

THE MYSTERIOUS CASE  
OF THE POISON FLOWER

Donald Trump and the  
Future of America

BY JAMES FALLOWS

# *The Atlantic*

## MY PRESIDENT WAS BLACK

Ta-Nehisi Coates on the  
Meaning (and Unmaking)  
of Obama's White House

+

The Mind of  
the Octopus

The Worst  
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## The Key to Good Government: Treat Citizens Like Consumers

To improve speed, efficiency, and outcomes, a customer-experience mindset will beat process-tweaking every time.

**WHEN RAIL OPERATOR EUROSTAR** sought to improve the journey between London and Paris for its customers, it turned to a group of engineers. The engineers focused on how to improve operations and concluded that the best way to make the journey better was to shorten it. So Eurostar spent 6 billion pounds on new tracks that shaved about 40 minutes from what had been a three-and-a-half-hour journey.<sup>1</sup> But what if Eurostar had changed the customer experience rather than the infrastructure?

In a TED talk, the ad guru Rory Sutherland reframed the problem:

Why is it necessary to spend 6 billion pounds speeding up the Eurostar train when, for about 10 percent of that money, you could have top supermodels, male and female, serving free Château Pétrus to all the passengers for the entire duration of the journey? You'd still have 5 billion pounds left in change, and people would ask for the trains to be slowed down.<sup>2</sup>

It's a simple but profound idea. By focusing on the customer experience (CX), rather than simply optimizing an existing business process, you widen the range of solutions available to tackle any given problem, often at a far lower cost.

What could this shift in focus mean for business's relationship with the public sector? By adopting a CX mindset, governments can help make business compliance much easier, boosting accurate, voluntary compliance rates. Improving government-to-business interactions can:

- Enhance consequences for true scofflaws, as opposed to accidental violators
- Increase regulatory compliance
- Reduce the burden of compliance on business

For government agencies, adopting a CX mindset involves taking advantage of developing technologies and borrowing tactics from the private sector's CX toolkit. Some of these include:

### UNDERSTANDING YOUR BUSINESS CUSTOMERS

Leading organizations are using new tools and approaches to answer the most fundamental questions behind a better customer experience: Who are my customers? How do they behave? And what do they want? Organizations are now using human-centered design to help them gain a more nuanced understanding of the variety of customers they serve. Rather than requiring users to adapt their behaviors and preferences to a tool or system, a human-centered system supports existing behaviors. It involves a deep understanding of customers' needs and experiences—both the ones they tell you about and, perhaps more important, the ones they don't.

### TYING CX TO A SPECIFIC BUSINESS OUTCOME

Outstanding customer service can save an agency money, make it more efficient, and foster better employee engagement; it may also promote economic development and better business compliance. In a regulatory agency, performance metrics that measure customer service can help focus the agency's efforts on CX. These metrics should measure not just the agency's ability to deliver a great customer experience, but also how that experience affects the agency's achievement of a particular mission outcome.

### CREATING A UNIFIED VISION FOR CHANGE

The journey to becoming a more customer-centered organization should start with an assessment of an organization's commitment to customer experience, its current capabilities, and its vision

**To capitalize on the potential of CX initiatives, governments should consider adopting the following strategies, grouped into three main buckets:**

#### 1. FOCUS ON BUSINESSES AS CUSTOMERS.

Map the business journey; ask what kind of experience businesses want for each transaction; iterate to test and refine the solution; proactively help businesses understand what they need to do to comply.

#### 2. INSTILL A CUSTOMER-CENTRIC CULTURE.

Fix systems and processes to help create a customer culture; recruit people with a customer mindset; transcend internal silos by sharing relevant information.

#### 3. EVOLVE POLICIES BASED ON USER INPUT.

Pursue legislative changes when needed; engage businesses while formulating rules and regulations; bring policymakers and the operations side of the government onto the same page.

for its business user and employee experience. It's also important for someone—be it a chief customer officer or a CX council composed of leaders who collectively own all the touchpoints across the customer journey—to have a horizontal view across the entire agency and be responsible for ensuring that the business customer experience is consistent across touchpoints that may span multiple business units. Another important aspect is defining the future CX state. Developing a blueprint for the future helps form the basis for measurement and the standard against which the program should be evaluated.

Government has a major—and sometimes defining—role to play in fostering an environment conducive to a healthy economy. As long as government requires businesses to get licenses and permits, pass inspections, pay fees, and comply with other regulations, it's in government's interest to help make those transactions as painless as possible. •

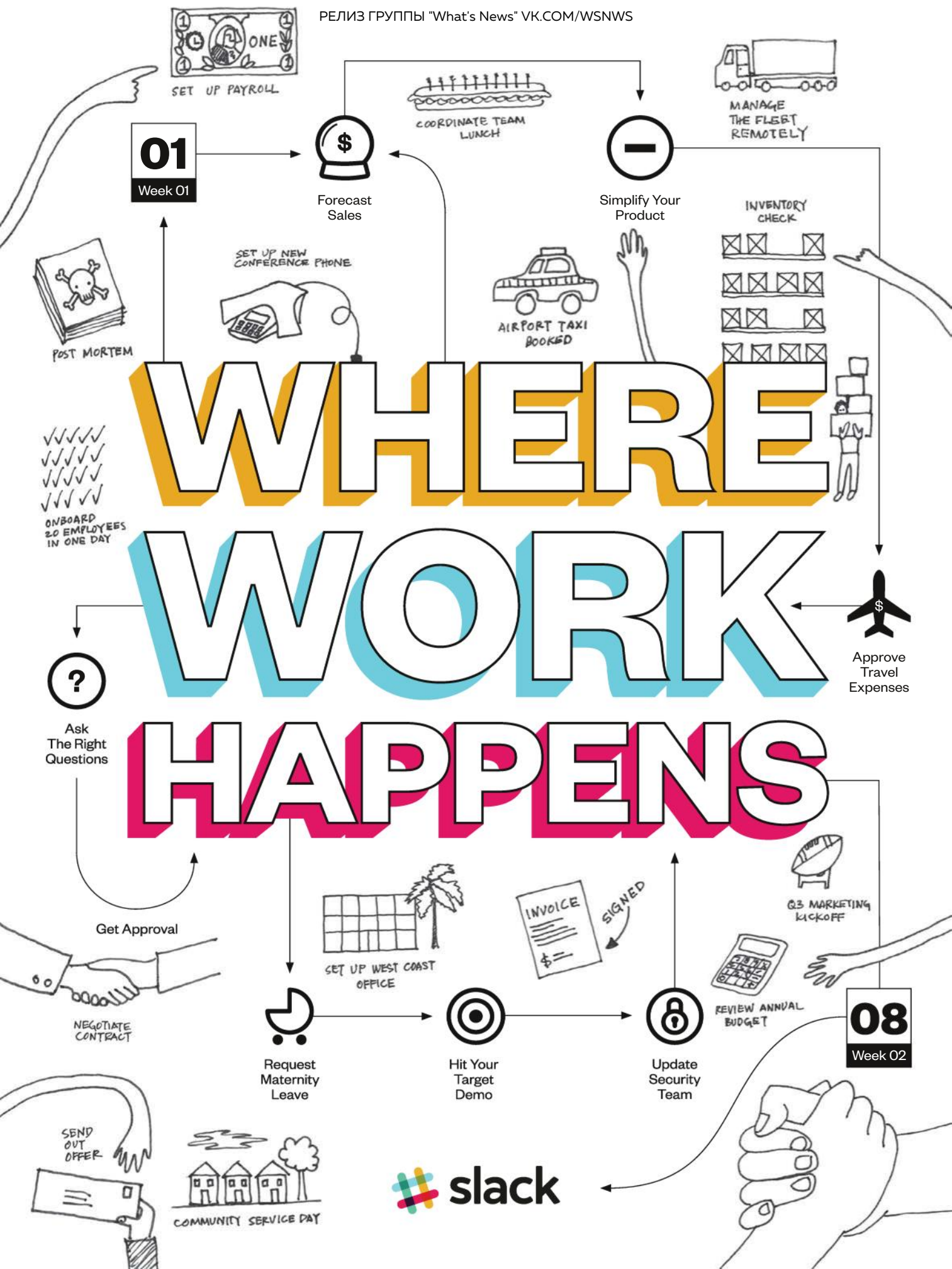
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<sup>1</sup>Rory Sutherland, "Perspective is everything," TED .com, December 2011

<sup>2</sup>Rory Sutherland, "Sweat the small stuff," TED.com, June 2010









OF NO PARTY OR CLIQUE

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# OBAMA, RACE, AND AMERICA'S FUTURE

**B**ARACK OBAMA HAS BEEN THOUGHT by some of his right-leaning critics to be a bit of a Mau Mau, a zealous anticolonialist, more Kenyan than American, a special pleader for his father's race. These critics fail to understand, among many things, how Barack Obama Sr.'s experience in postcolonial Kenya turned his son into an American patriot. In his memoir, Obama describes the way tribalism ruined his father's life. The senior Obama, an ambitious young government reformer, found himself on the wrong side of an ethnic divide in his newly liberated country, and this became his undoing. The poison of division, his son concluded, was for other countries, but not for America.

In an interview I conducted with Obama last year, he said, "It is literally in my DNA to be suspicious of tribalism. I understand the tribal impulse, and acknowledge the power of tribal division. I've been navigating tribal divisions my whole life. In the end, it's the source of a lot of destructive acts."

The American idea, Obama has suggested, is the best antidote for parochialism and sectarianism. Its power was demonstrated, in his view, by the election—twice—of a biracial senator with roots in Kenya and Kansas, a Muslim name, and a proud African American wife.

Obama is not an unalloyed idealist. He has complicated feelings about the nature of humanity, and harbors few illusions, in particular, about the moral systems that govern many other countries. But he has always seemed sincere in his belief that America is a place that possesses a unique capacity to become better, and then better again. "The arc of the moral universe is long, but it bends toward justice," he often said, quoting Martin Luther King Jr., but he really meant that America's arc bends toward justice.

And then came Donald Trump.

Shortly after the election in November, I spoke with my friend and colleague Ta-Nehisi Coates, the author of this issue's extraordinary cover story. The story refracts Obama's improbable presidency through the prism of race. It is built on hours of conversation between the two men, and on years of hard thinking by Coates.

Coates and the president have been in something of an argument; Coates has written in these pages that Obama's

faith in the underlying fairness of America's social and political institutions is unearned, and Obama appears to believe that Coates is at times too closed to the possibility of progress.

I told Coates after the election that he seems to have the upper hand in the argument, at least for now. Trump was not propelled to the White House solely by the forces of racial reaction. And yet an important and resentful tribe has opened a fissure in American society, and the chief of this tribe—who traffics in racial invective and who long cast Obama as a foreign-born threat to the American way—has broader appeal than I imagined. One does not have to be an apocalypticist to sense a curving-back of the arc of justice.

But when we spoke, Coates told me that we are not moving inexorably backwards. In his latest book, *Between the World and Me*, he argues that the arc of the universe bends, in fact, toward chaos. He doesn't believe the U.S. is having a good moment, but he also doesn't believe that he is right and Obama

is wrong about the ultimate trajectory of history.

"History is an indifferent force," Coates said. "I thought Donald Trump was a comet that was narrowly missing Earth. But the comet hit." Still, he went on to say, we are not on an inescapably revanchist pathway. "Obama's victory in 2008 was also a sign of chaos, of disruption," he said. "Who knows? Right now there could be someone working in Obama's White House who will turn out to be a major force 20 years into the future."



President Barack Obama and Ta-Nehisi Coates at the White House

We do not yet know the truest meaning, or the deepest consequences, of the rise of Donald Trump. And we do not yet understand what his rise will mean for the legacy of America's first black president, or for the future of relations among the races.

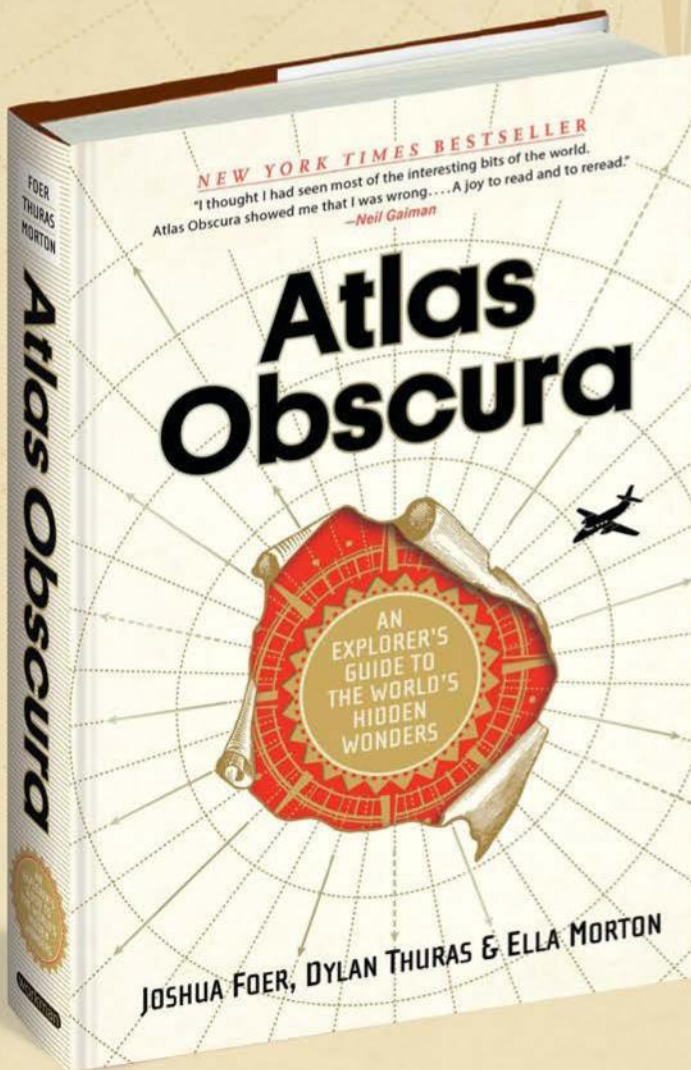
*The Atlantic*, however, is committed to understanding the meaning of these events, just as it has been committed to discerning the meaning of the Obama presidency, and just as it has been committed to advancing the cause of the American idea. This magazine was founded in 1857, at a time of immense fracturing in this country. *The Atlantic* is at its best in difficult times, when the task of explaining America to itself, and to the world, is most crucial. In this new age, we are redoubling our efforts to do this important work. Ta-Nehisi Coates's latest cover story is only one manifestation of our promise to readers.

—Jeffrey Goldberg



# DISCOVER WONDER.

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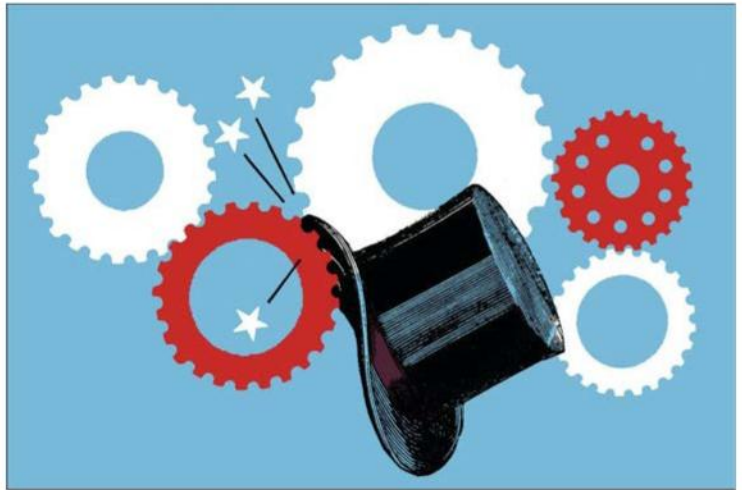


# THE CONVERSATION

RESPONSES & REVERBERATIONS

## America's Monopoly Problem

In October, Derek Thompson explained that "America's biggest companies are growing at the expense of the economy, even if they offer consumers good deals."



Senator Elizabeth Warren and other reformers are calling for more-vigorous antitrust enforcement. While enforcement may stop further concentration, what else can be done about already highly concentrated industries?

Graduating the corporate income tax, like the federal individual income tax but with a higher cap, could play a significant role in reining in incentives to merge. When companies face a higher tax rate, some might actually split apart because several companies paying a 20 percent rate might be more profitable than a single company paying a 35 or 40 percent marginal tax rate. In this reformed tax scenario, even if companies did not split, their smaller competitors could compete more effectively. Giving companies a financial incentive to resist mergers could also help new start-up companies to compete more effectively.

Thompson points out that the share of businesses that are new firms has fallen

by 50 percent since 1978. While it might be impossible to bring back the historical business start-up rate, the corporate tax code can stimulate the growth of firms by creating a corporate tax rate of 10 percent for up to \$1 million in pre-tax income. Reviving antitrust actions against mergers that concentrate industries is long overdue and would be aided by a corporate tax system that encouraged more competition. And it might reduce the harm already done to our economy by excessive concentration across a multitude of industries.

**Bill Parks, Ph.D.**

PROFESSOR EMERITUS OF BUSINESS STRATEGIES, UNIVERSITY OF IDAHO  
MOSCOW, IDAHO

Bigger isn't just "not always bad," as Derek Thompson says; it's increasingly irrelevant. Many upstarts can topple huge incumbents so long as they are able to get their product or service to market (indeed, the bigger the monopoly, the juicier the

target!). Regulators instead should police barriers to entry, which—while often brought about by a firm's bigness—might be much more the result of regulatory capture, frivolous intellectual-property litigation, or anticompetitive pricing than an industry's actual concentration. We are living through a renaissance of craft beer, for example—despite, as Thompson noted, dominance in the rest of the market by only two firms.

**Jason Bade**

SAN FRANCISCO, CALIF.

## Pity the Substitute Teacher

*In October, Sara Mosle reviewed Nicholson Baker's Substitute: Going to School With a Thousand Kids.*

After reading Sara Mosle's review of Nicholson Baker's book on being a substitute teacher in Maine and how awful that was, I found myself wondering just what

biases, along with his clear role as a curmudgeon, he brought to this assignment; and I pitied the poor students who were unlucky enough to have him be the Viola Swamp (of children's fictional lore) in their classrooms.

After I "retired" in 2012, I began substitute teaching in my community of West Hartford, Connecticut—by reputation an affluent suburb, but in reality a very diverse community with many challenged students and a broad array of services for special-needs kids. I have subbed in nearly every kind of middle-school and high-school class, and done lots of one-on-one "minding" of high-need special-needs students, and I have never had a day like Baker's reported unpleasant experiences.

I actually prefer "minding" assignments, as the special-needs students are easy to work with once their highly trained special-ed teacher has explained to me their "issues," and these students are often grateful for the attention and know, better than many other



students, when that attention is genuine.

Granted, my community has a fine school system, but I cannot imagine that the rich mix of students we have is very different from what Baker encountered in Maine. Yes, sometimes regular teachers leave relatively easy work for subs to do, but not always. Many times I have had to pay close attention to regular classwork that I was expected to administer, and I've had a few multiday stints that required my full attention to detail. I have had some classes, especially ninth-grade English, with uninterested students, and often the worst in 7:30 a.m. classes—that unfortunate start time should be changed, as not much learning goes on. Some of those ninth-graders just needed to go to the cafeteria to get some breakfast—which I let them do, one at a time. I have usually been able to eyeball unruly, uninterested students up close to

build enough rapport to teach the class. And yes, every once in a while, I've hoped that a class would end soon. But I always come back.

Baker clearly had preconceived notions about how school should be, and I hope those notions had nothing to do with his apparently "raunchy" fiction. I think Baker should stick to fiction and not inflict his satire on hapless students. Or maybe he needs the income.

**David Johnston**  
CENTER FOR HIGHER EDUCATION  
RETENTION EXCELLENCE  
HARTFORD, CONN.

In my experience (40-plus years on staff in the department of integrated studies in education at a Canadian university), most substitute teachers are nothing more than convenient placeholders who attempt to keep the inmates in order. The majority of substitute teachers arrive in schools ill-prepared for the subjects at hand and simply try as best as possible to make it through the day with as little bloodletting as possible.

In far too many cases, subs are not credentialed practitioners and have been foraged from the community to fill a slot, as no classroom can be left unattended. The fact that these adults will not know the academic interests of the students, have no clue regarding overall academic plans, quite possibly be lacking in scholastic knowledge, and even perhaps harbor attitudes alien to the contemporary situation matters not a whit.



## THE BIG QUESTION

On *TheAtlantic.com*, readers answered December's Big Question and voted on one another's responses. Here are the top vote-getters.

### Q: What is the most interesting family in history?

**5. Without the Tudors,** Western history would be less exciting. The Enlightenment in England and Scotland would be in question; the British empire would be questionable. English would not be the world language that it is, and the United States would not be the country it is today.

