ANTIDEMOCRACY IN AMERICA

TRUTH, POWER, AND THE REPUBLIC AT RISK

Public Books

EDITED BY ERIC KLINENBERG,
CAITLIN ZALOOM,
AND SHARON MARCUS

PART II. THE COLLAPSE: HOW WE GOT HERE

PART III. THE SOLUTIONS: WHAT WE CAN DO

COALTHINK

GRETCHEN BAKKE

If we trust the president, we believe that he is, if nothing else, a businessman. Towers glittering across real estates seem to proclaim the truth of this, but when it comes to coal, both business and sense exit the scene. Mercurial to his core, the diligence with which Mr. Trump maintains his fidelity to coal—the ferocity of his adoration of it—belies the notion that its use to him is that of simple political expediency. Symbolic of white working America, yes. Evocative of a 1950s, half-remembered and half-imagined, when environmental concerns impeded nothing, yes. But fuel of the future? This possibility hovers somewhere between unlikely and impossible.

The business case for the end of coal was well and solidly in place before Mr. Trump declared himself a candidate. Very few people have taken such a liking to the stuff as he has. Nobody really thinks that it will power the future, whether in America or elsewhere. Even China, which uses more coal than any other nation on earth, is making noises about moving on; even the chief executive of the American Coal Council admits that the industry has abandoned any plans to replace the retiring fleet of coal-burning power plants, once the backbone of American power. Even big money turns a blind eye toward coal. An executive at a

venture-capital firm recently told me with a bit of a grin that nobody even knows what a coal plant is worth any more. It's possible that one should be paid for the purchase of such a plant, rather than the other way around.

The era of coal in the United States is over; some might say it is only "ending," but the fact that bygones will soon be bygones is not under serious debate. What is it then about coal that pleases the president so? The answer I think, is that it's the last solid thing. And this tangibility, this sense of there being a something to hold on to, has implications not just for the presidency but for the country's future.

Though I doubt that the president has actually ever touched coal, its solidity matters. It can be touched. It is there. Coal is a "known known" as Mr. Rumsfeld would have said, a stone one can grip in a fist. Whatever Mr. Trump's personal past with combustible ingots, I am more certain that he has never touched natural gas—all wisps and fumes. And I suspect he has never understood that the wind (deranging his hair) or the sun (contributing, perhaps, to his improbable tan) are harvestable despite being immaterial. He may well recognize the weather in its attempted disturbances of his daily rhythms, but he does not grasp the climate. The climate is not, strictly speaking, graspable. No hand can take it in. No man, no matter how tight his fist, can hold it to himself.

Climate, sunbeams, air, natural gas: they are more like ideas than objects. One must be capable and comfortable with abstraction to get them right. Let's add one more to the list, electricity. Who knows how it works, but at least when coal was the centerpiece of the electric-power system it was possible to imagine a material that grounded our remotely powered, information-dense world. Coal for power begat worlds of activity: mountains chopped down, pits excavated, veins followed, burrows made, workers straining backs, lungs straining black, train cars and rails moving

combustible rocks to factories honorable in their complexity and reliability so long as the coal is there. Even the particulate nature of coal dust as a sort of midcentury pollution (like smog) is so much easier to imagine and deal with—even, in a strange, dystopian way, to romanticize—than are CO_2 and CH_4 and N_2O.

All of this digging, shipping, building, and combusting is the stuff of infrastructure: the means we use to build up a functional world that is, almost by its nature, substantive. That said, holding a material—a real hard tangible stone of a thing—is, at its core, the old way of infrastructure. Like the copper that goes into electric wires, the wood chopped up to build houses and make utility poles, the concrete poured into building foundations, it is a visceral, necessary premise. These are reminders, perhaps, of the raw, industrial world that Mr. Trump was born into in the 1940s and certainly something that any real estate developer, any builder of things, can immediately understand and appreciate.

