suggesting that local seafood was all but unaffected by the oil (the pitch: "It's New Orleans: You're Different Here"), even as peer organizations argued exactly the opposite. Journalist Cary Tennis contemplated post-BP regional exceptionality in an article entitled "Does God hate New Orleans?," concluding that, instead, "God would likely be saying[,] 'Stop fucking things up!'" [21]

The BP oil disaster will kill many things here, but the exceptionalism narrative, for better or worse, will not be among them.

Notes

- 1. W.A. Wescott, "Deltas as Petroleum Provinces: Past, Present, and Future," *Offshore Technology Conference* (Houston, Texas, 1992), 387–392.
- 2. In the 1830s, Capt. Henry Shreve and the State of Louisiana cleared a massive logjam to open up navigation on the Red and Atchafalaya rivers near their junctions with the Mississippi. Unbeknownst to the engineers, the new hydrology sent a steadily increasing flow of Mississippi River water down the Atchafalaya's channel, because it offered a shorter and steeper route to the Gulf of Mexico. Fearing a catastrophic channel jump, engineers in the 1950s and '60s built the Old River Control Structure, which currently regulates a 70–30 percent distribution of water between the Mississippi and Atchafalaya. New Orleans would be seriously threatened if Old River failed.
- 3. Venessa Wong, "America's Laziest States 2010," Bloomberg Businessweek, August 2, 2010. Louisiana, according to this study, ranked as the "laziest" state in the Union. "We aren't trying to beat up on Louisiana. Goodness knows, between Hurricane Katrina and the Gulf Oil Spill, the state has been through some tough times in recent years," the authors explained. "But the statistics speak for themselves...."
- 4. Mark Twain, Life on the Mississippi (New York: Harper & Row, 1883; republished 1958), 4.
- 5. Elisée Reclus, *A Voyage to New Orleans*, eds. John Clark and Camille Martin (Thetford, VT, 2004 translation of 1855 original), 42.
- 6. W.A. Wescott, "Deltas as Petroleum Provinces: Past, Present, and Future," *Offshore Technology Conference* (Houston, Texas, 1992), 387–392.
- 7. Pierre Le Moyne, Sieur d'Iberville, *Iberville's Gulf Journals*, ed. and trans. Richebourg Gaillard McWilliams (Tuscaloosa: University of Alabama Press, 1991), 53.
- 8. The Navigator (Pittsburgh, Pennsylvania: Zadok Cramer, 1806), 128.
- 9. Benjamin Henry Boneval Latrobe, *Impressions Respecting New Orleans: Diary & Sketches 1818-1820*, ed. Samuel Wilson Jr. (New York, 1951), 21, 40.
- 10. Charles F. Powell, "New Orleans," *Barre Gazette* (Barre, Massachusetts) 9, Issue 12, July 29, 1842, 2
- 11. "A Kaleidoscopic View of New Orleans," Daily Picayune, September 23, 1843, p. 2, c. 3.
- 12. Richard Campanella, *Bienville's Dilemma: A Historical Geography of New Orleans* (Lafayette: University of Louisiana Press, 2008), 279–287.
- 13. New-York Gazette & General Advertiser, October 12, 1812, p. 2, c. 3.
- 14. Timothy Flint, *Recollections of the Last Ten Years ... in the Valley of the Mississippi* (Boston, 1826), 305, 309.

- 15. Anonymous, New Orleans As It Is: Its Manners and Customs ("By a Resident, Printed for the Publisher," 1850), 6
- 16. Nathaniel H. Bishop, Four Months in a Sneak-Box (Boston, 1879), 205.
- 17. S. Frederick Starr, *Inventing New Orleans: Writings of Lafcadio Hearn* (Jackson: University Press of Mississippi, 2001).
- 18. Des Moines Capital, March 22, 1912, p. 15, c. 1; Philadelphia Inquirer, January 11, 1913, p. 15, c. 5
- 19. David Hammer, "Dangers and All, Louisiana and Oil Have a Long History," *Times-Picayune*, July 18, 2010.
- 20. Personal communications, Julie Hernandez, June-July 2010.
- 21. Campbell Robertson and John Collins Rudolf, "Louisiana Wants U.S. Help, and Its Own Way," *New York Times*, June 25, 2010; Frank Donze and Bruce Eggler, "Mayor: 'We Are Veterans of Pain,'" *Times-Picayune*, July 24, 2010, Metro-1; New Orleans Convention and Visitors Bureau ad, neworleansinfo.com, as illustrated in "No Offense, Redcoats," by Matthew Albright, *Times-Picayune*, June 18, 2010, C-6; Cary Tennis, "Does God hate New Orleans?" *Salon*, July 22, 2010.