— Kathleen Stewart

**4. Cronus and his wife, Rhea, along with their offspring,** Poseidon, Demeter, Hades, Hestia, and of course Zeus and his wife, Hera. When the children of Zeus (Apollo, Artemis, and the rest) are added to this celestial mix, we get unlimited tales of mischief and adventure, along with some of the greatest heroes of all time.

— Gary Kohl

**3. The Mitford sisters:** Jessica, Nancy, Diana,

Deborah, Unity, and Pamela. Among them were famous writers, a Communist, a moderate Socialist, and Nazis—including Diana, who left her husband to marry Sir Oswald Mosley, the founder of the British Union of Fascists. Reportedly, their dinner-table conversations were fantastic.

— Holmes Brannon

**2. Muhammad's family** and lineage are among the most influential elements in some Muslim societies. Kinship to the prophet of Islam can represent huge political privileges.

— Alessandro Columbu

**1. That would have to be the House of Medici,** the Italian dynasty that rose to power at the turn of the 15th century and spawned politicians, popes, and patrons of the arts.

— Anne-Marie McCartan

No other element in our society would tolerate such a contemptible situation. No community would hire a local mother to pinch-hit for a medical doctor, a convenient father does not sit in place of a judge, and a nonelected individual does not replace the mayor. Yet in hundreds of schools across North

America every day, we inflict upon our youth untrained adults who demean the real work that classroom teachers actually do.

**Jon Bradley**  
MONTREAL, QUEBEC

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# DISPATCHES

IDEAS & PROVOCATIONS

January/February 2017

*"After he lost his bid for reelection, William Howard Taft mused about what the country should do with its ex-presidents ... 'A dose of chloroform,' he proposed."*  
— Barbara Bradley Hagerty, p. 22

• POLITICS

## Despair and Hope in the Age of Trump

Americans are optimistic about the communities they live in—but not their nation. Why?

BY JAMES FALLOWS

**I** HAVE BEEN ALIVE for a long time. I remember the assassination of John F. Kennedy, when I was a 10th-grader, and then watching with my family through the grim following days as newscasters said that something had changed forever. The next dozen years were nearly nonstop trauma for the country. More assassinations. Riots in most major cities. All the pain and waste and tragedy of the Vietnam War, and then the public sense of heading into the utterly unknown as, for the first time ever, a president was forced to resign. Americans of my children's generation can remember the modern wave of shocks and dislocations that started but did not end with the 9/11 attacks.

Through all this time, I have been personally and professionally, and increasingly, an American optimist. The long years I have spent living and working outside the United States have not simply made me more aware of my own strong identity as an American. They have also sharpened my appreciation for the practical ramifications of the American idea. For me this is the belief that through its cycle of struggle and renewal, the United States is in a continual process of becoming a better version of itself. What I have seen directly over the past decade, roughly half in China

and much of the rest in reporting trips around the United States, has reinforced my sense that our current era has been another one of painful but remarkable reinvention, in which the United States is doing more than most other societies to position itself, despite technological and economic challenges, for a new era of prosperity, opportunity, and hope.

And now we have Donald Trump. We have small-town inland America—the culture I think of myself as being from—being credited or blamed for making a man like this the 45th in a sequence that includes Washington, Lincoln, and



FDR. I view Trump's election as the most grievous blow that the American idea has suffered in my lifetime. The Kennedy and King assassinations and the 9/11 attacks were crimes and tragedies. The wars in Vietnam and Iraq were disastrous mistakes. But the country recovered. For a democratic process to elevate a man expressing total disregard for democratic norms and institutions is worse. The American republic is based on rules but has always depended for its survival on norms—standards of behavior, conduct toward fellow citizens and especially critics and opponents that is decent beyond what the letter of the law dictates. Trump disdains them all. The American leaders I revere are sure enough of themselves to be modest, strong enough to entertain self-doubt. When I think of Republican Party civic virtues, I think of Eisenhower. But voters, or enough of them, have chosen Trump.

**H**OW COULD THIS have happened? No one can know for sure, and with an event this complex and contingent—why not more visits to Wisconsin? what about Comey? and the Russians?—there will be no single explanation. But I disagree with two elements of instant analysis: that this was a sweeping “change” election, and that it reflected a pent-up desperation and fury that would have been evident if anyone had bothered to check with Americans “out there,” away from the coasts.

In its calamitous effects—for climate change, in what might happen in a nuclear standoff, for race relations—this could indeed be as consequential a “change” election as the United States has had since 1860. But nothing about the voting patterns suggests that much of the population intended upheaval on this scale. “Change” elections drive waves of incumbents from office. This time only two senators, both Republicans, lost their seats. Of the nearly 400

representatives running for reelection to the House, only eight lost, six of them Republicans and two Democrats. In change elections, the incumbent president and his party are out of favor, even reviled: Hoover after the start of the Great Depression, George W. Bush after the financial crash. Through 2016, Barack Obama's popularity kept rising, and if he could have run again, he would have been a favorite for reelection. But even the much less popular candidate from his same party comfortably won the popular vote, and the Democrats *gained* seats in both the Senate and the House. This is not what 1932 looked like, or 1980, or 2008.

The “fury out there” argument was expressed by, among others, Mark Zuckerberg of Facebook, who was trying to rebut criticisms that his site's tolerance for serving up popular, profitable, and wholly fictitious reports as “news” had skewed voters' perceptions of reality, mainly toward the right. It didn't matter that people were learning online that Hillary Clinton was about to die of Parkinson's disease, or that violent crime was very high by historic standards when it was in fact very low. In the end, Zuckerberg said, voters “made decisions based on their lived experience.” Of course people must have been furious about their lived experiences. How else could they have voted for a man many of them viewed negatively, according to exit polls, and even as unqualified for the job?

To paraphrase Trump's famous campaign appeal to African American voters: With their lives and communities in such ruin, what the hell did they have to lose?

But just as Trump's appeal seemed grossly out of touch with modern African American life, so does the heartland-rage theory miss the optimism and determination that are intertwined with desolation and decay in the real “out there.” I can say that because I have been out there, reporting with my

wife, Deb, in smaller-town America for much of the past four years. Erie, Pennsylvania, has a landscape of abandoned factory buildings and a generation of laid-off blue-collar workers who know that their children will never enjoy the security they did at the once-mighty GE locomotive plant. (Those GE jobs, by the way, are moving not to China or Mexico but instead to Fort Worth, Texas.) But Erie also has as active a civic-reform movement as you will find anywhere in the country, led by people in their 20s and 30s who believe they can create new businesses for themselves and new life for their town. Erie is worse off in most ways than it was 50 years ago—but better off than five years ago, and headed toward better prospects five years from now, in the view of most people there. That's also what my wife and I found in places as poor and crime-ridden as San Bernardino, California; as historically downcast as Columbus, Mississippi; as removed from the glamour of the coastal metropolises as Laramie, Wyoming, or Duluth, Minnesota, or Dodge City, Kansas.

Are these impressions incomplete and anecdotal? Of course. But systematic surveys show the same thing. A Pew study in 2014 found that only 25 percent of respondents were satisfied with the direction of national policy, but 60 percent were satisfied with events in their own communities. According to a Heartland Monitor report in 2016, two in three Americans said that good ideas for dealing with national social and economic challenges were coming from their towns. Fewer than one in three felt that good ideas were coming from national institutions. These results also underscore the sense my wife and I took unmistakably from our visits: that city by city, and at the level of politics where people's judgments are based on direct observation rather than media-fueled fear, Americans still trust democratic processes and observe long-respected norms. As I argued in a cover story last year, most American communities still manage to compromise, invest and innovate, make long-term plans. They even manage to

**The heartland-rage theory misses the sentiments so clearly evident in the real “out there.”**



## • STUDY OF STUDIES

# Awesomeness Is Everything

Why encountering vastness makes us more spiritual, generous, and content

BY MATTHEW HUTSON

cope with the ethnic change and racial tension that Donald Trump so crudely exploited in his campaign, with more flexibility and harmony than anything about the campaign might indicate. Yes, residential and educational segregation are evident across the country. Yes, police violence is more visible than ever before. But people in Michigan and Mississippi and Kansas were more willing to start confronting these injustices locally than nationally. The same was true of immigration. In our travels we observed what polls also indicate: The more a community is exposed to recent immigrants and refugees, the less fearful its people are about an immigrant menace. We heard no lusty "Build a wall" cheers in California or Texas or other places where large numbers of outsiders had arrived.

Yet Donald Trump has won. How could his message of despair and anger about the American prospect, and disrespect for the norms that made us great, have prevailed in a nation that still believes in itself at the local level? How can Americans have remained so confident and practical-minded in their daily civic dealings, and so suspicious, fearful, and tribally resentful about the nation as a whole?

Nearly a century ago, Walter Lippmann wrote that the challenge for democracies is that citizens necessarily base decisions on the "pictures in our heads," the images of reality we construct for ourselves. The American public has just made a decision of the gravest consequence, largely based on distorted, frightening, and bigoted caricatures of reality that we all would recognize as caricature if applied to our own communities. Given the atrophy of old-line media with their quaint regard for truth, the addictive strength of social media and their unprecedented capacity to spread lies, and the cynicism of modern politics, will we ever be able to accurately match image with reality? The answer to that question will determine the answer to another: whether this election will be a dire but survivable challenge to American institutions or an irreversible step toward something else. **A**

**I**N OCTOBER, Jeff Bezos's space-flight company, Blue Origin, passed a crucial safety test when it successfully detached a crew capsule from a rocket. In the process, would-be space tourists came one giant leap closer to suborbital selfies. A joyride to 330,000 feet would be, quite literally, awesome.

Research on awe (an emotion related to Edmund Burke's notion of the sublime, Sigmund Freud's oceanic feelings, and Abraham Maslow's peak experiences) reveals both its triggers and its far-out effects. Psychologists have described awe as the experience of encountering something so vast—in size, skill, beauty, intensity, etc.—that we struggle to comprehend it and may even adjust our worldview to accommodate it. A waterfall might inspire awe; so could childbirth, or a scene of devastation. **[1]**

Even if awe's source is terrestrial, its outcome can be spiritual. In one set of studies, watching nature videos induced awe, which in turn reduced

tolerance for uncertainty, which led to stronger belief in God or the supernatural. **[2]** People have different ways of making sense of vastness. In another study, awe reduced belief in science among religious people. For the nonreligious, awe increased belief in evolution as an orderly versus random process. **[3]**



As vastness expands our worldview, it shrinks our ego. Awe makes spiritual and religious people feel a greater sense of oneness with others. **[4]** And this oneness can make us nicer: Researchers found that inducing awe—say, by having people stand in a grove of tall trees—increased generosity, in part by stoking "feelings of a small self." **[5]** Awe also shapes our sense of time. One series of studies found that awe made

time feel more plentiful, which increased life satisfaction, willingness to donate time to charity, and preferences for experiences over material products. **[6]**

We react physically to awe. When people logged their goose bumps, awe was the second-most-common cause. (The first was being cold.) **[7]** Nonetheless, people from different countries seem to have different predispositions to the sensation. Those in the U.S. reported feeling awe more frequently than did those in Iran. **[8]**

Which is too bad, because awe just might be a prescription for world peace. In an analysis of 56 astronauts' memoirs, interviews, and oral histories, the astronauts appeared to experience increases in spirituality and universalism—that is, the belief in an interconnected humanity. **[9]** This doesn't mean we should encourage Iranian

rockets, though—we can send links instead. Researchers found that the more awe-inspiring a *New York Times* article was—"Now in Sight: Far-Off Planets" got high marks—the more likely it was to go viral. **[10]**

Of course, far-off planets don't have a monopoly on awe. If you can't afford a trip to space, try a walk in the woods. **A**

Matthew Hutson is the author of *The 7 Laws of Magical Thinking*.

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DISPATCHES



## Glenn Beck's Regrets

His paranoid style paved the road for Trumpism.  
Now he fears what's been unleashed.

BY PETER BEINART

**G**LENN BECK LOOKS like the dad in a Disney movie. He's earnest, geeky, pink, and slightly bulbous. His idea of salty language is *bullcrap*.

The atmosphere at Beck's Mercury Studios, outside Dallas, is similarly soothing, provided you ignore the references to genocide and civilizational collapse. In October, when most commentators considered a Donald Trump presidency a remote possibility, I followed audience members onto the set of *The Glenn Beck Program*, which airs on Beck's website, theblaze.com. On the way, we passed through a life-size replica of the Oval

Office as it might look if inhabited by a President Beck, complete with a portrait of Ronald Reagan and a large Norman Rockwell print of a Boy Scout.

On one side of the main stage hung a drawing of an old pickup truck, captioned "Edward Janssen Farms." (Janssen was Beck's maternal grandfather; Beck's family sells a line of American-made clothing that bears the Janssen name.) Over the truck, in large type, was the word HONOR. On the other side of the stage sat an old-fashioned radio and a comfy blue armchair. The scene was warmly reassuring, except for the television offstage, which was blaring an advertisement for a year's worth of

"emergency survival food" to be consumed in case society unravels.

Beck asked an audience member to lead a prayer, then filming started. Someone asked, "How do we get people to come together?" Beck responded by citing a book called *Pendulum*, which argues that as the result of generational change, history shifts in 40-year cycles between "me" eras and "we" eras. In 2003, he explained, America entered a "we" era, a time when individual identity weakens and group identity strengthens. "We" generations," Beck declared, produce "genocidal monsters": The past three "we" generations coincided with the French and American revolutions,



Karl Marx and the Civil War, and the Holocaust. Americans can survive the coming "onslaught," he reassured his viewers, but to do so will require great character. He mentioned Dietrich Bonhoeffer, who was hanged for resisting the Nazis. He invoked Gandhi, who fasted in an effort to prevent India's Hindus and Muslims from murdering each other. Then Beck stopped for a commercial break, during which he chatted amiably with his audience about the impending collapse of America's banks.

Later in the show, a questioner suggested that Americans were turning away from God. Beck said he'd been thinking a lot about the prophet Jeremiah, who vainly warned the Israelite kings that catastrophe was near. Finally, when the Babylonians were about to sack Jerusalem, Jeremiah urged the Israelites to accept national enslavement, because it was God's will. Beck saw a contemporary lesson: "Sometimes you have to pay the price for what you've done." Then he started talking about Donald Trump's assault on the Bill of Rights.

**A**MIDST THE MISERY of the 2016 presidential campaign, Beck showed unusual courage. Many conservative pundits opposed Trump. But they mostly worked for mainstream media institutions like *The New York Times*, *The Washington Post*, MSNBC, and CNN. They didn't rely on Trump supporters to pay their salary.

Conservative talk-show hosts, who stoke right-wing populism for a living, reacted very differently. Sean Hannity appeared in one of Trump's campaign videos. Laura Ingraham spoke at the Republican National Convention. Rush Limbaugh declared in March that, "with the case of Trump, there's a much bigger upside than downside." In July, Hugh Hewitt wrote, "Of course I am voting for Donald Trump."

Even the most moralistic conservative talkers—including William Bennett and Dennis Prager, who have made careers of arguing that private character is key to political leadership—endorsed Trump. Mark Levin, who hosts a popular

show on the Westwood One radio network, vowed not to. "Count me as Never Trump," he declared in April. But in September he announced, "I'm voting for Trump."

Among big-time national conservative talk-show hosts, Beck—who is tied with Levin for the third-largest listenership after Limbaugh and Hannity—was a rare exception. He didn't just oppose Trump. He compared him to Hitler. He warned that Trump was a possible "extinction-level event" for

American democracy and capitalism. In an attempt to defeat Trump, Beck campaigned during the primaries for Ted Cruz. Then, when Cruz endorsed Trump, Beck apologized for having supported him.

One longtime sponsor of Beck's radio show reportedly tried to pull its ads in protest. In May, SiriusXM briefly suspended Beck for implying that if Congress wouldn't stop a President Trump, Americans might have to do so by force. Nonetheless, Beck held firm



•VERY SHORT BOOK EXCERPT

## HUXLEY TO ORWELL: MY DYSTOPIA IS BETTER THAN YOURS

*On October 21, 1949, a few months after the publication of Nineteen Eighty-Four, George Orwell received a letter from Aldous Huxley, whose Brave New World had been published 17 years earlier. Huxley concludes:*

WITHIN THE NEXT GENERATION I believe that the world's rulers will discover that infant conditioning and narco-hypnosis are more efficient, as instruments of government, than clubs and prisons, and that the lust for power can be just as completely satisfied by suggesting people into loving their servitude as by flogging and kicking them into obedience. In other words, I feel that the nightmare of *Nineteen Eighty-Four* is destined to modulate into the nightmare of a world having more resemblance to that which I imagined in *Brave New World*. The change will be brought about as a result of a felt need for increased efficiency. Meanwhile, of course, there may be a large-scale biological and atomic war—in which case we shall have nightmares of other and scarcely imaginable kinds.

— Adapted from *Letters of Note, Volume 2*, compiled by Shaun Usher, published in October 2016 by Chronicle Books

in his opposition. He considered voting for Hillary Clinton, but ultimately went for the independent candidate Evan McMullin. Why?

The answer lies in the very catastrophizing that makes Beck sound like a kook. In the mid-1990s, Beck was, by his own account, a “despicable human being,” a divorced, alcoholic, drug-addicted shock jock for a Connecticut radio station. He once put on a banana suit and leaped into a pool of Styrofoam. He repeatedly considered suicide.

Eventually Beck got sober and fell in love with the woman who would become his second wife. But she refused to marry him until they found a religion. So the couple embarked on a “church tour” and were baptized as Mormons in 1999.

For a time, Beck remained apolitical. “I didn’t pay attention to anything until September 11, nothing, nothing,” he explained to me after the taping, as we sat in his office. “I couldn’t have told you the Bill of Rights in any great detail.” He describes 9/11 as “a turning point for me.” He was by then hosting a show in New York, and remembers walking from Ground Zero to his studio and reading on air a 19th-century hymn written by a Mormon pioneer fleeing Missouri on his way to Utah. Beck says he felt a special calling at that moment. “If you have a position on the gate and you don’t warn the people of what you see,” he remembers thinking, “you’re to blame.”

Ever since, Beck has imagined himself as a sentry perched on the national ramparts, warning of looming disaster. Usually, that disaster manifests itself as a threat to the Constitution. Which, given Mormon history, makes perfect sense. Many Americans revere the Constitution. Mormons, however, consider it sacred. In *Doctrine and Covenants*, a book of Mormon scripture, God says, “I have established the Constitution of this land by the hands of wise men whom I raised up unto this very purpose.” According to polling by David Campbell, a Notre Dame political scientist, 94 percent of American Mormons believe that the “Constitution and the Bill of Rights are divinely inspired.” That’s only two points lower than the

percentage who believe that the Book of Mormon is.

But Mormons don’t just consider the Constitution sacred. They believe that its violation has allowed their persecution. Why did the governor of Missouri in 1838 call for Mormons to “be exterminated or driven from the State”? Why were Mormons forced to travel halfway across the continent—leaving the borders of what was then the United States—in order to find sanctuary in Utah? Because America’s leaders disregarded the country’s sacred texts.

Today, many Mormons see defending the Constitution the way many Jews see opposing genocide: as a way of honoring their ancestors and affirming their identity. In recounting his own religious conversion, Beck told me about a parade that he claimed Mormon settlers held upon reaching Utah, after having been expelled from the United States. “The women carried the Declaration of Independence and the men carried the Constitution,” he said. “And the whole point was that people may let you down, people will violate the principles, but the principles are true.” Such a parade likely never happened. Two scholars of Mormonism told me they had never heard of it. But the story nonetheless illustrates the Constitution’s centrality to Beck’s identity, and to the identity of many Mormons. According to legend, the Mormon leader Joseph Smith prophesied in 1843 that the Constitution would one day “hang by a thread” and be saved by “the elders of Zion,” by which he meant Mormon men. Church authorities say the quote is apocryphal. Campbell’s polling, however, finds that a majority of Mormons believe it’s true.

And yet, Campbell argues, Mormons tend not to accentuate these views publicly. Mormon culture, he told me, emphasizes a “moderate way of speaking.” Think Mitt Romney or Orrin Hatch. Campbell, who is Mormon himself, says that’s in part because many

Mormons are desperate to be accepted by a mainstream that has long rejected them. They’re fearful of looking like fanatics or nuts.

Beck is not. Perhaps because he converted to Mormonism as an adult, he never imbibed his co-religionists’ anxiety. He has publicly invoked Smith’s alleged prophecy at least five times, most recently in March. Warning Utah voters of the threat Trump posed, Beck reminded them that “the body of the priesthood is known to stand up when the Constitution hangs by a thread.” More problematically for liberals, Beck invoked the prophecy three times in late 2008 and early 2009 to describe Barack Obama.