In a way, I like how Mr. Trump has pulled an awareness of materiality back into our modern world. As if to say, look beneath your feet: Whence that floor? That roadway? That runway? Look over your head: whence that ceiling, cabling, polystyrene? He gives us cause to remember that much of the work done is still done by men who sweat. Men who at the end of the day actually need a shower because they are covered in dirt. These days, some women have also been hired on in the mines and into construction, but watch a road crew building a road and you will see that America is still mostly manmade. Mr. Trump prefers this vision not because he likes these people—his economic policies would seem to indicate that he does not—but because they are, like coal, seriously solid. The imagination only has to go so far to think a road, a power line, a bridge, a train on its tracks, a massive wall, a lump of coal, the workers who step-by-step twist these into form.

Where the imagination goes, money promises to follow. Mr. Trump, unlike many political leaders, has garnered his modest popularity without (to date) ever funding any of these things, though he has curtailed environmental protections as a means of encouraging industrial expansion of the most material sorts. Tailings may now be let in streams; new leases may now be issued on federal lands unsubject to environmental review: Obama's "Clean Power Plan" undone. These are free gifts to industry. However, promises that require cash on the table—like building and renewing infrastructure or building a border wall or buoying up coal or providing secure employment to the people who labor to bring such things to pass—have seemed sufficient until now. It is enough to hold a thing dear, to supply a vision, and then, Tom Sawyering the deal, pushing others to pony up the funds. Granted, Mexico is balking at the "$10 billion or less" needed for a border wall, and American states and cities are balking at the suggestion that the "$1 trillion" in infrastructure funding promised during the campaign now must come from their own coffers.

These are political problems and fiduciary ones. There will be wrangling. They are also, I hold, secondary to what matters. The imagination—Mr. Trump's imagination, but far from his alone—has been fossil fueled for a long time. It is solidly grounded in the condensed remains of Paleozoic forests.

"Coal, oil, natural gas. 1750–2050." It should read as a gravestone. Coal has already had its day; it no longer stands at the heart of our infrastructure. Oil, more material by far than its natural-gas companion fuel, is also, quiet suddenly, on its way out. Oil already doesn't fuel America's electricity system (says everyone but Hawaii; said everyone but Puerto Rico), but infrastructures of power are not the only thing changing. The cars—the cause célèbre of the contemporary oil industry and the raisons d'être of the national

road system—are changing, and when they go their infrastructures will grow all catawampus without them.

Today, 70 percent of the oil used in the world fuels transport. Yet across the globe governments are now turning the great ships of state against these oil-based systems. The internal-combustion engine—internally combusting ocean liners across seas, trucks across continents, cars across town—has quiet suddenly gone from ubiquitous to ignominious.[1] England, for one, is phasing out the internal-combustion engine. No cars will have them on that first industrial isle after 2040. France is following suit but subtracting five years: 2035. China ("no date set") is doing the same. California is now talking about joining this group. As gas wisps away from the engines of the world, it is slowly following coal to the graveyard. At long last the fossils that fuel will be allowed their rest; they will become mere fossils once more.

The end of coal for electricity is further along. In 2016 almost all (93 percent) of the utility-scale power generation added to the American grid was fueled by things difficult to grasp; in fact, 60 percent of it was wind and solar (8.7 GW and 7.7 GW, respectively). Together these two account for twice the infrastructure of new natural gas that year (33 percent or 9 GW). These statistics are just for utility-scale installations, nary a rooftop solar array is included in their number. And these grew by 116 percent in 2016 to 16 gigawatts (GW), "more than doubling the record-breaking 7.3 GW installed in 2015" according to SEIA, a trade organization for the solar industry. And just to trump the chump one last time, today 43 percent of the people working in power in the United States work in the solar sector. That's more than coal, oil, and natural gas combined.

In a way, America is lucky. Much of our infrastructure built up in the midcentury heydays of the president's own youth is

reaching the end of its useful life. It's aging out, falling down and to bits. It's blowing down and into shards; it's sinking down under storm surges higher than they ought to be and rain more ferocious than recent memories permit for. Florida didn't just lose power under Irma, she is drowning in shit as sewer systems—never designed to account for that much water—fail. Even without climactic anomalies, massive infrastructure investments are needed to keep America at borderline "great," a level to which we've grown accustomed.