This is the irony underlying Beck’s current stance: The same doomsday sensibility that helps him appreciate the menace posed by Trump led him to massively exaggerate the menace posed by Obama—and thus to breed the hateful paranoia on which Trump now feeds. Beck, in fact, pioneered some of Trump’s most disturbing themes. At the beginning of Obama’s first term, Beck repeatedly called the president antiwhite. In 2010, he wondered why Obama “needlessly throws his hat

into the ring to defend the Ground Zero mosque. He hosts Ramadan dinners, which a president can do. But then you just add all of this stuff up—his wife goes against the advice of the advisers, jets to Spain for vacation. What does she do there? She hits up the Alhambra palace mosque. Fine, it’s a tourist attraction.

But is there anything more to this? Are they sending messages?”

Trump opponents may appreciate Beck’s Hitler analogies now that they’re directed at The Donald. But during the first 14 months of the Obama administration, according to Dana Milbank’s book *Tears of a Clown: Glenn Beck and the Tea Bagging of America*, Beck and guests on his Fox News show invoked “fascism,” “Nazis,” “Hitler,” “the Holocaust” and “Joseph Goebbels” 487 times.

**Many Americans revere the Constitution. Mormons like Beck consider it sacred.**



For good measure, Beck in 2007 said that Hillary Clinton sounds like “the stereotypical bitch.”

Beck says he’s sorry for all that. “I played a role, unfortunately,” he told Megyn Kelly during a 2014 interview on Fox News, “in helping tear the country apart.” He told me that now that America has “hit the iceberg,” he wants to help it heal. “I’m not the guy you want at the beginning of the ride on the *Titanic*, because I’m the guy going out and saying, ‘We’re going to hit ice,’” he explained. “But once she starts going down, I’m the guy who would be standing at the lifeboats saying, ‘Relax, it’s going to be okay. Let’s get the women and the children in the boats. Let’s not tear each other apart.’”

Although still generally conservative, Beck now insists that America’s real moral divide isn’t between left and right. He recently angered some conservatives by sending aid to undocumented children detained at the Mexican border. In a *New York Times* op-ed this fall, he called on conservatives to show “empathy” for Black Lives Matter activists. He says Americans must stop thinking in terms of ideological sides.

The day after Trump’s victory, I checked in with Beck again. He said he saw “the seeds of what happened in Germany in 1933.” The question was whether the American people would “water them” with “hatred and division.” Did he feel partly responsible? “I’ll not only take my share of blame, I’ll take extra,” he answered. “If you want to blame me for him, that’s fine; I don’t believe it’s true, but it’s fine with me. Please just listen to the warnings now so we don’t continue to do this.”

When Barack Obama rose to the presidency after insisting, “There is not a black America and white America and Latino America and Asian America; there’s the United States of America,” Glenn Beck called him a racist. Now that Donald Trump is president, Beck wants to bind the country’s racial and ideological wounds. He really does.

But for years and years, he called sheep wolves. Now that the wolf is here, it may be too late. **A**



• BIG IN JAPAN

## Tiny Food

**T**HE BROTH sizzles in a tiny pot hung over a flame on a miniature *irori*, or “hearth.” A knife the size of a pinkie finger nudges minuscule cubes of tofu from a palm-size cutting board. Flakes of seaweed tumble off a spoon pinched between a thumb and finger. A couple of minutes later, a tiny ladle dishes the finished miso soup into bowls no bigger than a thumbnail.

YouTube is replete with Japanese tiny-food videos. Their creators shrink recipes to Lilliputian dimensions: pancakes the size of nickels, burgers compact enough to flip with chopsticks. The meals may be extremely diminutive, but they’re edible. Most of the ingredients are hulking compared with the finished products, but whenever possible, the chefs choose smaller stand-ins: Pearl onions or shallots sub for their bigger counterparts, and quail eggs replace chicken eggs.

Some of the YouTube channels devoted to tiny food post only periodically, while others roll out new installments a few times a week. Miniature Space, to take one

example, has more than 1 million subscribers; its most popular video—a strawberry shortcake made from a single berry—has been viewed more than 8.5 million times. The videos are addictive; there’s something at once mesmerizing and weirdly funny about a gigantic hand trying to chisel a tiny sliver of meat, or smooth whisker-thin coats of icing on a multitiered “cake” cut from a single slice of bread.

Merry White, an anthropology professor at Boston University who studies Japanese culture and cuisine, says that tiny food embodies the Japanese obsession with *kawaii*, or “cuteness.” Dishes are typically presented against a backdrop of dollhouse furniture and accessories—little chairs, plates, floor lamps, and potted plants. White detects an affectionate gibe in some of this, a playful “teasing by miniaturing, and making exceptional the ordinary.”

Although the recipes are fairly straightforward—more home cooking than haute cuisine—the videos reveal a fussiness about details. To White,

the exacting attention required to, say, move one grain of rice at a time echoes the culture of *otaku*—young, predominantly male hobbyists who are consumed by interests like manga, video games, and anime.

Inspired by the success of Japanese tiny-food videos, the California-based company Tastemade has produced a web series called *Tiny Kitchen*, with more than 50 episodes and millions of views across Facebook, Snapchat, Instagram, and YouTube. Tastemade’s videos display the same fastidiousness as the Japanese originals. “I feel sort of like a surgeon,” says Hannah Aufmuth, the food stylist whose hands are in the *Tiny Kitchen* videos, jokingly referring to her miniature spatula as her “scalpel.”

The tiny-food trend grafts onto a Japanese enthusiasm for zany cooking shows—the popular *Cooking With Dog*, for instance, is hosted by an anonymous Japanese woman whose poodle flounces around her countertop. White says that compared with such shows, tiny-food videos can be a bit more nostalgic. After all, the traditional hearth some of the videos painstakingly re-create is fast disappearing from the country. The *irori* in the miso-soup video, for example, recalls old-fashioned farmhouses—from which most young people are a few generations removed.

“It would be like a Norman Rockwell painting of Thanksgiving dinner for an American,” White says. But a lot, lot smaller.

— Jessica Leigh Hester

## • BUSINESS

# How Frackers Beat OPEC

The surprising ingenuity of the American shale-oil industry—and its huge global consequences

BY VAUHINI VARA

**I**N NOVEMBER 2014, OPEC ministers gathered in Vienna for a tense meeting. Oil prices had fallen to their lowest point in four years. For decades, the cartel had responded to situations like this by restricting production and sending prices higher.

But things were changing. During the mid- and late aughts, more companies in the United States had begun using an alternative to traditional land-based drilling and deepwater offshore drilling. The method—fracking—involved using a mixture of water, chemicals, and proppant (sand or sand-like substances) to crack underground shale rock and release oil from it.

In 2014, U.S. shale oil represented about 5 percent of the oil being produced worldwide. But the process was expensive, which suggested to many that shale producers could not stay in business if oil prices dipped too far.

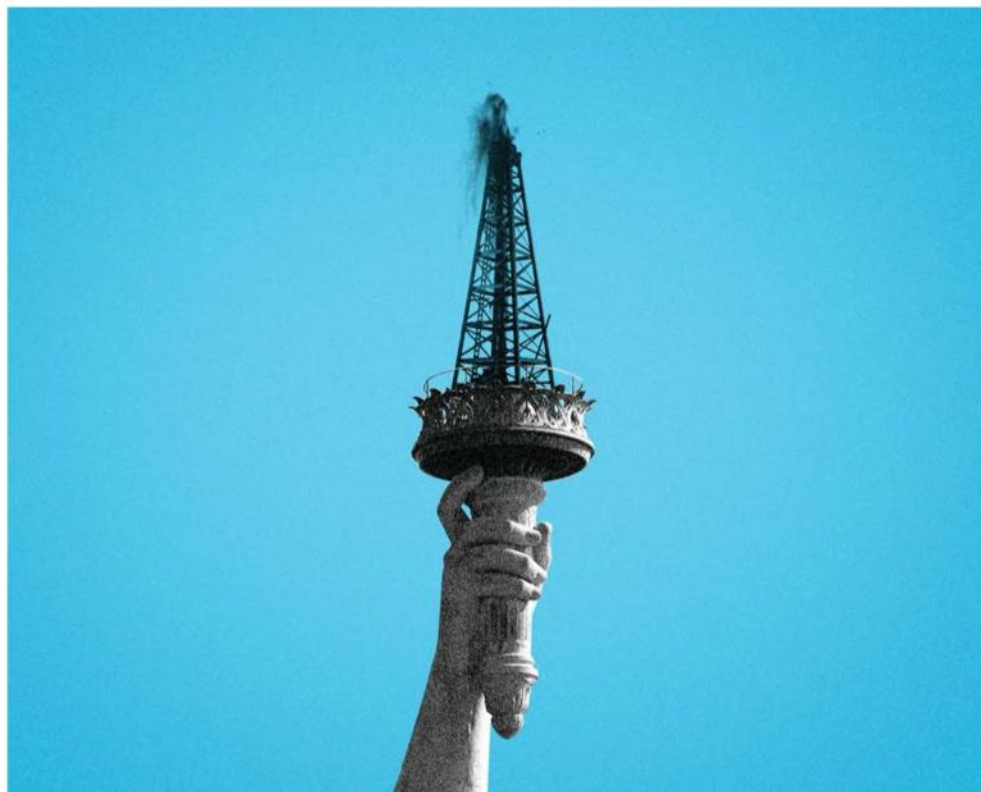
The main question at hand for the OPEC ministers was whether their countries should lower oil production and thereby raise prices. The oil minister of Saudi Arabia, Ali al-Naimi, spoke up. He argued, according to widely reported accounts of the meeting, that if the OPEC countries stopped pumping as much oil, non-OPEC producers, such as U.S. frackers, might step in and supply more oil themselves.

Naimi's argument proved persuasive: OPEC decided

not to reduce production, and the price of oil plunged—from just over \$70 a barrel to less than \$60 by the end of the year. The move immediately came to be seen as a strike against U.S. frackers. "Inside OPEC Room, Naimi Declares Price War on U.S. Shale Oil," announced a Reuters headline the day after the meeting. And in fact, oil prices did appear to be crossing an ominous threshold for frackers: In December 2014, U.S. shale producers needed oil prices to be at \$69 a barrel on average in order to break even on a newly drilled well, according to Rystad Energy, a consulting firm. Whether or not this was an explicit price war, many observers believed that U.S. fracking was in trouble.

**W**HAT'S HAPPENED SINCE has been a surprise. Even as oil prices fell and stayed low—by January 2016, they had dropped to less than \$30 a barrel; today, they've rebounded, but only to about \$45—shale-oil companies kept pumping. Their average break-even price has fallen by more than 40 percent, to about \$40 a barrel. In some parts of the country, that figure is much lower. In the Bakken shale formation in North Dakota and Montana, where the economics of fracking are particularly favorable, the average break-even price is \$29.

Fracking, it turns out, is a remarkably nimble industry—which perhaps, in retrospect, should not have been such a surprise. In the early years of the fracking boom, a Harvard Ph.D. student, Thomas Covert, studied records related to wells fracked in the Bakken shale formation. Wells that were newly tapped in 2005, he found, captured on average only 21 percent of the profits they could have produced if they'd been fracked in the most optimal way—that is, with the best mix of water and sand. By 2012,





though, newly fracked wells were capturing 60 percent of maximal profits.

When oil prices fell, frackers responded by continuing to innovate. David Demshur, the CEO of Core Laboratories, a Dutch company that analyzes the ground into which oil companies drill, recalls suddenly getting a lot of phone calls in the summer of 2014 from shale companies desperate to squeeze more oil out of their wells. Demshur's business with shale companies, until then, had amounted mostly to producing reports on the characteristics of a given chunk of rock; it was up to the companies to make use of the information. Now Core Laboratories started recommending the best cocktail of water, proppant, and any of several chemicals to get the most oil out of a particular well. Some of the biggest shale companies signed up.

Demshur's experience wasn't unusual; I heard similar stories as I spoke with analysts and oil-company representatives. Oil companies invested more in technology from outside firms to help them become more efficient and productive at fracking, while also doing their own in-house research. Their techniques varied: using different combinations of water, proppant, and chemicals; applying the cocktail with greater pressure; drilling several wells simultaneously in a single area; using drones and sensors, instead of humans, to detect when equipment needed to be fixed or replaced.

Statoil, which drills in several U.S. shale basins, came up with a concept known as "the perfect well"—essentially, a hypothetical well that could produce oil at the lowest cost possible. "We just went through piece by piece to find more-efficient ways of doing every single operation," Bruce Tocher, the head of the company's shale-oil-and-gas research group, told me. In the Eagle Ford shale formation in Texas, Statoil cut the average time it took to drill a new well from 25 days to 15.

One major advantage for shale producers has to do with the time and money it takes to drill a new well for fracking relative to starting an offshore project. Before the fracking boom, the United States—while extracting plenty of oil through conventional drilling on land—depended largely on offshore projects for alternative sources of oil. But fracking wells can be created more quickly and cheaply than offshore sites. "As soon as they see prices go up, they can get a rig together and go drill a well

and bring that well online within a matter of weeks," Judson Jacobs, an energy analyst at the research firm IHS Markit, told me.

Not every oil producer has succeeded in the current climate; more than 100 North American oil and gas companies have gone bankrupt since the beginning of 2015, and U.S. oil production fell by about 6 percent between the 2014 OPEC meeting and this past

summer. That itself was a source of cost savings: Producers focused on the best fields rather than the marginal ones; outside contractors, with less work to go around, cut their rates. Yet much of the story involves innovation, and those producers that survived proved startlingly adept. In early August 2016, David Stover, the CEO of the shale producer Noble Energy, admitted to analysts, "It's a bit surprising to me how we continue to still see improvements."

**T**HANKS TO ALL these factors—not to mention the likelihood that Donald Trump's administration will be quite supportive of fracking—it has become clear that the shale-oil business is going to survive, at least for now. And that could have major implications for the global oil market. Saudi Arabia and the other OPEC countries have long worked together to cap supply so prices don't tumble. However, with sustained competition from shale companies, OPEC is unlikely to be able to keep prices as high as it once could. "Certainly, the days of

\$120 barrels of oil are a long way away," Jacobs says.

The consequences of cheap oil will be widespread. Car owners may benefit; the environment will not. Meanwhile, the geopolitical ramifications have already been "enormously significant," according to Jason Bordoff, a former energy adviser to President Obama who now directs Columbia University's Center on Global Energy Policy. In Venezuela, low oil prices (combined with other factors) have led to a food shortage. In Nigeria, they are among the causes of an ongoing recession. And Saudi Arabia, which has recently had a hard time balancing its budget, has cut back on public services, such as subsidies for water and electricity.

For its part, the United States is expected to produce more oil over the next several decades—which "puts us in a stronger position to have conversations with countries around the world," Bordoff says. If a future U.S. president wants to persuade other leaders not to buy oil from a particular nation, for example, it could help that the United States can step in and provide some oil itself.

No one knows how this will all play out over the long term. At some point, U.S. shale basins could run out of oil (though other non-OPEC countries with shale resources could make up for that). Or alternative energy sources could eventually displace oil altogether. Still, it's clear that the shale revolution has changed the geopolitics of oil, with ripple effects likely for years to come. Even the leaders of Saudi Arabia seem to be acknowledging this: In April 2016 they released an unprecedented plan to dramatically reduce the country's economic dependence on oil by encouraging other industries, such as mining and tourism. In May, a year and a half after leading OPEC into an apparent attack on U.S. fracking, the longtime Saudi oil minister Ali al-Naimi was ousted. And soon after, Saudi Arabia was encouraging OPEC to cut production and raise prices—exactly what it had argued against not so long ago. **A**

*Vauhini Vara is a journalist based in Colorado.*

**The average break-even price for shale oil has fallen by more than 40 percent. In some places, it is \$29 a barrel.**



## • HISTORY

## Can an Ex-President Be Happy?

What Jimmy Carter, Bill Clinton, and George W. Bush can teach Barack Obama about life after the White House

BY BARBARA BRADLEY HAGERTY

**I**N 1912, AFTER he lost his bid for reelection, William Howard Taft mused about what the country should do with its ex-presidents once they leave the White House. “A dose of chloroform,” he proposed, to protect the nation “from the troublesome fear that the occupant could ever come back.”

Today, the Twenty-Second Amendment limits how often a president may come back. The question concerning Barack Obama is not what should be done with him, but rather, what should he do with himself?

For most of our history, ex-presidents who were not independently wealthy had to work—not until 1958 did Congress pass a law granting them a pension. George Washington became the country’s largest whiskey producer. John Quincy Adams won a seat in the House of Representatives and fought slavery. And William Howard Taft! Good thing no one took him up on the chloroform. Nine years after he left office, he was appointed chief justice of the Supreme Court, a position that the presidential historian Doris Kearns Goodwin says gave him “probably the happiest decade of his life.”

At 55, Obama will be one of the youngest ex-presidents, and—despite the defeat of his intended successor, Hillary Clinton—a popular one. He is in good health and could easily live for another four decades, which is a long time to be ex-anything.

What can he learn from Jimmy Carter, Bill Clinton, and George W. Bush, who likewise walked out of the White House as vigorous middle-aged men?

**T**HE DOWNSHIFT FROM presidency to post-presidency has bewildered quite a few former White House residents. Having lost in a landslide to Ronald Reagan in 1980, Jimmy Carter left Washington an unpopular one-term president. When he and Rosalynn returned to Plains, Georgia, they found the family peanut business \$1 million in debt, and their house in need of repairs.

“The forest in their backyard had crept up to their back door, literally,” says Mark Updegrave, the director of the LBJ Presidential Library. The former

J. SCOTT APPLEWHITE/AP



first couple spent their first weeks back home hacking away at the overgrowth and making the house habitable.

The chore was an apt metaphor for Carter's predicament as, at age 56, he sought a path forward. "He said, 'Look, the actuarial tables said I'm going to live another 20 to 25 years. I want to stay productive and figure out something else I can do with myself,'" says Phil Wise, a vice president at the Carter Center.

Jon Meacham, who has written several presidential biographies, believes that most of the clues to a president's life after the White House can be found in his past. "What drives them, post-presidency, is their essential personality," he says. "They are—finally, at last—free to be whatever they want."

From early on, Carter, a Naval Academy graduate who taught Bible studies on the submarine where he served, displayed a striking mix of ambition and idealism. In office, his Baptist faith was fodder for jokes. Out of office, however, it fueled his redemption. "He often talked to me when he was president about how, when it was over, he wanted to be a missionary," Carter's vice president, Walter Mondale, told me.

The particulars of a given presidency also come into play, of course. How did the president fare in the White House? Was he reelected or defeated? Did he feel satisfied with his legacy, or haunted by unfinished business? For his part, Carter sought to build on his greatest presidential triumph, the peace accord he brokered between Israel and Egypt at Camp David. To that end, he created the Carter Center, an institution from which he could act as a freelance diplomat and launch further global pursuits.

Over the past three decades, the Carter Center has monitored more than 100 elections around the world. It has effectively eradicated guinea worm disease in Africa. Carter has mediated prickly diplomatic disputes and won

a Nobel Peace Prize. In the process, he has redefined the post-presidency, transforming it into a humanitarian and philanthropic venture. "He's made it difficult for absolutely everyone who's come after him," says Michael Duffy, a co-author, with Nancy Gibbs, of *The Presidents Club*. "Because who can keep up?"

In fact, Carter's missionary zeal has done more than inspire envy; it has caused his successors headaches. Unfettered by the constraints of the White House, he has found his post-presidency the ideal pulpit from which to push his peace agenda. When George H. W. Bush was building a coalition to oust Saddam Hussein from Kuwait, Carter lobbied members of the United Nations Security Council to vote against U.S. policy. When it appeared that North Korea was trying to develop nuclear weapons, Carter traveled there as a private citizen and told the country's leader, Kim Il Sung, that the U.S. would take the threat of sanctions off the table. President Clinton was furious.

**B**ILL CLINTON began thinking about his post-presidency the day he became president, according to Joe Conason, the author of *Man of the World*, a biography of Clinton. But nothing prepared him for his first day out of office. Newly resettled in Chappaqua, New York, Clinton ventured to the local deli for a cup of coffee. A crowd of reporters surrounded him, demanding to know why, on his last day in office, he had pardoned the fugitive financier Marc Rich.

"Suddenly, there was no phalanx between him and the media and the public," Conason says. "He felt powerless. He felt unprotected." And alone. Hillary Clinton was starting her new job as the junior senator from New York, Conason notes. "So he holed up in his house, not knowing exactly what to do."

After a few desultory months, the Marc Rich controversy faded, and Clinton ventured back into the spotlight.

"Bill Clinton, since he was a little boy, wanted more, more, *more*," Jon Meacham says. "Whether it was power, knowledge, women, or good works—it goes both ways, light and dark."

The light: Through the Clinton Foundation, he got sugary drinks out of public schools and funded relief programs after the tsunami of 2004 and Hurricane Katrina in 2005. He poured money into hospitals in Africa, particularly in Rwanda (he is haunted by his failure to stop the 1994 genocide there). The dark: Early on, he jetted around with, and received money from, billionaires with sordid reputations. The Clinton Foundation raised \$2 billion for charities, but some donors—the Saudi royal family, Blackwater—raised eyebrows.

Bill Clinton was also, of course, the first to fully realize the post-presidency's promise as a global moneymaking operation. Since 2001, he has earned some \$150 million for speaking and writing books—prompting Michael Duffy to observe to me: "Being president is a good career move."

**I**F JIMMY CARTER and Bill Clinton seemed to cling to the vestiges of the presidency, George W. Bush happily shook them off. In a 2010 interview with *Texas Monthly*, he told Mark Updegrave that when he woke up in Crawford, Texas, on January 21, 2009, he opened the newspapers and was delighted to realize that the stories inside were no longer his problems: "So I gathered up [my dogs,] Barney and Beazley, got in the pickup truck, drove over to my office, and started writing anecdotes for my book." James Glassman, who was then the director of the George W. Bush Institute, recalls a private dinner at Bush's home in 2010, during which Condoleezza Rice and Karl Rove chatted about the upcoming elections. Not Bush. "He was not the least bit interested," Glassman told me, laughing. "It was stunning how little attention he paid to the political world."

Today, Bush mostly stays close to home, taking part in activities he enjoyed before his political life—barbecues with his neighbors, golfing,

**Obama and George W. Bush have a similar relationship with the presidency: They don't need it.**

riding his mountain bike. He has occasionally traveled to Africa, where his institute has renovated health clinics and expanded programs to fight cervical cancer. "He seems content because he is content," says Peter Wehner, a former speechwriter for Bush who stays in touch with his former employer.

Indeed, Bush could be the poster child for a happy second act. Uninterested in either burnishing his legacy or remaining at the center of the political swirl, he has discovered what midlife researchers suggest is the secret to fulfillment: shifting away from ambition and acquisition and toward activities that have lasting and intrinsic worth, such as investing in important relationships and causes or hobbies that give joy and meaning to one's life.

As has been widely reported, after leaving the White House, Bush developed a passion for painting—dogs, himself, world leaders. Now he has turned his eye to military personnel who served in Iraq and Afghanistan, some of whom returned wounded. Sixty-six of these portraits will appear in a book to be published in February. When I asked Wehner whether Bush might be working through his decision to invade Iraq, he shook his head. "The painting is a way to honor the veterans," he says. "I don't think there's any deeper meaning, that there are dark elements that were somehow manifesting itself in art. It's possible, but that doesn't strike me as the kind of person he is."

**O**N JANUARY 21, what can Barack Obama expect? He surely will not enjoy the buoyant landing he once anticipated. The defeat of Hillary Clinton, for whom he campaigned hard and often, has cast a deep shadow over his final weeks in office. Before he was elected, Donald Trump vowed to unravel many of Obama's achievements.

Even so, for reasons of temperament and popularity, Obama may be spared the anxieties that dogged some of his predecessors. Douglas Brinkley, a presidential historian, says that while the electorate may have rejected some of Obama's policies, it has not rejected

him. He compares Obama's situation to that of Dwight D. Eisenhower, who left office a popular two-term president, even though his intended successor, Vice President Richard Nixon, had lost the 1960 election. Barack Obama's response to leaving the White House is perhaps most likely to recall Bush's, friends and observers say. In part, that's because, despite their vastly different politics and personalities, the two men have a similar relationship with the presidency: They don't need it.

Unlike so many politicians before him, Obama did not aspire to the presidency early on. For years, points out David Maraniss, who has written biographies of Obama and Clinton, Obama did not settle on a particular career path. Rather, he engaged in a "struggle to figure himself out" as a mixed-race man in America, a struggle that included traveling to Kenya, organizing poor residents on Chicago's South Side, and writing a literary memoir. "He's just an unusual character to be president," observes Doris Kearns Goodwin. "The fact that

he's a writer means that he looks at himself from the outside in. There's a self-awareness and a reflection that is not common among politicians."

Valerie Jarrett, Obama's close friend and senior adviser, says he doesn't yearn for the spotlight: "Of course he'll miss being in the thick of things. But I think he's also really grounded and pragmatic. So he won't indulge the emotion of saying, 'Oh gosh, I wish it wasn't over.' It's over."

Which isn't to say that Obama is likely to spend the rest of his days bodysurfing. Jarrett and others believe his feeling of social obligation will be a source of direction as he goes forward. Obama's sense of calling to service is key, Jon Meacham says. "It's a lot like Carter—that we're here for a purpose," he said. "It's our duty to do as much good as we can, as the scale of our life allows."

Obama will undoubtedly spend some time raising money for his presidential library in Chicago, and writing his presidential memoir, for which he is expected to receive a multimillion-dollar advance.

But what else?

For several years, Obama has ruminated about his next phase with dinner guests including Steven Spielberg and Reid Hoffman, a co-founder of LinkedIn. Before November, the possibilities seemed endless, ranging from addressing racism or criminal-justice reform or gun control or climate change, to buying a basketball team, to teaching law, to joining a tech firm. Advancing the social and environmental

issues close to his heart may be harder now—but he may also view the effort as more important.

Regardless, he will have to manage a challenge more quotidian, but hardly simple—an emptying nest. "Family is everything to Obama," David Maraniss says. "His whole young life was a search for home—for a sense of family, place, and identity." A man who

grew into adulthood without a father, he seems to define himself as much by his constancy as a dad as by his political achievements. Most nights that he is in Washington, he walks upstairs at 6:30 to dine with his family. When politics at home and war abroad created minute-by-minute upheaval, his family was his anchor.

Now, in an inevitable cruelty of midlife, his girls say they prefer sleepovers with friends to movies with Dad. "They break my heart," Obama has said. He wore sunglasses to Malia's graduation from Sidwell Friends School in June, so no one would see him cry. The prospect of losing his girls to adulthood, friends say, saddens him more than leaving the White House. **A**

*Barbara Bradley Hagerty is the author of Life Reimagined: The Science, Art, and Opportunity of Midlife.*



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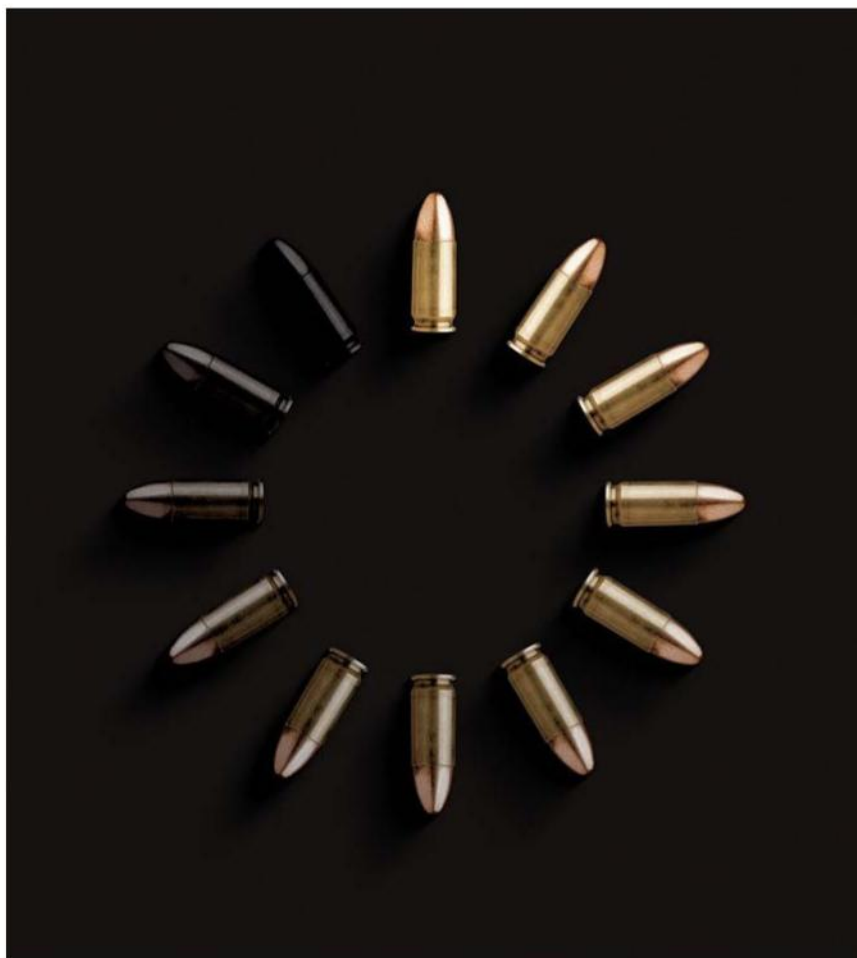
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## DISPATCHES



## • TECHNOLOGY

# Bulletproofing

Could technology help prevent mass shootings?

BY WILLIAM BRENNAN

**A**CCORDING TO A recent poll by the Associated Press, 60 percent of Americans worry that they or a family member might die in a mass shooting. Statistically speaking, we'd do better to fret about septicemia and car accidents, but it's not hard to find the source of the outsize concern: From 2000 to 2006, an average of six "active-shooter incidents"

took place in the United States each year; in the following seven years, that number nearly tripled—with one occurring, on average, every three weeks.

One of the best ways to prevent mass shootings, experts say, is to regulate who can buy and use a gun. But Second Amendment advocates in Congress have thwarted even the most toothless gun-safety measures—and will almost

certainly continue to do so under Donald Trump, who has vowed to block universal background checks, abolish restrictions on guns in schools, and oppose regulations on assault weapons.

With no political solution in sight, maybe it's worth looking for a technological one. Private companies are working on advances in firearms and other technologies that might save lives. Here's what those efforts look like.

## 1 Remote-Control Guns

"If we can set it up so you can't unlock your phone unless you've got the right fingerprint, why can't we do the same thing for our guns?" President Obama asked last January after the shooting in San Bernardino, California. In fact, we can: Manufacturers have been developing smart guns—meaning guns that can be fired only by authorized users—since the 1990s. But because of low demand and fierce opposition by the National Rifle Association, none has yet made it to market.

If smart guns do end up on gun-store shelves, they might one day come equipped with technology that would allow owners to shut them down from afar. According to William Tang, an engineering professor at UC Irvine, the technologies to remotely disable a gun already exist—it's just a matter of bringing them all together.

Guns could be equipped, for instance, with the same radio transmitters found in cellphones, giving them unique ID numbers and providing time-stamped data on the number of rounds they've fired. The safety could then be controlled via an app, which would send commands to ultralightweight levers in the stock of the gun. If police were given a backdoor into the software, Tang says, they might be able to check cell-tower records to determine which guns have been fired in the vicinity of a shooting and then disable them.

Of course, there are enormous caveats here—chief among them the

### A BRIEF CHRONICLE OF GUNS

**1132:** Chinese soldiers use the fire lance, a precursor to the gun that shoots small projectiles out of a paper or bamboo barrel.



**1288:** The first known firearm appears in China.

**1538:** An Italian duke commissions the earliest known bulletproof armor.

**1887:** Smith & Wesson designs a revolver, nicknamed the "Lemon Squeezer," that has a safety lever.



HISTORY

1200

1550

1900



unlikely that a mass shooter would use a gun with such technology in the first place, or that law enforcement could go through the steps to disable one fast enough to save lives. And the prospect of giving police a backdoor into the software should give us serious pause.

## 2 Schools Become Fortresses

As mass shootings become a fact of life in the United States, some buildings are getting outfitted with technologies that might at least limit the bloodshed. High-tech, high-volume body scanners and bullet-resistant, automatically locking doors are already on the market. "Gunfire detectors"—originally developed for use on battlefields and the streets of high-crime neighborhoods—are popping up in classrooms, playgrounds, and cafeterias. A company called SST ShotSpotter recently introduced SecureCampus, an auditory gunfire-detection system that maps the layout of a school and sends the precise location of a shooting to security guards and emergency responders.

According to the Department of Homeland Security, an average mass shooting lasts no more than 15 minutes. Typically, three to five minutes pass before the first calls begin streaming into 911. One tool that could cut down that delay is an app-based service called Guard911, which equips teachers at a school with a digital "panic button" that instantly blasts an alert to the phone of every police officer—on duty or off—within a certain radius of the school. To date, some 35,000 cops have downloaded the app.

A Virginia-based company called NetTalon hopes to go much further. Its Virtual Command system automatically locks every door—reinforced with steel and bulletproof glass—within seconds of a teacher sounding the first alarm. A computer terminal at the local police department then lets law-enforcement officers take control of the school. With

the help of motion detectors and cameras, dispatchers can track a gunman's whereabouts. They can also cloud his vision by releasing smoke from canisters installed at strategic points in the ceiling—and potentially push him to a location where he can more easily be apprehended. Future versions of Virtual Command will give police direct control of the PA system, for use in negotiations with a shooter.

These technologies might save lives, but critics worry that they distract from prevention efforts—and signal a societal surrender to the idea of mass shootings as normal and inevitable. There is also the potential for misuse. Privacy advocates warn that gunfire detectors could be used to eavesdrop on kids' cafeteria gossip (ShotSpotter denies this is possible), and Virtual Command gives authorities unprecedented ability to monitor and control students' movements.

## 3 Rise of the Robocops


In July, after a sniper shot 12 officers in Dallas, police armed a small robot with a bomb and detonated it next to the shooter—killing him, and ending an hours-long standoff. It was the first time police in the U.S. had ever used a robot to kill a suspect. As robots and drones become more commonplace, they're likely to play an increased role in all areas of public life, including mass shootings.

So-called security robots already patrol parking lots and shopping centers in California, like dehumidifier-shaped mall cops. The Knightscope K5, for instance, uses sensors and high-definition cameras to monitor a GPS-defined area, scanning for people who don't belong there. The company behind the robot is hoping to develop gun-detection software that will let it recognize firearms and alert authorities if one is spotted. One day, such robots might even be able to stop a gunman on their own. A weapon-equipped robot might track down a shooter using visual sen-

sors and data gathered via a ShotSpotter-like system. After locating the gunman, it could fire at him—or, perhaps, incapacitate him with nonlethal force.

Technological advances have already made it possible for computers to locate—and act upon—real-world targets on their own: The U.S. military, for instance, uses self-directed missiles to find and destroy enemy radar systems. But as Missy Cummings, the head of robotics at Duke University, points out, developing such technology for use in the close-range, crowded spaces where mass shootings typically occur—malls, cafeterias, movie theaters—presents enormous technical challenges. For one, distinguishing panicked bystanders from a gunman would require significantly more computing power than most robots currently have.

Some engineers and ethicists also worry about a slippery slope, leading to the use of lethal robots in far less clear-cut circumstances than the Dallas shooting. "I think Dallas is in danger of being the big moment" when the taboo on law enforcement's use of lethal robots broke, says Noel Sharkey, a professor emeritus of artificial intelligence and robotics at the University of Sheffield, in the U.K., and a longtime crusader against "killer robots." "Next time it will be easier. A few times after that, it'll become commonplace."

No states have statutes governing the use of lethal robots, though a few have prohibited weaponized drones. North Dakota, however, recently passed a law allowing police to arm drones with "less than lethal" weapons such as Tasers, pepper spray, and rubber bullets. Of course, police aren't the only ones who could use robots to kill. In 2014, an engineering student in Connecticut outfitted a small drone with a handgun that he was able to fire remotely—raising the chilling prospect that the mass shooter of the future might not even have to leave his home. 

ED ANDRIESKI/AP; KOMMERSANT/GETTY

**1992:** Seismologists in California work with local police to create the first gunfire-detection systems.

**1999:** Following the shooting at Columbine High School in Colorado, U.S. schools amp up security measures.



**2004:** The federal assault-weapons ban, enacted in 1994, expires.

**2013:** Mikhail Kalashnikov, the inventor of the AK-47, writes a letter expressing the "spiritual pain" his invention has caused him.



**2016**

**2035:** Autonomous anti-shooter robots begin appearing in malls, schools, and airports.

1990

2000

PREDICTIONS

2035

## DISPATCHES

## •WORKS IN PROGRESS

# Time-Travel Therapy

Can a faux 1950s downtown sharpen the minds of dementia patients?

BY AMANDA KOLSON HURLEY

**A**N ESTIMATED 5.4 million people in the United States suffer from Alzheimer's disease, a number that is expected to rise as the Baby Boomers age. Still more suffer from other forms of dementia. To keep such patients' minds engaged and give their caregivers at home a break, doctors often refer them to day centers, where they can exercise, take part in activities, and receive counseling or medication.

Recently, the George G. Glenner Alzheimer's Family Care Centers, a San Diego nonprofit that operates three such facilities, has begun to create a very different sort of daytime space for its patients: a faux town of 24 buildings, arranged around a central green and designed to evoke the era when most of today's dementia patients were young adults. The hope is that visual reminders of their youth will spark



memories and conversation.

Scott Tarde, the CEO of the Glenner Centers, was partly influenced by Hogeweyk <sup>1</sup>, a dementia-care facility in the Netherlands. There, about 150 people live inside a specially built, fully enclosed village, shopping and getting their hair cut in stores run by nursing staff dressed in street clothes. Tarde wondered whether he could create a similarly immersive environment for daytime, not round-the-clock, use. A member of the Glenner Centers' board remarked that the project sounded like set



design. Tarde's next move was to call the San Diego Opera's Scenic Studio.

Collaborating with Douglas Pancake, an architect who specializes in housing for senior citizens, and Marsha Sewell, an interior designer, the opera's scenic builders started in July on Glenner Town Square's first set piece, a scaled-down version of San Diego's county-administration building <sup>2</sup>. The opera's crew

visited the original Spanish Revival/Streamline Moderne building, which dates to 1938 <sup>3</sup>, to study its medallions and tile work, then re-created these details with meticulous painting <sup>4</sup>. Unlike most sets, the wood-and-drywall structure <sup>5</sup> is three-dimensional; it contains functional offices, where the facility's director and activity director will one day work, amid period furnishings.



1: JON ROWLEY/WSNWS; 2, 5, 8: SAN DIEGO OPERA; 3: SAN DIEGO HISTORY CENTER; 4, 7: SAN DIEGO TRIBUNE; 6 (KRENDERING): GLENNER ALZHEIMER'S CENTER





in clinical practice. By using a variety of prompts such as photographs and music, facilitators—including staff at Glenner 7—help dementia patients recall episodes from decades past. Studies have found that the therapy improves both cognitive function and quality of life; the hope is that a fully immersive environment like Town Square could enhance these effects by an order of magnitude.

As dementia progresses, memories of childhood and

early adulthood tend to endure the longest. “Graduation from high school, college, first jobs, marriage, perhaps children—these are the milestones, typically, in life,” Tarde told me. “That 20-year period seems to be where memories are the strongest.” Ask a person with mid-stage dementia about Jennifer Lawrence, and you’ll probably get a confused stare. But take out a photo of Judy Garland, and a lively conversation may ensue.

Tarde and his colleagues got an inkling of this when they purchased a 1959 Thunderbird 8 for Town Square. A man with dementia from Parkinson’s disease took one look at the double headlights and pronounced it a ‘58 or later. “It seems like a small thing,” Sewell says. But “being able to say ‘That is so-and-so’—that is amazing.” 4



If all goes according to plan, the ersatz city hall will soon be relocated to a former lumber warehouse in the San Diego suburb of Chula Vista, at which point construction on the rest of Town Square will start. When the project is finished, in 2018, the town-inside-a-warehouse will include a pet store—complete with fish and possibly visiting dogs—a library, a museum, a diner, a hospital, a movie theater, and other working storefronts 6. Patients will move between these buildings, much as high schoolers

change classrooms period by period. And everything will be designed to look as it would have in the years between 1953 and 1961, when most of today’s dementia patients were in their teens, 20s, or 30s.

Glenner Town Square will be the first facility of its kind in the United States, according to Daniel Sewell, a clinical-psychiatry professor at UC San Diego and an unpaid medical adviser on Glenner’s board. While the project is novel, the approach it reflects—known as reminiscence therapy—is common



# The CULTURE FILE



THE OMNIVORE

## The Ninja Cure for Anxiety

The self-medicating effects of extreme-fitness TV

BY JAMES PARKER

**W**HAT DO YOU DO, reader, when the imps of agitation are upon you? When they're running up and down your insides, each with his little wavering bouffant of blue flame, making the present tense an almost impossible place to be? Do you have a drink? Take a pill? Reach for your laptop? Shovel a drooping, dripping slice of pizza into your face? Because if America—as John Updike beautifully observed—is a conspiracy to make you happy, it is also a conspiracy to make you anxious, violent, horny, and obese. Stimulated by everything, nourished by nothing, you gape yet more savagely with need: the real need, the intolerable need, the need beneath the needs. So you dose yourself or distract yourself or stuff yourself.

But there is another course open to you: the course of health. You can get fit. You can address yourself to the engine of the body, and drive it and drive it until you are sanctified with shining sweat and glossy with endorphins. Self-medication through exercise. Working out *works*, at least for some of us: It temporarily settles the rogue brain. Many's the time, sitting in the gym, on the factory floor of fitness, trembling between sets on some comically inhuman-looking machine, that I've wondered, *Who else is down here because they're just barely keeping it together?* (Raise your hand, the nutcase doing burpees in the corner.)