Trump's folly, Florida's folly, is not the act of rebuilding the sewers, roads, bridges, dams, railways, electrical and other cabling that holds this country together. This is both necessary and good. The folly is in rebuilding it as if it were still the 1950s, as if utilities were still government-supported monopolies; as if we didn't have computers and the flexibility, intelligence, connectivity, and interoperability these beget; as if coal were the wisest way to make power and the gas the rightest way to fuel fleets. As if the weather had not already begun to change, the storms grown stronger and the seasons more schizophrenic. In other words, the hardness of coal—a sense of sureness derived from definite, graspable things—is the wrong mnemonic. It betrays the task. With it, we build wrong.

There is a joke about Florida that circulates through green energy circles. Florida, the sunshine state, has one of the lowest sunbeam to solar panel ratios in the country. Instead of using the sun to make power or even encouraging this use among its customers, Florida uses natural gas (61 percent), coal (23 percent), and nuclear (12 percent). Its modest "renewable" power generation (4 percent) is split unequally between a biomass burner—good for getting rid of the excesses of the citrus industry, very bad for global warming—and hydropower. There is one big solar facility and a smattering of rooftop installations, but a close relationship between

the state's utilities and its legislature, which sets the laws governing this industry, has meant that solar is arguably the most underutilized resources in a state that suffers inordinate and frequent damage from ocean-born storms.

If anyone should care about decarbonizing their electricity supply, it's Florida. Ranked third among states in solar-power potential and similarly high on the less-august list of states ranked by air-conditioner use, its seems almost criminal that Florida is, in essence, combusting methane to make its swampy lands more livable. Criminal because air conditioners are uniquely suited to solar. They need power during the day; the sun makes power during the day and, voila, a match made in heaven. In Florida, it has also turned out to be a match made far too expensive and complicated by utility and legislative collusion. That's not the joke. That's just the way it is. Here is the joke:

Q: Why don't they have any solar in Florida?
A: Because they'll be underwater before the payback period is over.

It's not very funny, but these days one is given to wonder if it is true.

In Puerto Rico the situation is worse and yet the joke is much the same. The island made its electricity from oil, despite solar resources that put even Florida to shame. Puerto Rico's Hurricane Maria, its storm of the century, flattened all of that with impunity. Its grid is, for all intents and purposes, gone. Its roads remain impassible, and even if they were clear the nation's trucks would not move for there is no fuel to feed them. Its sewers have flooded up over ground, making cesspools of standing water. Its cows scattered and drowned, its people, as if irony were the mover of men, are bound for Florida.

We can blame President Trump for not caring more, not doing more. He deserves this blame. But beyond the immediate, the world he works to support—a world with coal at its heart—is the underlying cause of Maria's extraordinary ferocity.

The electricity system is unique in that it is a central contributor to the climactic systems given to destroying it. We use fossil fuels, including natural gas, to make electricity; the chemical pollution from these adds massively to global warming; global warming makes for more ferocious storms; and these storms swoop in and decimate the grid. This destruction prompts people to think about ways that the grid might be made harder to destroy. Occasionally even, we take action on these thoughts and change some small thing. It is an absurdist loop, inefficient and peculiarly destructive. And yet it is the one we take, not because it's cheaper but because it's easier to think. This is coalthink at its purest and most dismal.

NOTE

1. Airplanes run on gas turbines, similar to gas-fired power plants, no pistons involved; most would say that this is also an internal-combustion engine.

VIOLENCE AND CRIMINAL JUSTICE

PATRICK SHARKEY

On a rainy day in December of 2013, I visited the Heritage Foundation, one of the country's most prominent conservative think tanks, to talk about how to reform the criminal-justice system. I sat at a long oval table with a politically diverse group of researchers, policy makers, and institutional leaders and discussed what we know about how mass incarceration has affected families, how time in prison alters long-term prospects for stable employment, and how the impact of imprisonment lingers on to affect the next generation. There were moments of disagreement and frustration, but there was one point of virtual consensus. Almost everyone in the room agreed that the scale of incarceration in the United States was unsustainable.

In that year, 2013, the national homicide rate *descended* to its lowest point in at least five decades. And yet more than 2.2 million Americans were imprisoned, and over *four million* more were living under the supervision of the criminal justice system, either on parole or probation.

Before the meeting began, I thought that I would have to spend the day making the case for the damaging consequences of mass incarceration and arguing that the crime decline had changed