There's a lot of bodywork happening on reality TV right now—bodies in training, bodies on trial, bodies stretching and twanging at the highest pitch of performance. NBC's *Spartan: Ultimate Team Challenge* is the muddiest of the shows: five-person teams floundering through a one-mile obstacle course, writhing under barbed wire, flinging spears,

bellowing like bulls. By contrast, the same network's *American Ninja Warrior*, currently prepping for its ninth season, is the most joyously and aerically spectacular. Competitors dance across toadstool-like steps, cling to jolting barrels, swarm up netting, go hand over hand above a pool of water through an inverted forest of dangling, diabolical grips, and then launch themselves in madness at the Warped Wall: an almost completely vertical ramp that looms over the course like a stalled wave, a black reef of impossibility. Aficionados will tell you that the early seasons of ANW were the best, as the open-to-all qualifying rounds, held in cities across the United States, activated an occult subculture of weightless individualists—extreme sportsmen, stunt doubles, mystic free runners, and human flies. (One hectic apprentice memorably attempted the course in flowing robes, with a sword hanging from his belt.) On the other hand, increased competition has heightened the level of athleticism, and women have entered the game in a serious way. “She is a *beast*,” marveled co-host Akbar Gbaja-Biamila at the 2015 Venice Beach finals, watching the extraordinary Jessie Graff bounce, tumble, and waft through the course with a flickering half-smile on her face.

Then there's *American Grit*, over on Fox, hosted by the former wrestling star (and fine comic actor, notably in last year's *Trainwreck*) John Cena. Deep-jawed, doggily handsome, his voice a sort of genial, magmatic burp, Cena on *American Grit* represents concreteness and completion. He is a huge and benign fact. The contestants, meanwhile, undergoing strength and character examinations in the chilly foothills of Mount Rainier, jumping in and out of ice baths and standing on



How worldly you are has nothing to do with a passport.  
THAT'S CONTINENTAL

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top of narrow poles until their feet go numb, are hoarsely struggling to self-actualize. "I don't have patience for negativity," says a 34-year-old bodybuilder named Marc. "I'm all about positivity, optimism, and success."

Or, as Ralph Waldo Emerson put it: "Don't bemoan and bewail. Omit the negative propositions. Nerve us with constant affirmatives." In Marc's proclamation, and across all these shows, one can hear the rude strains of the mind-power gospel, America's real national religion. Say yes, think positive, boldly visualize, and reality will bend to your will. Mitch Horowitz, in his history of positive thinking, *One Simple Idea*, boils the many strands of American affirmation down to one proposition: "Thoughts are causative." The greatest of the ninjas seem to float and bob over the obstacles on thermals of self-belief. "I believe in you!" shouts a team leader on *Spartan: Ultimate Team Challenge*, straddling the top of a slimy wall while his teammates slide backward into mud and despair. Because belief—even somebody else's belief—can grab a dude by his shorts and haul him up and over.

But the most fascinating of the recent body shows, to me, is NBC's *Strong*. If *American Ninja Warrior* represents mind power in excelsis, ninjas in bloom, and *American Grit* dramatizes a lower-level struggle with one's own limitations, *Strong* is at the bottom of the totem pole. Ten nonfit, nonconfident (so we are repeatedly told) women are matched with 10 top-of-the-line male trainers. The women huff, the men puff, and then, in trainer/trainee pairs, they battle through stamina challenges in a knockout competition. Here the ideology of these shows displays itself at its most naked, with some dodgy gender dynamics thrown in. "All day ... Own the moment!" shout the bulbous trainers, gym-rat Pygmalions, as their trainees grunt and wobble and shed their negativity in thick waves. "Own your body, own your body, it's your weapon!" The crude cognitive drilling is not always successful. "I'm trying to let you know that there's more inside you," trainer Adam tells trainee CC. "It's not to be demoralizing." "Well, it is," weeps CC.

On each of these shows, a summit of difficulty looms, a test of tests. On *American Grit* it is the Endurance Platform; on *American Ninja Warrior* it is the eight-story, many-chambered ziggurat known as Mount Midoriyama. And on *Strong* it is the Elimination Tower. "It's a metaphor for your life!" roars trainer Todd at trainee Brittany as they prep for this final obstacle—although really the Elimination Tower is more allegorical than metaphorical, a soul-hurdle you could fit into Bunyan's *Pilgrim's Progress*, right between the Slough of Despond and the Hill Difficulty.

## The Culture File

THE OMNIVORE

### Love handles? No! Those were lumps of self-hate. Fear flaps.

"That tower," murmurs trainer Ky, "aka the voice in your head that tells you you can't."

Each episode of *Strong* ends with a "jaw-dropping transformation" segment, in which the glammed-up contestants exult in their new bodies and look back with pity at their now-extinguished slob-selves. Love handles? No! Those were lumps of self-hate. Fear flaps. "I came here feeling just very beat down," says Mahogany, who has reduced her body fat by 12 percent. Says Sarah, who has added nine pounds of lean muscle to her frame: "I didn't have many friends ... I isolated myself a lot." But there's a melancholy to these before-and-after shots. One feels a kind of instant nostalgia for the characterful, miscellaneously shaped women who have been replaced by these glaring fitness-creatures.

I was glued to *Strong*, and grew progressively more obsessed with the idea—based on no evidence whatsoever—that the trainers and trainees were falling in love with each other. Sweating, high-fiving, achieving, zealously professing mutual admiration, all within the hothouse of reality TV—surely it was not possible that these relationships could remain chaste. I too have known the touch of a personal trainer, and it is a profound and tender thing. He asks you whether you had enough protein for breakfast, and you feel *loved*. The show's producers don't go there, however. "You've changed my life!" is as close as we get. And this is as it should be. Fleshly pressures are not to distract us from the puritan rigor of the endeavor, its clean lines and life-improving goals.

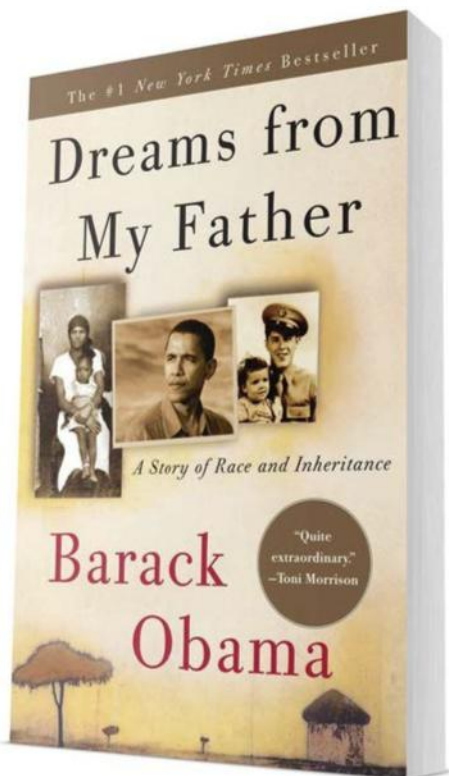
The fitness pilgrimage, as pilgrimages go, is not a particularly heroic or transcendent one. And of course all this refrigerated effort and overcoming, this upward leaping, presupposes a counterstate of complete moral-physical collapse—cellulite as original sin, a nationwide depressive epidemic for which gyms and glassed-in health clubs across the land function as industrialized crisis centers. Is there another way? Can't a person sit on his or her gently spreading ass and just be, untroubled by these frantic imperatives to betterment—these austerities, purgations, ardent burpees, and deadly you-can-do-it mantras? Well, I can't, clearly, which is where we started. Anxiety, as a roaring lion, walketh about, seeking whom he may devour, and without regular exercise I would be a casualty of my own unoriginal mental fizz. That's a fact, like John Cena. That's *my* ever-receding Mount Midoriyama, and as I scramble toward it I see limping ninjas all around me, on the same journey, limping ninjas everywhere. **A**

James Parker is a contributing editor at The Atlantic.



# Read the Books That Inspired a Nation

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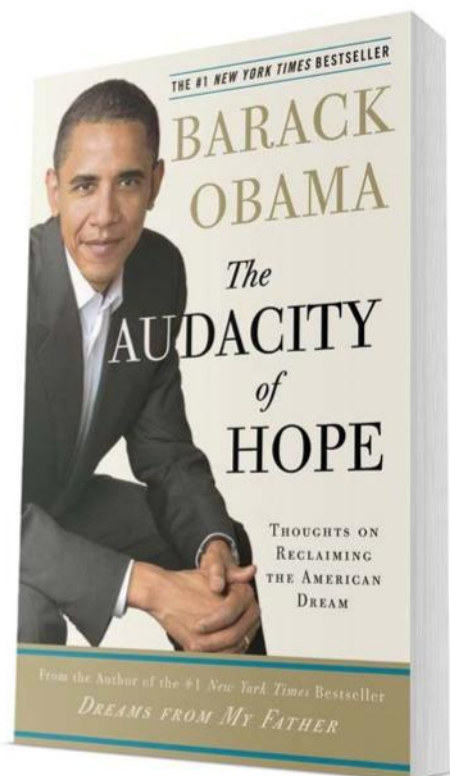


“The best-written memoir ever produced by an American politician.”

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—MICHAEL KAZIN, *Washington Post*



BOOKS

# What the Octopus Knows

A scuba-diving philosopher explores invertebrate intelligence and consciousness.

BY OLIVIA JUDSON

**M**Y LOVE AFFAIR with octopuses began when I was 9. On a summer holiday by the sea, I found *Octopus and Squid: The Soft Intelligence* (1973) in my great-aunt's bookcase. Written by Jacques-Yves Cousteau, the great pioneer of scuba diving, and his colleague Philippe Diolé, the book told of encounters between humans and cephalopods—the group that includes octopuses, squid, cuttlefish, and their more distant cousins, the nautilus. A few days after I'd finished reading, I was out snorkeling and saw my first wild octopus. It was clambering over rocks in the shallows, changing color as it went. I was so excited that, after it vanished into a crevice, I leaped out of the water and began telling two strangers on the shore everything I'd learned from the book.

Cousteau and his team were the first to spend a lot of time—many hours at a stretch—in the water observing and filming wild octopuses and getting to know different individuals by visiting them regularly. Before long, some of the animals would come out to greet the divers, even climbing onto them and going for a ride. Others were shy, and would stay in their holes. Some appeared to develop preferences for particular humans. The divers wanted to know whether octopuses—as suspected—steal fish from fishermen's nets, so they set up a net complete with several fish, and settled back to watch. Sure enough, an octopus came and helped itself to the lot. Another octopus opened a jar containing food, while a third seemed disturbed by its reflection when shown a mirror.

Cousteau's accounts are anecdotes, not scientific experiments. Yet, taken together, they capture three aspects of octopuses—some species of them, at least—that strike anyone who spends time in the water with them.

First, different individuals have different temperaments. Some are shy, some are bold; some are inquisitive, some aggressive. Because of this individuality, people who hang out with them, whether in the sea, at a public aquarium, or in the laboratory, tend to give them names—an honor normally reserved for mammals such

as dolphins and chimpanzees. Cousteau spoke of an octopus called Octopissimus; one scientific paper I read referred to Albert, Bertram, and Charles.

Second, some octopuses will engage with you. They might reach out an arm and touch your hand. They will investigate an object you present to them, giving every impression of thinking about it as they do so. All the while, they will appear to watch you with their large, mobile eyes. Again, these are behaviors we associate with dolphins and dogs—but not with, say, fish, let alone animals such as sea urchins or clams.

Third, octopuses often behave in surprising ways. Although Albert and Bertram were prepared to pull levers to receive pieces of fish, Charles destroyed the experimental equipment—he pulled it apart with his arms—and repeatedly squirted the experimenter with water. On a recent diving trip, my partner and I came across a little octopus sitting in the sand, two of its arms holding a large half clamshell over its head like a roof. For a while, we looked at it, and it looked at us. Then it shifted. It must have been reaching down with its other arms, because suddenly, like a small animated bulldozer, it tossed up a heap of sand. It did this several times, watching



us closely and giving us the sense that, though it was interested in checking us out, it was also ready, if necessary, to pull the shell down like a lid and disappear into the seafloor.

REINHARD DIRSCHERL/GETTY

The animals also frequently change their skin color and texture—which, to creatures such as ourselves, fine-tuned to watch faces for frowns and smiles, blushes and blanches, gives the appearance of emotional expressiveness. In other words, an encounter with an octopus can sometimes leave you with the strong feeling that you've encountered another mind.

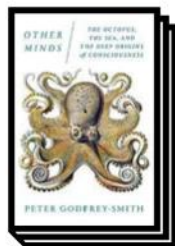
But that mind—if mind it is—has evolved along a route entirely different from the one that led to our own. The most-recent common ancestors of humans and octopuses lived about 600 million years ago, early in the evolution of animal life. Although much about our joint ancestors is obscure, they were probably small wormlike creatures that lived in the sea. This makes octopuses very different from other animals we suspect of sentience, such as dolphins and dogs, parrots and crows, which are much more closely related to us. In the words of Peter Godfrey-Smith, "If we can make *contact* with cephalopods as sentient beings, it is not because of a shared history, not because of kinship, but because evolution built minds twice over. This is probably the closest we will come to meeting an intelligent alien."

Godfrey-Smith is a scuba-diving philosopher; his specialties are philosophy of biology and philosophy of mind. While out diving some years ago, he began encountering octopuses and cuttlefish, became intrigued, and started studying them. The result is *Other Minds: The Octopus, the Sea, and the Deep Origins of Consciousness*, a terrific mix of Cousteau-esque encounters with the animals in the wild (including a giant cuttlefish he calls Kandinsky), wide-ranging scientific discussion, and philosophical analysis. Beautifully written, thought-provoking, and bold, this book is the latest, and most closely argued, salvo in the debate over whether octopuses and other cephalopods are intelligent, sentient beings.

**M**IND, INTELLIGENCE, SENTIENCE, consciousness—these are difficult, slippery terms, especially when applied to nonhuman animals. Cousteau remarked drily, "Scientists, although they concede that the octopus has a memory and that it learns quickly, do not use the word 'intelligence' in describing it." He was writing in 1973, but it could have been yesterday. Several octopus researchers have told me that *intelligence* is a word they shy away from, either because of the SAT-like connotations, or because they feel that evidence for it is lacking, or because they think focusing on intelligence is narcissistic and fails to capture other important aspects of the wonder of these animals. Consciousness is even more contentious.

## The Culture File

### The octopus mind has evolved along a route entirely different from the one that led to our own.



OTHER MINDS:  
THE OCTOPUS,  
THE SEA, AND THE  
DEEP ORIGINS OF  
CONSCIOUSNESS  
PETER GODFREY-SMITH  
FSG

Arguably, though, it's also narcissistic to assume up front that other animals are not, in some measure, intelligent or sentient, and that the human experience is unique in all respects. In any case, evolution doesn't usually conjure complex traits from nothing; instead, they typically emerge from simpler antecedents. Light-sensing mechanisms run the gamut from molecules to eyespots to a huge variety of more complicated eyes. Nervous systems, too, show different levels of complexity; some are small and simple, while others are larger and more intricate. So why can't the same be true of minds or consciousness? Indeed, as Godfrey-Smith reminds us, William James, the great 19th-century philosopher and one of the founders of psychology, argued that we should avoid assuming that human consciousness irrupted, fully formed, into the universe, and should seek simpler precursors. Taking this to its logical conclusion, Godfrey-Smith starts his quest for the origin of minds around the dawn of animal life, when nervous systems were first evolving into being.

But let's get back to octopuses. In many ways, they are indeed profoundly alien. The animals are mollusks, and thus more closely related to other mollusks, such as clams and snails, than they are to any mammal. Most famously, they have eight arms, each lined with scores of suckers capable of grasping and tasting. Octopuses lack bones or an external shell (though they have a piece of cartilage that protects the brain). As a result, their bodies are soft, flexible, and stretchy—properties that allow them to vanish through tiny gaps. A small octopus can easily get inside an empty beer bottle. And in some species at least, the animals have an astonishing capacity for camouflage, instantly changing color, texture, and posture so as to blend in with lumps of coral on a reef or the blankness of the sand. This helps them hide from the many animals that fancy having octopus for lunch.

Then there's the fact that they live in the sea, which means they operate in an entirely different sensory world—gravity doesn't press, sound travels differently, and as the water gets deeper, the light becomes more and more blue before fading out altogether. This makes them, like many marine animals, hard to study in the wild. Just to find out what octopuses do all day takes tag teams of observers spending hours snorkeling or diving. Only a handful of groups have ever attempted such work. And octopuses have a reputation for being difficult to keep in the laboratory—they are sensitive to water quality, tricky to look after, and well-known escape artists.

Despite their "alien" credentials, however, octopuses do resemble us in some unexpected ways. Their eyes are remarkably like human eyes,



an example of evolution converging on roughly the same solution from two wildly different starting points. (Octopuses don't see in color, but because of the way their eyes are wired, they also don't have a blind spot.) Like us, octopuses are dexterous, and can reach out and manipulate objects in the world. They display all those inquisitive, friendly behaviors reminiscent of dolphins and dogs.

Most telling of all, octopuses, along with cuttlefish and squid, have far larger, more complex nervous systems than any of their molluscan relations—or indeed, than any other invertebrates—do. The California sea slug (also a mollusk) has about 18,000 neurons, and honeybees, the invertebrate runners-up for neuron count, have roughly 1 million. The common octopus, *Octopus vulgaris*, has about 500 million neurons. This is more than five times the number in a hamster, and approaches the number in the common marmoset, a kind of monkey. (Humans have about 86 billion.) Going just on the basis of neuron count, you might think octopuses were a kind of mammal. But whereas mammals keep most of their neurons in their heads, an octopus's nervous system is distributed throughout its body: About two-thirds of its neurons are not in its head, but in its arms.

**W**HICH RAISES SEVERAL questions. What forces led octopuses to evolve such large nervous systems? Does having a large nervous system necessarily mean octopuses are intelligent, even conscious? And if they are, is their experience of consciousness something akin to our own, or is it—reflecting, perhaps, their distributed nervous system—entirely different?

Drawing on the work of other researchers, from primatologists to fellow octopologists and philosophers, Godfrey-Smith suggests two reasons for the large nervous system of the octopus. One has to do with its body. For an animal like a cat or a human, details of the skeleton dictate many of the motions the animal can make. You can't roll your arm into a neat spiral from wrist to shoulder—your bones and joints get in the way. An octopus, having no skeleton, has no such constraint. It can, and frequently does, roll up some of its arms; or it can choose to make one (or several) of them stiff, creating an elbow. Surely the animal needs a huge number of neurons merely to be well coordinated when roaming about the reef.

At the same time, octopuses are versatile predators, eating a wide variety of food, from lobsters and shrimps to clams and fish. Octopuses that live in tide pools will occasionally leap out of the water to catch passing crabs; some even prey on incautious birds, grabbing them by the legs,

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### BOOKS

## Despite their “alien” credentials, octopuses do resemble us in some unexpected ways.

pulling them underwater, and drowning them. Animals that evolve to tackle diverse kinds of food may tend to evolve larger brains than animals that always handle food in the same way (think of a frog catching insects).

But are they clever? Measuring intelligence in other animals is a challenge even when they're not as remote from us as the octopus. And for octopuses, Godfrey-Smith observes, there is “a mismatch between the results of laboratory experiments on learning and intelligence, on one side, and a range of anecdotes and one-off reports on the other.” Yet as he points out, the very wealth of anecdotes is important information, showing as it does the flexible, unpredictable ways in which different individuals behave. While pigeons will spend hours pecking keys to get food rewards, octopuses are notoriously feisty. Charles is by no means alone in electing to squirt the experimenter instead of following the protocol.

As for assessing animal consciousness, that at first seems impossible. But one angle of attack is to work from the situation in humans. Over the past 30 years, a growing body of results has shown that conscious awareness represents just a fraction of what the human brain is registering. At the same time, scientists are identifying the type of tasks that do require consciousness. In particular: Consciousness seems essential for learning new skills—such as finding an alternative way home or opening a coconut. Taking up the work of the neuroscientist Stanislas Dehaene, Godfrey-Smith suggests that “there's a particular *style* of processing—one that we use to deal especially with *time*, *sequences*, and *novelty*—that brings with it conscious awareness, while a lot of other quite complex activities do not.”

Like humans, octopuses learn new skills. In some species, individuals inhabit a den for only a week or so before moving on, so they are constantly learning routes through new environments. Similarly, the first time an octopus tackles a clam, say, it has to figure out how to open it—can it pull it apart, or would it be more effective to drill a hole? If consciousness is necessary for such tasks, then perhaps the octopus does have an awareness that in some ways resembles our own.

Perhaps, indeed, we should take the “mammalian” behaviors of octopuses at face value. If evolution can produce similar eyes through different routes, why not similar minds? Or perhaps, in wishing to find these animals like ourselves, what we are really revealing is our deep desire not to be alone. **A**

*Olivia Judson, an evolutionary biologist and writer, is at work on a history of the planet.*



BOOKS

## The Uncoupling

Her marriage broken, her house dismantled, Rachel Cusk has broken apart her fiction, too, remaking it in new ways.

BY RUTH FRANKLIN

**I**N AN ESSAY this past summer in *The New York Times Magazine*, the novelist Rachel Cusk described her home renovation—a seemingly mundane subject that became, for her, a source of physical, psychological, and existential chaos. “I caused walls to be knocked down and floors to be ripped up and rooms to be gutted,” she wrote. “I threw away decades’ worth of clutter and keepsakes and old furniture; with what at times seemed like magic and at others sheer violence, I caused the past to be obliterated and put something new, something of my choosing, in its place.” This was no joy-sparking cleanse. The process drove her to “what appeared to be the brink of mental and physical collapse.” Everywhere she looked, she saw “a hidden part of myself that was publicly exposed.”

If a house is like a woman’s body—a comparison Cusk drew at length in the article—it is also like a novel: a highly individual structure that can assume a virtually infinite number of shapes, within which characters speak, love, fight, and otherwise go about the acts of living. In *Outline*, published two years ago, Cusk subjected the novel’s form to something like the demolition she

described taking place in her apartment. Instead of a story line with traditional rounded characters, she sketched a series of coolly realized encounters between a narrator, a writer something like Cusk herself, and an assortment of people: her seatmate on a plane, the students in the writing class she teaches, friends with whom she socializes. In each encounter, the narrator—her name, Faye, is used only once in the book, giving her the impression of namelessness—remains impassive, revealing little about herself and saying only enough to keep the others talking. The stories they tell, with very few exceptions, revolve around the same theme: the breaking of a marriage. As the novel proceeds, the monologues circle and spiral around one another, their layering and patterning creating a form of profound complexity, like a seashell.

This technique has its roots in the work of W. G. Sebald, the German writer who lived for many years in England (as Cusk does), and who also negotiated the rough terrain between fiction and autobiography through a nameless narrator’s interactions with others. In *Open City*, which traces a Nigerian doctor’s peregrinations around New York City, Teju Cole, too, follows a similar path. But Sebald’s style was deliberately antiquarian, more reminiscent of the 17th-century

polymath Sir Thomas Browne, one of his models, than of anyone writing today. Cusk's more radical method, by contrast, looks and feels like a particularly well-realized "gut renovation": elegant, spare, and often very beautiful, stripped of the dusty corners and overstuffed armchairs of its forebears.

*Outline* came on the heels of *Aftermath* (2012), a memoir in which Cusk told the story of the breakup of her own marriage. Like Sebald's and Cole's narrators, Faye at once resembles her author and is distinct from her—divorced, with two children (in her fiction they are boys, while Cusk herself has daughters). Yet it is impossible to think of *Outline* as autobiographical in any traditional sense. The instability of its form constitutes the very opposite of not only the 19th-century omniscient narrator but even the conventionally unreliable first-person narrator. We don't know what anyone is feeling or thinking, least of all the person whose consciousness we are supposed to be inhabiting. The "I" who tells this story feels insubstantial, ghostlike; we see her only via other people's responses to her. Even so, everything that takes place in the novel is filtered silently, almost imperceptibly, through her intelligence.

Cusk's new novel, *Transit*, offers a sequel of sorts to *Outline* in what is projected to be a trilogy. It begins where that novel left off, more or less. (Continuity of plot is not a priority here: Certain events take place "offstage," and we learn about them, and realize their significance, later.) In *Outline*, we saw Faye converse with her real-estate agent; she has now moved into a "bad house in a good street," an apartment that must be destroyed and remade in order to be inhabitable. A process that normally involves settling down proves to entail its opposite. When the new novel opens, she has just received a spam email from an astrologer who tells her a "major transit" will soon take place in her zodiac sign, a portent of upheaval and change.

**T**HE SECOND NOVEL in a trilogy has a difficult role to play. It must advance the narrative while nonetheless remaining incomplete, a bridge to another destination as yet unknown. This state of limbo suits *Transit*, which, even more than *Outline*, deals in paradoxes and reversals. The warmth and calm of a beauty salon are shattered—literally—by an act of destruction. A man loses his girlfriend's beloved dog and finds that his carelessness brings them closer together. The place in which Faye is trying to make her new home turns out to be a scene of horror: The tenants who occupy the

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## The place in which Faye tries to make her new home turns out to be a scene of horror.

basement apartment beneath hers menace her at every opportunity, banging broomsticks on the ceiling at the slightest sound and snarling at her when she emerges. They live in a state of squalor and chaos, with a ruined yard full of garbage through which Faye must pass in order to reach her own garden.

As the floorboards are literally ripped out from beneath Faye's feet, she feels an excruciating vulnerability. "Everywhere I looked I saw skeletons, the skeletons of walls and floors, so that the house felt unshielded, permeable," she says. She looks with longing at the people next door, whose children run and laugh on the lawn while the adults drink wine and converse in French or German. (Her own children, as in *Outline*, are physically absent from the novel, having been sent to stay with their father during the renovation, but they periodically call in distress, their disembodied voices weeping on the line.) "It seemed so strange," she muses, "that these two extremes—the repellent and the idyllic, death and life—could stand only a few feet apart and remain mutually untransformed."

What appears idyllic, however, may turn out to be repellent. At one point Faye visits her cousin Lawrence, who has left his wife for another woman. He now lives with her and the children from their previous marriages in a beautiful home in the countryside, "a long low farmhouse with aged, bulging brick walls, surrounded by a walled garden," everything well tended and brightly lit. But this comforting display of order opens onto a scene of emotional brutality.

The candlelit living room is filled with "the sounds of music and conversation," but it has the feeling of a stage set, and the characters who inhabit it—Eloise, Lawrence's new partner, and two other fashionable women with their children—put on a disturbing performance. There is an undercurrent of violence in the parents' relationships with their children. A girl grabs her mother so hard around the throat that she leaves red marks, while Eloise's son pulls on her dress hard enough to tear it, exposing her breast. The conversation, in which Faye, as usual, is a quietly curious interlocutor, proceeds through incidents of terrible callousness and cruelty. The evening ends with all the children and at least one of the adults in tears. Faye awakens in the morning to "the ruins of dinner" on the table, with "melted candles ... hardened into sprawling shapes," surrounded by dirty glasses and cutlery and crumpled napkins. She slips out without saying goodbye.

Many of the novel's strands poke ironically at the idea of freedom and its opposites, obligation and fate. "To stay free," Faye's hairdresser tells



her in an episode that was published last year in *The Paris Review* under the title "Freedom," "you have to reject change." One character Faye meets boasts of how he tightly regulates his own commitments. "I asked him what he used his freedom for, since he defended it so assiduously, and he looked somewhat taken aback."

Faye is wrestling with how to understand her own feelings of powerlessness in the dramas of her life. "I was beginning to see what other people called fate in the unfolding of events, as though living were merely an act of reading to find out what happens next," she tells a man she has recently met. But she realizes that she was wrong. While she once believed that it was "only through absolute passivity that you could learn to see what was really there," she now desires the power that other people have always had over her. "What I called fate was merely the reverberation of their will." This realization sets her on a new course.

**"A**BSOLUTE PASSIVITY" at first seems like an apt way to describe Cusk's method of constructing a narrative out of other people's voices. But—appropriately for a novel that is often concerned with the mismatch between reality and illusion—this apparent surrender is a mask for stringent control. "I like it that you ask these questions," one of the women at Lawrence's house says, midway through her monologue, "but I don't understand why you want to know." Faye—and behind her, Cusk—knows just what she is doing, as she demonstrates in an episode that takes place during a writing class. Imperceptibly steering a student who is at a loss for words, Faye shows exactly how to ask questions so as to elicit details. In the rare moments when Cusk allows a glimpse of Faye's own interior, her plain style is clear, elemental. Leaving Lawrence's house, Faye says, "I felt change far beneath me, moving deep beneath the surface of things, like the plates of the earth blindly moving in their black traces."

If living cannot be "an act of reading to find out what happens next," this novel's purposes, too, have little in common with the traditional plot-driven narrative. In one of the most humorous scenes, Faye travels to a remote town to attend an outdoor literary festival, where she appears on a panel with two other writers, both men. It is pouring, but their host is unaware that there is a covered walkway to the stage, so they are all forced to give their talks drenched and dripping. The first speaker, who has written a best-selling memoir about the childhood abuses he suffered at the hands of his stepfather, describes himself as "a cupboard rammed full with junk: when he

## The Culture File

**Cusk's work is unstable, confessing a deep skepticism about perception itself.**



TRANSIT  
RACHEL CUSK  
FSG

opened the door everything fell out." The other man has written a 1,000-page book that turns the mundane into the grotesque in order to capture attention—"eating and drinking and shitting and pissing and fucking." Their talks are reproduced at length, but when Faye gets up to read, the narrative falls silent. "I read aloud what I had written. When I had finished I folded the papers and put them back in my bag, while the audience applauded."

We might understand the first writer, who wears a luxurious suit and arrogantly dominates the panel, as—for lack of a better way to put it—your typical contemporary male realist novelist: a Philip Roth or Richard Ford or Jonathan Franzen (winked at with that excerpt titled "Freedom"). Writing, this man explains, is "getting control of anger and shame ... [taking] the mess of experience and [making] something coherent out of it." (Incidentally, he bids Faye farewell with a remark of astonishing crudeness and condescension.) The second writer, who shows up for the panel in a torn leather jacket and dirty jeans, might represent the wave of rebellion against the traditional novel that has arisen over the past 20 years with the monologues of Chris Kraus, Ben Lerner, and Karl Ove Knausgaard, the author of a several-thousand-page autobiographical novel that deals in great depth with all the aforementioned bodily functions.

Cusk began her career in something like the first mode, with a string of novels that were stylishly written and critically successful. Though some critics have lately placed her among the second group, she doesn't comfortably fit there. Her work, like Sebald's, is at once too cerebral and too unstable, confessing a deep skepticism about perception itself. "I heard the students speaking and wondered how they could believe in human reality sufficiently to construct fantasies about it," Faye says. Writing several years ago on the subject of teaching creative writing, Cusk went further. "Very often a desire to write is a desire to live more honestly through language," she wrote. If more students now seek to become writers, it may be a sign "that our manner of life is dishonest, that it offers too few opportunities for self-expression, and that, for some people, there is too great a disjuncture between how things seem and how they actually feel."

Cusk's third approach to the novel does not share the consoling imagination of the first mode or the comic nihilism of the second. But in her effort to expose the illusions of both fiction and life, she may have discovered the most genuine way to write a novel today. **A**

*Ruth Franklin is the author of Shirley Jackson: A Rather Haunted Life.*



BOOKS

## The Sugar Wars

Science can't prove it and Big Sugar denies it, but Gary Taubes is convinced that sugar kills.

BY DANIEL ENGBER

**I** HOPE THAT WHEN you have read this book I shall have convinced you that sugar is really dangerous," wrote John Yudkin in his foghorn-sounding treatise on nutrition from 1972, *Pure, White and Deadly*. Sugar's rapid rise to prominence in the Western diet, starting in the mid-19th century, had coincided with a sudden outbreak of heart disease, diabetes, and obesity. Yudkin, one of the United Kingdom's most prominent nutritionists at the time, believed that one had caused the other.

Then, as now, there was no decisive test of his idea—no perfect way to make the case that sugar kills. It's practically impossible to run randomized, controlled experiments on human diets over many years, so the brief against sugar, like the case against any other single foodstuff, must be drawn from less reliable forms of testimony: long-term correlations, animal experiments, evolutionary claims, and expert judgments. In *Pure, White and Deadly*, Yudkin offered all of these as "circumstantial evidence rather than absolute proof" of his assertion. But so many suspicious facts had already accumulated by 1972, he claimed, that it would be foolish to ignore them. Even based on circumstantial evidence, readers should be convinced "beyond reasonable doubt" of sugar's crime against humanity.

The story of what happened next may be familiar, not just in its particulars but in the broader pattern that it represents. In the 1970s, Yudkin's enemies, chief among them the influential American nutritionist Ancel Keys, ridiculed and buried his idea. On the basis of research sponsored by the sugar industry, Keys and others created and enshrined a different dietary bogeyman as the source of heart disease and other chronic ills: not sugar, but saturated fat. Yudkin's book went out of print. Low-fat diets went mainstream. Sugar got a pass.

Now Yudkin's case has been reopened. In the past few years, the dangers of dietary fat have begun to look as though they were overstated, and the risks of sugar underplayed. Among the leading advocates for this reappraisal is Gary Taubes, an investigative journalist who has been reporting on nutrition since the late 1990s. His third book on the topic of diet and health, *The Case Against Sugar*, is a prosecutor's brief, much like Yudkin's own, but fleshed out with four decades' worth of extra science and a deeper look at both the history of that science and the commercial, economic, and political forces that helped shape it.

How might we explain the soaring rates of heart disease, diabetes, and obesity, not to mention lots of other ailments of modernity—asthma, gout, cancer, stroke, hypertension, and maybe even dementia? These conditions tend to show up together, both in populations and in individuals, Taubes explains. "The detectives assigned to the case would start from the assumption that there was one prime suspect, one likely perpetrator, because the crimes ... are so closely related," he writes. "We should begin with the simplest possible hypothesis, and only if that can't explain what we observe should we consider more complicated explanations." It's the lone-gunman theory of disease, and sugar once more stands accused.

**T**AUBES BUILDS HIS CASE through lawyerly layering of rich detail. A résumé of several centuries' worth of research starts with Thomas Willis, the English doctor in the 1600s who noted that a diabetic's urine tastes "wonderfully sweet like sugar or hon[e]y." (Thus Willis's decision to append the term *mellitus*, meaning "from honey," to the name of the disease.) Even way back then, Willis saw fit to warn against too much sugar in the diet, but Taubes reveals that this early version of the Yudkin claim would soon be rebutted by a proto-Ancel Keys, the physician Frederick Slare.

A persistent back-and-forth ensued over sugar's value as a nutrient. By the early 20th century,

some experts were saying that sugar fattens us with empty calories. Others claimed it had a "much-needed stimulating effect" that might even give an edge to athletes. ("Chocolate bars for marathon runners and sugared tea for football players may result in new records," promised one renowned diabetes researcher in 1925.) Still others argued that sugar might be poisonous. Research papers piled up.

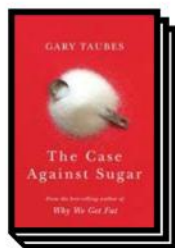
By the late 1960s, Taubes says, the most important voice defending sugar was a scientist named Fredrick Stare. *Nota bene*: This was not Frederick Slare, the 17th-century physician who quarreled with Thomas Willis. Stare was the 20th-century founder of the Department of Nutrition at Harvard University. Given Taubes's blizzard of citations, such confusions are inevitable. The reader must likewise learn to discriminate among the work of Willoughby Gardner and Wightman Garner, Harold Higgins and Harold Himsworth, Gustav von Bergmann and Carl von Noorden, and that of many other homonymic experts in nutrition whose theories either rhymed or clashed. This bewilderment of names reflects, in a way, the perplexity of the scientists themselves, who saw-sawed for generations between rival explanations for disease, and even rival understandings of the same basic sets of facts.

In Taubes's telling, the controversy came to a head in the mid-20th century, when prejudice and politics worked in concert to tip the scales against the anti-sugar theorists. In part, he argues, the problem stemmed from a long-standing tendency among experts to choose the most obvious answer to any given research question, and then refuse to let it go. But Taubes considers the opposite impulse, also commonly indulged, to be even more misleading: to overcomplicate the science with elaborate claims and multicausal explanations.

Nutritionists have for decades tried to disentangle a dense thicket of associations. Where the modern Western diet and lifestyle prevail, obesity, diabetes, and heart disease are correlated in the population, along with other illnesses such as cancer, gout, and hypertension. All seem related to a Western diet high in fat and sugar. The mainstream view among experts, at least in the United States, has for a long time held that the causal arrow starts with obesity. First, eating too much and exercising too little makes a person fat. Then, being fat helps to spawn illnesses like heart disease and diabetes. Meanwhile, the consumption of specific ingredients has been implicated in certain undesired states: saturated fat in heart disease, salt in hypertension, eggs in high cholesterol, red meat in gout, and so on.

## The Culture File

**There is no perfect way to make the case that sugar kills.**



THE CASE AGAINST SUGAR  
GARY TAUBES  
Knopf

According to Taubes, and the mostly European researchers whom he champions, these accounts are far too subtle. All of these Western ailments appear to be related to one another, and they've followed major changes in our diet. Should we really start with the assumption that this diet happens to contain not one but four or five different toxic substances, and that these toxic substances happen to produce an overlapping pattern of disease? He suggests that we proceed from a simpler premise—namely, that these conditions share one cause.

By mid-century, an emerging line of research hinted that the malefactor might be sugar. Under healthy, normal circumstances, the body secretes insulin in order to maintain stable levels of blood sugar and fat. Having too many carbohydrates in the diet—and too much sugar in particular—seems to overtax this system, messing with our metabolism and making insulin less efficient at its job. The case against sugar holds that this condition in turn can make us fat, and also diabetic, and prone to heart disease, cancer, gout, and the rest.

In other words, toxic sugar would seem to offer the most parsimonious explanation of the facts. Yet for more than 40 years, Taubes says, scientists have preferred to conjure up a broad array of factors: not only saturated fat, cholesterol, and salt, but also portion sizes, processed food, sleeping habits, lack of exercise, environmental toxins, viruses, prescription drugs, and even alterations to our microbiome. Indeed, they've viewed the baldness of the case against sugar as a sign of quackery or wishful thinking. It's deemed much more sensible, these days, to chart a fuzzy middle course. *We went too far with saturated fat, so let's not make that same mistake again.* Instead of searching for a single bad ingredient, the experts now construct whole ecologies of blame: the food desert, the industrial farm, the consumer-capitalist society. (*Sugar may be bad for you, but it can't be the only thing ...*) One might choose to see this as humility. Taubes argues that it's giving up.

**C**ERTAINLY HE'S TENACIOUS. It takes some grit to pursue a simple claim through a jungle of confusing research, and even more when you consider how that simple claim was for many years ignored or denigrated by experts in the field. To explain this disrespect, Taubes delves into the history and politics of sugar. Things might have turned out differently, he says, and the Yudkin theory been given fair consideration, but for the long-term efforts of a partnership between the honchos in nutrition research and their conniving sponsors from the food industry. In Taubes's telling, this group—which some have



called the “sugar conspiracy”—worked behind the scenes to squelch the toxic-sugar theory.

To expose the machinations of Big Sugar, Taubes draws from internal memos, letters, and other industry records obtained by Cristin Kearns, a dentist who quit her job to scour university archives for evidence of backroom deals. Sugar companies formed a research foundation in 1943 and soon began a concerted effort, through hefty grants to scientists and seven-figure ad campaigns, to counter claims that sugar causes cavities and that diet soda might be better for your health, among other threats to the industry. It was, in effect, the Big Tobacco strategy: Amplify uncertainty about what causes what, put the skeptics on your payroll, kick the can of scientific proof ever further down the road. According to Taubes’s and Kearns’s research, some of the most important figures in the field of nutrition—Ancel Keys, for one, as well as Harvard’s Fredrick Stare—took money from Big Sugar and at the same time made a point of doubting sugar’s role in chronic illness.

Taubes’s account leaves out half the story, though, as I guess a prosecutor’s brief is wont to do. Allow me some reluctant words for the defense. It’s true that Keys, Stare, and their associates were taking sugar money, but Yudkin had his own ties to the food industry. According to David Merritt Johns, a Columbia University public-health historian who has studied the sugar/fat dispute, Yudkin took funding from Nestlé and the U.K.’s National Dairy Council, as well as from H. J. Heinz, Unilever, and other food-related businesses. He was also sponsored by the public-relations arm of the egg industry. On the first page of *Pure, White and Deadly*, he offers thanks to “the many firms in the food and pharmaceutical industry that for 25 years have given me such constant generous support,” claiming that “for many of them” the results of his research “were often not at all in their interests.” Johns says this sort of coziness with industry appears to have been common in the field.

As the journalist Nina Teicholz has demonstrated, lots of food companies have paid for research that supported their parochial concerns. (Vegetable-oil producers, for example, helped to prosecute the case against saturated fat through groups like the Wesson Fund for Medical Research.) “There has been a lot of bad science in the field of nutrition—and many ‘Big Tobaccos,’” Teicholz wrote in a recent *Los Angeles Times* op-ed responding to Kearns’s research. The interests arrayed behind each individual ingredient—sugar, eggs, oil, wheat, whatever—made their own attempts to influence scientific research, and in so doing helped

## ▼ The CultureFile

BOOKS

**Lots of food companies have paid for research that supported their parochial concerns.**

undercut competitors and defend themselves from regulation. Some were more successful than others.

And though Taubes depicts Big Sugar as a single actor in a far-reaching and triumphant plot, history doesn’t really bear him out. By the end of the 1970s, he writes, the industry “had managed to shape both public opinion on the healthfulness of sugar, and how the public-health authorities and the federal government would perceive it for the next quarter-century, if not, perhaps, ever since.” The coup de grâce arrived in 1980, with the publication of the first edition of the U.S. government’s *Dietary Guidelines for Americans*. That document, heavily influenced by the work of sugar apologists, recommended cuts to total-fat and saturated-fat intake while noting that, “contrary to widespread opinion,” eating too much sugar likely does not lead to heart disease or diabetes. On the basis of this shift in expert opinion, low-fat products multiplied on supermarket shelves. Americans ate more carbohydrates and drank more sugar-sweetened sodas. The epidemic of obesity got even worse.

This account would make you think the case against sugar had been dropped, when in fact it never really went away. Taubes notes that in May 1976, the Public Relations Society of America gave a Silver Anvil Award to the Sugar Association for its “ability to stem the flow of reckless commentary” about sugar. But as his book also reveals, that commentary continued—showing up the very next month, for example, in *The New York Times Magazine*. “The Bitter Truth About Sugar,” a broadside by Jean Mayer, whom Taubes describes as “easily the most influential nutritionist in the United States,” claimed that sugar can be as addictive as tobacco and is likely responsible for dental cavities, obesity, and diabetes. “Purveyors of health foods and ‘natural foods’ enthusiasts are unanimous in their statements that white sugar is toxic,” Mayer wrote. (Fredrick Stare followed with a four-point rebuttal in a letter to the editor.)

Then, in the spring of 1977, the FDA proposed a ban on the artificial sweetener saccharin. Taubes portrays this as the culmination of Big Sugar’s scheme to protect itself from growing sales of diet soda. (The sugar interests had launched a million-dollar ad campaign against diet soda in the 1960s, and sponsored research on the link between artificial sweeteners and bladder cancer in rats.) Yet the regulators’ plan sparked a backlash from the sugar-fearing public—more than 40,000 letters to the agency by early summer. One magazine cited an estimate that the loss of saccharin might cause an extra 25,000 cases of cardiovascular disease every year. Dentists warned of an epidemic of bad teeth. Before long, Congress stepped in to prevent the ban.

Taubes asserts that the damage to the diet-soda business had been done. "Artificial sweeteners had been ... irrevocably tainted," he writes. "In the 1980s, when food-industry analysts were predicting a surge in diet-soda sales that failed to last, one explanation was that consumers continued to think of these substances as far more noxious than sugars."

That's not at all what happened, though. With the introduction in the early 1980s of Diet Coke—made with aspartame, a better-tasting artificial sweetener—demand for sugar-free soda took off. Bold predictions of the market's surge were met, and then exceeded. Diet soda's share of total soda sales climbed steadily throughout the '80s and '90s, even through the peak years of the low-fat craze. The market reached its ceiling only in 2007.

The truth is that even the *Dietary Guidelines* of 1980 were not as unreservedly sugar-friendly as Taubes portrays. Sugar, though exonerated of causing heart disease or diabetes, was charged with a lesser crime: promoting tooth decay. Under the heading "Avoid Too Much Sugar," the *Guidelines* warned against the sugars and syrups in jams, jellies, candies, cookies, sodas, cakes, and pies.

**I**'M NOT TRYING to debunk Taubes's anti-sugar position. As an industry consultant might say, "I'm only pointing out some inconsistencies." These should be considered in their murky context, though. Just as the history defies a simple reading, the research on nutrition—ample and diverse though it's been—isn't close to dispositive. We can't prove the case against sugar, and we can't prove the case against that case, either. Taubes knows this as well as anyone. Though his book is an impassioned

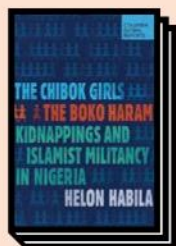
## The Culture File

**Taubes is a clear-eyed zealot for his cause, acknowledging his bias and pressing on for better science.**

brief, it never fails to describe the scientific evidence for what it is: "suggestive," rather than definitive, or, in other places, "compelling" and "provocative." He's a clear-eyed zealot for his cause, acknowledging his bias even as he presses on for better science.

Outside of his book, Taubes is ready to admit, for example, that commercial research grants aren't always bad for science. Industry funding is "a double-edged sword," he told the *Pittsburgh Post-Gazette* in 2014; it pushes research forward, at a slant. Money from the business world helped address what he sees as another myth of healthy eating—that salt causes hypertension. Someone had to pay for scientists to study this idea, he said, and the food industry stepped up. But when these studies found that salt maybe isn't all that bad for you, they were cast in doubt. "People say, 'Well, look who funded the study.'"

For Taubes, the entire field of nutrition science—industry-funded or not—should be viewed with skepticism. "I actually think the evidence is ambiguous," he said in a recent interview on sugar. "I mean if it was a criminal case, you would have enough to indict but not to convict because all the research has holes in it." Much nutrition research suffers from a fatal flaw: It relies on short-term studies to examine chronic, long-term problems. His critique goes further. In a footnote to *The Case Against Sugar*, he writes that when he started reporting his first book on nutrition, he found to his dismay that many of the people he interviewed lacked basic knowledge about sugars. Epidemiologists and doctors weren't even aware that fructose—the form of sugar that he believes to be most toxic—makes up half of table sugar, and that high-fructose corn syrup contains glucose. "They didn't have the nutrition



COVER TO COVER

### **The Chibok Girls: The Boko Haram Kidnappings and Islamist Militancy in Nigeria**

**HELON HABILA**  
COLUMBIA GLOBAL REPORTS

**ON APRIL 14, 2014,** Boko Haram terrorists abducted 276 girls from a secondary school in the mostly Christian town of Chibok, in northeast-

ern Nigeria. The event spawned the #BringBackOurGirls campaign, and became the symbol of the government's failed battle against

the insurgents. Fifty-seven girls had escaped at the outset. But until 21 of the kidnapped girls were freed in October, only one other had been found.

Helon Habila, a novelist who grew up not far from Chibok, succeeded in getting through checkpoints on two recent visits to the town and its environs. In 110 spare yet vivid pages, he evokes the traumatized

aftermath—parents walking "as if there was no blood in their bodies," escaped girls reciting oft-told stories. He also sketches the history leading up to the horror: the violent rise of Islamist extremism in Nigeria.

When Habila concludes by stressing "the shocking banality" of what has happened, he isn't referring merely to the evil. He knows the ranks of the marauders

include "ordinary boys in dirty shirts and slippers, shooting at whatever they were told to shoot at by their handlers." But the girls who got away, as he learns, were ordinary, too—saved by "chance, opportunity, and desperation." In rescuing the Chibok tragedy from "mythic status," Habila's unusual primer quietly yet powerfully revives the call to take notice.

— Ann Hulbert





or biochemistry background necessary at the time to be aware of these simple facts.”

It’s extraordinary and refreshing to see a science journalist so wary of his sources, and so willing to present himself as someone who knows more than they do. Given all the irresolvable uncertainty, Taubes must fall back on expert judgment of the facts, and he does what few science journalists dare: He invokes not some egghead academic’s assessment, but his own. The clear subtext of *The Case Against Sugar* is that Taubes has done a more thorough job of accounting for the evidence than even some of the leading figures in the field. And having devoted himself so completely to a single topic, and with such depth and perspicacity, he may well be right. I’m not sure that he still counts as a journalist. It’s as though he’s fallen through a wormhole from reporting into expertise.

That crisis of identity has become only more complicated. Is Taubes a journalist, an activist, a scholar? In September 2012, he branched out from science writing and got involved with science research. With the help of a doctor and researcher named Peter Attia, he launched the Nutrition Science Initiative—a nonprofit with the stated goal of sponsoring careful, well-controlled studies on long-standing questions in the field. He set out to do his part in plugging some of those many holes in the research.

**It’s extraordinary and refreshing to see a science journalist so wary of his sources.**

The initiative’s first study, on what happens when you eat fewer carbs while consuming the same amount of calories overall, came out this past summer. It appeared to show that the low-carb, low-sugar diet did not increase the loss of body fat in 17 men across a four-week stretch. Kevin Hall, a researcher at the National Institutes of Health and the study’s lead author, said that the results of that and another study he’d conducted “basically falsify” one theory of how sugar and other carbohydrates make us fat. Other experts have been more circumspect, saying that this was just a pilot study (and another short-term one), and that its findings are, in fact, equivocal. Taubes himself declared the results “interesting” but added, “They’re very hard to interpret.”

In other words, he hasn’t budged—at least not yet. Could sugar be responsible for a national catastrophe in public health, in which one in three adults is obese, one in seven has diabetes, and one in four or five will die of cancer? Until someone comes along and proves the opposite, Taubes considers the simplest and most likely answer to be yes. The rest of us will have to draw our own conclusions, based on information from whatever sources—doctors, gurus, journalists, or intuition—we happen to prefer.

But when all is said and done, our verdict on sugar—I mean yours and mine, not that of scientific experts—may not matter all that much. Even if we’re inclined to be suspicious, and even if we choose another villain in its place, our diets may end up more or less the same. Consider what is now among the most popular alternatives to Yudkin’s theory, espoused by Michael Pollan—the idea that processed foods, as a category, are more to blame than any one ingredient, and that we should stay away from them. As Taubes points out, these same products virtually all contain sugar, so it wouldn’t make a difference whether we’re avoiding one thing or the other. Either way, we’d get less sugar overall.

The same goes for other mainstream diets. “Whether you’re trying to avoid gluten, trans fats, saturated fats, or refined carbohydrates of all types, or just trying to cut calories—eat less and eat healthy—an end result of this advice is that you’re often avoiding processed foods containing sugar and a host of other ingredients,” Taubes writes at the end of the book. “If we benefit, we cannot say exactly why.”

This may be a source of some despair for scientists, but for the rest of us, it’s a heartening idea. The case against sugar is unresolved, and yet we know exactly what to do. **A**

*Daniel Engber is a columnist for Slate.*



# IF OUR BODIES COULD TALK



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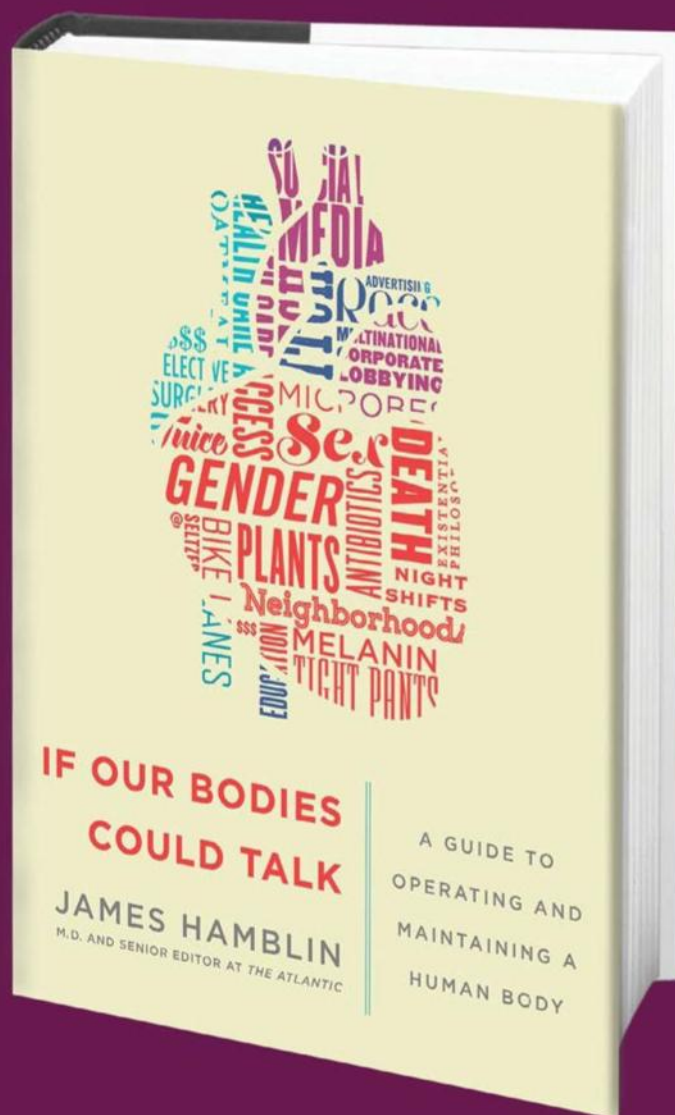
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# **My President Was Black**

A history of  
the first African  
American White House—  
and of what  
came next

**By Ta-Nehisi Coates**

**PHOTOGRAPHS BY IAN ALLEN**



*"They're a rotten crowd,"  
I shouted across the lawn.  
"You're worth the whole damn  
bunch put together."*

— F. Scott Fitzgerald,  
The Great Gatsby

## I.

### "LOVE WILL MAKE YOU DO WRONG"

In the waning days of President Barack Obama's administration, he and his wife, Michelle, hosted a farewell party, the full import of which no one could then grasp. It was late October, Friday the 21st, and the president had spent many of the previous weeks, as he would spend the two subsequent weeks, campaigning for the Democratic presidential nominee, Hillary Clinton. Things were looking up. Polls in the crucial states of Virginia and Pennsylvania showed Clinton with solid advantages. The formidable GOP strongholds of Georgia and Texas were said to be under threat. The moment seemed to buoy Obama. He had been light on his feet in these last few weeks, cracking jokes at the expense of Republican opponents and laughing off hecklers. At a rally in Orlando on October 28, he greeted a student who would be introducing him by dancing toward her and then noting that the song playing over the loudspeakers—the Gap Band's "Outstanding"—was older than she was. "This is classic!" he said. Then he flashed the smile that had launched America's first black presidency, and started dancing again. Three months still remained before Inauguration Day, but staffers had already begun to count down the days. They did this with a mix of pride and longing—like college seniors in early May. They had no sense of the world they were graduating into. None of us did.

The farewell party, presented by BET (Black Entertainment Television), was the last in a series of concerts the first couple had hosted at the White House. Guests were asked to arrive at 5:30 p.m. By 6, two long lines stretched behind the Treasury Building, where the Secret Service was checking names. The people in these lines were, in the main, black, and their humor reflected it. The brisker queue was dubbed the "good-hair line" by one guest, and there was laughter at the prospect of the Secret Service subjecting us all to a "brown-paper-bag test." This did not come to pass, but security was tight. Several guests were told to stand in a makeshift pen and wait to have their backgrounds checked a second time.

Dave Chappelle was there. He coolly explained the peril and promise of comedy in what was then still only a remotely potential Donald Trump presidency: "I mean, we never had a guy have his own pussygate scandal." Everyone laughed. A

few weeks later, he would be roundly criticized for telling a crowd at the Cutting Room, in New York, that he had voted for Clinton but did not feel good about it. "She's going to be on a coin someday," Chappelle said. "And her behavior has not been coinworthy." But on this crisp October night, everything felt inevitable and grand. There was a slight wind. It had been in the 80s for much of that week. Now, as the sun set, the season remembered its name. Women shivered in their cocktail dresses. Gentlemen chivalrously handed over their suit coats. But when Naomi Campbell strolled past the security pen in a sleeveless number, she seemed as invulnerable as ever.

Cellphones were confiscated to prevent surreptitious recordings from leaking out. (This effort was unsuccessful. The next day, a partygoer would tweet a video of the leader of the free world dancing to Drake's "Hotline Bling.") After withstanding the barrage of security, guests were welcomed into the East Wing of the White House, and then ushered back out into the night, where they boarded a succession of orange-and-green trolleys. The singer and actress Janelle Monáe, her famous and fantastic pompadour preceding her, stepped on board and joked with a companion about the historical import of "sitting in the back of the bus." She took a seat three rows from the front and hummed into the night. The trolley dropped the guests on the South Lawn, in front of a giant tent. The South Lawn's fountain was lit up with blue lights. The White House proper loomed like a ghost in the distance. I heard the band, inside, beginning to play Al Green's "Let's Stay Together."

"Well, you can tell what type of night this is," Obama said from the stage, opening the event. "Not the usual ruffles and flourishes!"

The crowd roared.

"This must be a BET event!"

The crowd roared louder still.

Obama placed the concert in the White House's musical tradition, noting that guests of the Kennedys had once done the twist at the residence—"the twerking of their time," he said, before adding, "There will be no twerking tonight. At least not by me."

The Obamas are fervent and eclectic music fans. In the past eight years, they have hosted performances at the White House by everyone from Mavis Staples to Bob Dylan to Tony Bennett to the Blind Boys of Alabama. After the rapper Common was invited to perform in 2011, a small fracas ensued in the right-wing media. He performed anyway—and was invited back again this glorious fall evening and almost stole the show. The crowd sang along to the hook for his hit ballad "The Light." And when he brought on the gospel singer Yolanda Adams to fill in for John Legend on the Oscar-winning song "Glory," glee turned to rapture.

De La Soul was there. The hip-hop trio had come of age as boyish B-boys with Gumby-style high-top fades. Now they moved across the stage with a lovely mix of lethargy and grace, like your favorite uncle making his way down the *Soul Train* line, wary of throwing out a hip. I felt a sense of victory watching them rock the crowd, all while keeping it in the pocket. The victory belonged to hip-hop—an art form birthed in the burning Bronx and now standing full grown, at the White House, unbroken and unedited. Usher led the crowd in a call-and-response: "Say it loud, I'm black and I'm proud." Jill Scott



showed off her operatic chops. Bell Biv DeVoe, contemporaries of De La, made history with their performance by surely becoming the first group to suggest to a presidential audience that one should “never trust a big butt and a smile.”

The ties between the Obama White House and the hip-hop community are genuine. The Obamas are social with Beyoncé and Jay-Z. They hosted Chance the Rapper and Frank Ocean at a state dinner, and last year invited Swizz Beatz, Busta Rhymes, and Ludacris, among others, to discuss criminal-justice reform and other initiatives. Obama once stood in the Rose Garden passing large flash cards to the *Hamilton* creator and rapper Lin-Manuel Miranda, who then freestyled using each word on the cards. “Drop the beat,” Obama said, inaugurating the session. At 55, Obama is younger than pioneering hip-hop artists like Afrika Bambaataa, DJ Kool Herc, and Kurtis Blow. If Obama’s enormous symbolic power draws primarily from being the country’s first black president, it also draws from his membership in hip-hop’s foundational generation.

That night, the men were sharp in their gray or black suits and optional ties. Those who were not in suits had chosen to make a statement, like the dark-skinned young man who strolled in, sockless, with blue jeans cuffed so as to accentuate his gorgeous black-suede loafers. Everything in his ensemble seemed to say, “My fellow Americans, do not try this at home.” There were women in fur jackets and high heels; others with sculpted naturals, the sides shaved close, the tops blooming into curls; others still in gold bamboo earrings and long blond dreads. When the actor Jesse Williams took the stage, seemingly awed before such black excellence, before such black opulence,

President Obama onstage at BET’s “Love & Happiness” event in October 2016, the last in a series of concerts the first couple hosted at the White House

assembled just feet from where slaves had once toiled, he simply said, “Look where we are. Look where we are right now.”

This would not happen again, and everyone knew it. It was not just that there might never be another African American president of the United States. It was the feeling that this particular black family, the Obamas, represented the best of black people, the ultimate credit to the race, incomparable in elegance and bearing. “There are no more,” the comedian Sinbad joked back in 2010. “There are no black men raised in Kansas and Hawaii. That’s the last one. Y’all better treat this one right. The next one gonna be from Cleveland. He gonna wear a perm. Then you gonna see what it’s really like.” Throughout their residency, the Obamas had refrained from showing America “what it’s really like,” and had instead followed the first lady’s motto, “When they go low, we go high.” This was the ideal—black and graceful under fire—saluted that evening. The president was lionized as “our crown jewel.” The first lady was praised as the woman “who put the *O* in *Obama*.”

Barack Obama’s victories in 2008 and 2012 were dismissed by some of his critics as merely symbolic for African Americans. But there is nothing “mere” about symbols. The power embedded in the word *nigger* is also symbolic. Burning crosses do not literally raise the black poverty rate, and the Confederate flag does not directly expand the wealth gap.

Much as the unbroken ranks of 43 white male presidents communicated that the highest office of government in the

country—indeed, the most powerful political offices in the world—was off-limits to black individuals, the election of Barack Obama communicated that the prohibition had been lifted. It communicated much more. Before Obama triumphed in 2008, the most-famous depictions of black success tended to be entertainers or athletes. But Obama had shown that it was “possible to be smart and cool at the same damn time,” as Jesse Williams put it at the BET party. Moreover, he had not embarrassed his people with a string of scandals. Against the specter of black pathology, against the narrow images of welfare moms and deadbeat dads, his time in the White House had been an eight-year showcase of a healthy and successful black family spanning three generations, with two dogs to boot. In short, he became a symbol of black people’s everyday, extraordinary Americanness.

Whiteness in America is a different symbol—a badge of advantage. In a country of professed meritocratic competition, this badge has long ensured an unerring privilege, represented in a 220-year monopoly on the highest office in the land. For some not-insubstantial sector of the country, the elevation of Barack Obama communicated that the power of the badge had diminished. For eight long years, the badge-holders watched him. They saw footage of the president throwing bounce passes and shooting jumpers. They saw him enter a locker room, give a business-like handshake to a white staffer, and then greet Kevin Durant with something more soulful. They saw his wife dancing with Jimmy Fallon and posing, resplendent, on the covers of magazines that had, only a decade earlier, been almost exclusively, if unofficially, reserved for ladies imbued with the great power of the badge.

For the preservation of the badge, insidious rumors were concocted to denigrate the first black White House. Obama gave free cellphones to disheveled welfare recipients. Obama went to Europe and complained that “ordinary men and women are too small-minded to govern their own affairs.” Obama had inscribed an Arabic saying on his wedding ring, then stopped wearing the ring, in observance of Ramadan. He canceled the National Day of Prayer; refused to sign certificates for Eagle Scouts; faked his attendance at Columbia University; and used a teleprompter to address a group of elementary-school students. The badge-holders fumed. They wanted their country back. And, though no one at the farewell party knew it, in a couple of weeks they would have it.

On this October night, though, the stage belonged to another America. At the end of the party, Obama looked out into the crowd, searching for Dave Chappelle. “Where’s Dave?” he cried. And then, finding him, the president referenced Chappelle’s legendary Brooklyn concert. “You got your block party. I

got my block party.” Then the band struck up Al Green’s “Love and Happiness”—the evening’s theme. The president danced in a line next to Ronnie DeVoe. Together they mouthed the lyrics: “Make you do right. Love will make you do wrong.”

## II.

### HE WALKED ON ICE BUT NEVER FELL

Last spring, I went to the White House to meet the president for lunch. I arrived slightly early and sat in the waiting area. I was introduced to a deaf woman who worked as the president’s receptionist, a black woman who worked in the press office, a Muslim woman in a head scarf who worked on the National Security Council, and an Iranian American woman who worked as a personal aide to the president. This receiving party represented a healthy cross section of the people Donald Trump had been mocking, and would continue to spend his campaign mocking. At the time, the president seemed untroubled by Trump. When I told Obama that I thought Trump’s candidacy was an explicit reaction to the fact of a black president, he said he could see that, but then enumerated other explanations. When assessing Trump’s chances, he was direct: He couldn’t win.

This assessment was born out of the president’s innate optimism and unwavering faith in the ultimate wisdom of the American people—the same traits that had propelled his unlikely five-year ascent from assemblyman in the Illinois state legislature to U.S. senator to leader of the free world. The speech that launched his rise, the keynote address at the 2004 Democratic National Convention, emerged right from this logic. He addressed himself to his “fellow Americans, Democrats, Republicans, independents,” all of whom, he insisted, were more united than they had been led to believe. America was home to devout worshippers and Little League coaches in blue states, civil libertarians and “gay friends” in red states. The presumably white “counties around Chicago” did not want their taxes burned on welfare, but they didn’t want them wasted on a bloated Pentagon budget either. Inner-city black families, no matter their perils, understood “that government alone can’t teach our kids to learn ... that children can’t achieve unless we raise their expectations and turn off the television sets and eradicate the slander that says a black youth with a book is acting white.”

Perceived differences were the work of “spinmasters and negative-ad peddlers who embrace the politics of ‘anything goes.’” Real America had no use for such categorizations. By Obama’s lights, there was no liberal America, no conservative America, no black America, no white America, no Latino America, no Asian America, only “the United States of America.” All these disparate strands of the American experience were bound together by a common hope:

It’s the hope of slaves sitting around a fire singing freedom songs; the hope of immigrants setting out for distant shores; the hope of a young naval lieutenant bravely patrolling the Mekong Delta; the hope of a mill worker’s son who dares to

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defy the odds; the hope of a skinny kid with a funny name who believes that America has a place for him, too.

This speech ran counter to the history of the people it sought to address. Some of those same immigrants had firebombed the homes of the children of those same slaves. That young naval lieutenant was an imperial agent for a failed, immoral war. American division was real. In 2004, John Kerry did not win a single southern state. But Obama appealed to a belief in innocence—in particular a white innocence—that ascribed the country's historical errors more to misunderstanding and the work of a small cabal than to any deliberate malevolence or widespread racism. America was good. America was great.

Over the next 12 years, I came to regard Obama as a skilled politician, a deeply moral human being, and one of the greatest presidents in American history. He was phenomenal—the most agile interpreter and navigator of the color line I had ever seen. He had an ability to emote a deep and sincere connection to the hearts of black people, while never doubting the hearts of

Obama's keynote address at the 2004 Democratic National Convention launched his rise from Illinois state senator to president of the United States.

white people. This was the core of his 2004 keynote, and it marked his historic race speech during the 2008 campaign at Philadelphia's National Constitution Center—and blinded him to the appeal of Trump. ("As a general proposition, it's hard to run for president by telling people how terrible things are," Obama once said to me.)

But if the president's inability to cement his legacy in the form of Hillary Clinton proved the limits of his optimism, it also revealed the exceptional nature of his presidential victories. For eight years Barack Obama walked on ice and never fell. Nothing in that time suggested that straight talk on the facts of racism in American life would have given him surer footing.

I HAD MET THE PRESIDENT a few times before. In his second term, I'd written articles criticizing him for his overriding trust in color-blind policy and his embrace of "personal responsibility" rhetoric when speaking to African Americans. I saw him as playing both sides. He would invoke his identity as a president of all people to decline to advocate for black policy—and then invoke his black identity to lecture black people for continuing to "make bad choices." In response, Obama had invited me, along with other journalists, to the White House for off-the-record conversations. I attempted to press my points in these sessions. My efforts were laughable and ineffective. I was always inappropriately dressed, and inappropriately calibrated in tone: In one instance, I was too deferential; in another, too bellicose. I was discombobulated by fear—not by fear of the power of his office (though that is a fearsome and impressive thing) but by fear of his obvious brilliance. It is said that Obama speaks "professorially," a fact that understates the quickness and agility of his mind. These were not like press conferences—the president would speak in depth and with great familiarity about a range of subjects. Once, I watched him effortlessly reply to queries covering everything from electoral politics to the American economy to environmental policy. And then he turned to me. I thought of George Foreman, who once booked an exhibition with multiple opponents in which he pounded five straight journeymen—and I suddenly had some idea of how it felt to be the last of them.

Last spring, we had a light lunch. We talked casually and candidly. He talked about the brilliance of LeBron James and Stephen Curry—not as basketball talents but as grounded individuals. I asked him whether he was angry at his father, who had abandoned him at a young age to move back to Kenya, and whether that motivated any of his rhetoric. He said it did not, and he credited the attitude of his mother and grandparents for this. Then it was my turn to be autobiographical. I told him that I had heard the kind of "straighten up" talk he had been giving to black youth, for instance in his 2013 Morehouse commencement address, all my life. I told him that I thought it was not sensitive to the inner turmoil that can be obscured by the hardness kids often evince. I told him I thought this because I had once been one of those kids. He seemed to concede this point, but I couldn't tell whether it mattered to him. Nonetheless, he agreed to a series of more formal conversations on this and other topics.

The improbability of a black president had once been so strong that its most vivid representations were comedic.



This photograph of a 5-year-old boy patting the president's hair in 2009 became an icon of the Obama White House.

Witness Dave Chappelle's profane Black Bush from the early 2000s ("This nigger very possibly has weapons of mass destruction! I can't sleep on that!") or Richard Pryor's black president in the 1970s promising black astronauts and black quarterbacks ("Ever since the Rams got rid of James Harris, my jaw's been uptight!"). In this model, so potent is the force of blackness that the presidency is forced to conform to it. But once the notion advanced out of comedy and into reality, the opposite proved to be true.

Obama's DNC speech is the key. It does not belong to the literature of "the struggle"; it belongs to the literature of prospective presidents—men (as it turns out) who speak not to gravity and reality, but to aspirations and dreams. When Lincoln invoked the dream of a nation "conceived in liberty" and pledged to the ideal that "all men are created equal," he erased the near-extermination of one people and the enslavement of another. When Roosevelt told the country that "the only thing we have to fear is fear itself," he invoked the dream of American omnipotence and boundless capability. But black people, then living under a campaign of terror for more than half a century, had quite a bit to fear, and Roosevelt could not save them. The dream Ronald Reagan invoked in 1984—that "it's morning again in America"—meant nothing to the inner cities, besieged as they were by decades of redlining policies, not to mention crack and Saturday-night specials. Likewise, Obama's keynote address conflated the slave and the nation of immigrants who profited from him. To reinforce the majoritarian dream, the nightmare endured by the minority is erased. That is the tradition to which the "skinny kid with a funny name" who would be president belonged. It is also

the only tradition in existence that could have possibly put a black person in the White House.

Obama's embrace of white innocence was demonstrably necessary as a matter of political survival. Whenever he attempted to buck this directive, he was disciplined. His mild objection to the arrest of Henry Louis Gates Jr. in 2009 contributed to his declining favorability numbers among whites—still a majority of voters. His comments after the killing of Trayvon Martin—"If I had a son, he'd look like Trayvon"—helped make that tragedy a rallying point for people who did not care about Martin's killer as much as they cared about finding ways to oppose the president. Michael Tesler, a political-science professor at UC Irvine, has studied the effect of Obama's race on the American electorate. "No other factor, in fact, came close to dividing the Democratic primary electorate as powerfully as their feelings about African Americans," he and his co-author, David O. Sears, concluded in their book, *Obama's Race: The 2008 Election and the Dream of a Post-Racial America*. "The impact of racial attitudes on individual vote decisions ... was so strong that it appears to have even outstripped the substantive impact of racial attitudes on Jesse Jackson's more racially charged campaign for the nomination in 1988." When Tesler looked at the 2012 campaign in his second book, *Post-Racial or Most-Racial? Race and Politics in the Obama Era*, very little had improved. Analyzing the extent to which racial attitudes affected people associated with Obama during the 2012 election, Tesler concluded that "racial attitudes spilled over from Barack Obama into mass assessments of Mitt



Romney, Joe Biden, Hillary Clinton, Charlie Crist, and even the Obama family's dog Bo."

Yet despite this entrenched racial resentment, and in the face of complete resistance by congressional Republicans, overtly launched from the moment Obama arrived in the White House, the president accomplished major feats. He remade the nation's health-care system. He revitalized a Justice Department that vigorously investigated police brutality and discrimination, and he began dismantling the private-prison system for federal inmates. Obama nominated the first Latina justice to the Supreme Court, gave presidential support to marriage equality, and ended the U.S. military's Don't Ask, Don't Tell policy, thus honoring the civil-rights tradition that had inspired him. And if his very existence inflamed America's racist conscience, it also expanded the country's anti-racist imagination. Millions of young people now know their only president to have been an African American. Writing for *The New Yorker*, Jelani Cobb once noted that "until there was a black Presidency it was impossible to conceive of the limitations of one." This is just as true of the possibilities. In 2014, the Obama administration committed itself to reversing the War on Drugs through the power of presidential commutation. The administration said that it could commute the sentences of as many as 10,000 prisoners. As of November, the president had commuted only 944 sentences. By any measure, Obama's effort fell woefully short, except for this small one: the measure of almost every other modern president who preceded him. Obama's 944 commutations are the most in nearly a century—and more than the past 11 presidents' combined.

Obama was born into a country where laws barring his very conception—let alone his ascendancy to the presidency—had long stood in force. A black president would always be a contradiction for a government that, throughout most of its history, had oppressed black people. The attempt to resolve this contradiction through Obama—a black man with deep roots in the white world—was remarkable. The price it exacted, incredible. The world it gave way to, unthinkable.

### III.

#### "I DECIDED TO BECOME PART OF THAT WORLD"

When Barack Obama was 10, his father gave him a basketball, a gift that connected the two directly. Obama was born in 1961 in Hawaii and raised by his mother, Ann Dunham, who was white, and her parents, Stanley and Madelyn. They loved him ferociously, supported him emotionally, and encouraged him intellectually. They also told him he was black. Ann gave him books to read about famous black people. When Obama's mother had begun dating his father, the news had not been greeted with the

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threat of lynching (as it might have been in various parts of the continental United States), and Obama's grandparents always spoke positively of his father. This biography makes Obama nearly unique among black people of his era.

In the president's memoir, *Dreams From My Father*, he says he was not an especially talented basketball player, but he played with a consuming passion. That passion was directed at something more than just the mastering of the pick-and-roll or the perfecting of his jump shot. Obama came of age during the time of the University of Hawaii basketball team's "Fabulous Five"—a name given to its all-black starting five, two decades before it would be resurrected at the University of Michigan by the likes of Chris Webber and Jalen Rose. In his memoir, Obama writes that he would watch the University of Hawaii players laughing at "some inside joke," winking "at the girls on the sidelines," or "casually flipping lay-ups." What Obama saw in the Fabulous Five was not just game, but a culture he found attractive:

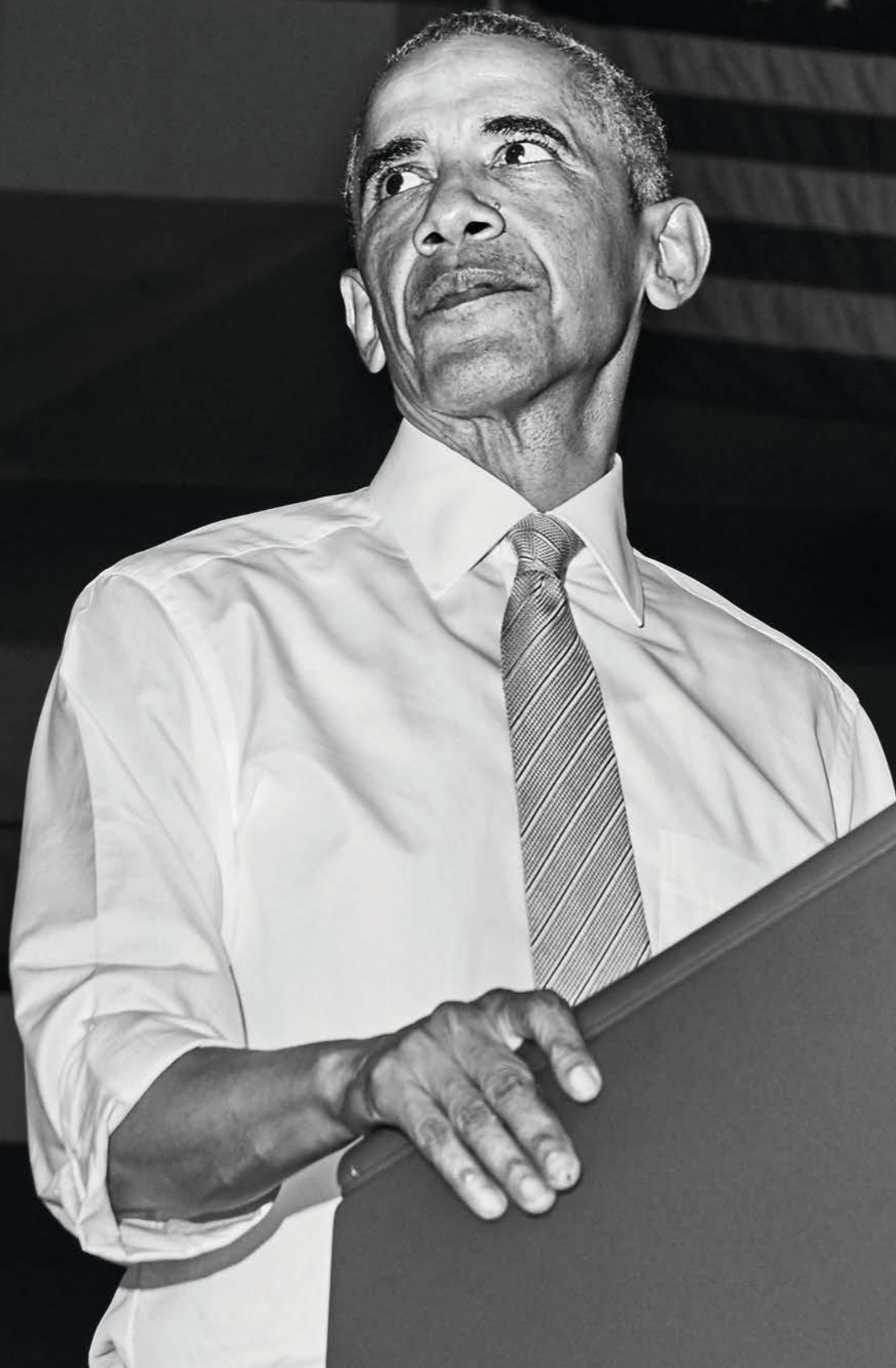
By the time I reached high school, I was playing on Punahou's teams, and could take my game to the university courts, where a handful of black men, mostly gym rats and has-beens, would teach me an attitude that didn't just have to do with the sport. That respect came from what you did and not who your daddy was. That you could talk stuff to rattle an opponent, but that you should shut the hell up if you couldn't back it up. That you didn't let anyone sneak up behind you to see emotions—like hurt or fear—you didn't want them to see.

These are lessons, particularly the last one, that for black people apply as much on the street as they do on the court. Basketball was a link for Obama, a medium for downloading black culture from the mainland that birthed the Fabulous Five. Assessing his own thought process at the time, Obama writes, "I decided to become part of that world." This is one of the most incredible sentences ever written in the long, decorated history of black memoir, if only because very few black people have ever enjoyed enough power to write it.

Historically, in black autobiography, to be remanded into the black race has meant exposure to a myriad of traumas, often commencing in childhood. Frederick Douglass is separated from his grandmother. The enslaved Harriet Ann Jacobs must constantly cope with the threat of rape before she escapes. After telling his teacher he wants to be a lawyer, Malcolm X is told that the job isn't for "niggers." Black culture often serves as the balm for such traumas, or even the means to resist them. Douglass finds the courage to face the "slave-breaker" Edward Covey after being given an allegedly enchanted root by "a genuine African" possessing powers from "the eastern nations." Malcolm X's dancing connects him to his "long-suppressed African instincts." If black racial identity speaks to all the things done to people of recent African ancestry, black cultural identity was created in response to them. The division is not neat; the two are linked, and it is incredibly hard to be a full participant in the world of cultural identity without experiencing the trauma of racial identity.

Obama is somewhat different. He writes of bloodying the nose of a white kid who called him a "coon," and of chafing





at racist remarks from a tennis coach, and of feeling offended after a white woman in his apartment building told the manager that he was following her. But the kinds of traumas that marked African Americans of his generation—beatings at the hands of racist police, being herded into poor schools, grinding out a life in a tenement building—were mostly abstract for him. Moreover, the kind of spatial restriction that most black people feel at an early age—having rocks thrown at you for being on the wrong side of the tracks, for instance—was largely absent from his life. In its place, Obama was gifted with a well-stamped passport and admittance to elite private schools—all of which spoke of other identities, other lives and other worlds where the color line was neither determinative nor especially relevant. Obama could have grown into a raceless cosmopolitan. Surely he would have lived in a world of problems, but problems not embodied by him.

Instead, he decided to enter this world.

"I always felt as if being black was cool," Obama told me while traveling to a campaign event. He was sitting on *Air Force One*, his tie loosened, his shirtsleeves rolled up. "[Being black] was not something to run away from but something to embrace. Why that is, I think, is complicated. Part of it is I think that my mother thought black folks were cool, and if your mother loves you and is praising you—and says you look good, are smart—as you are, then you don't kind of think in terms of *How can I avoid this?* You feel pretty good about it."

As a child, Obama's embrace of blackness was facilitated, not impeded, by white people. Obama's mother pointed him toward the history and culture of African Americans. Stanley, his grandfather, who came originally from Kansas, took him to basketball games at the University of Hawaii, as well as to black bars. Stanley introduced him to the black writer Frank Marshall Davis. The facilitation was as much indirect as direct. Obama recalls watching his grandfather at those black bars and understanding that "most of the people in the bar weren't there out of choice," and that "our presence there felt forced." From his mother's life of extensive travel, he learned to value the significance of having a home.

That suspicion of rootlessness extends throughout *Dreams From My Father*. He describes integration as a "one-way street" on which black people are asked to abandon themselves to fully experience America's benefits. Confronted with a woman named Joyce, a mixed-race, green-eyed college classmate who insists that she is not "black" but "multiracial," Obama is scornful. "That was the problem with people like Joyce," he writes. "They talked about the richness of their multicultural heritage and it sounded real good, until you noticed that they avoided black people." Later in the memoir, Obama tells the story of falling in love with a white woman. During a visit to her family's country house, he found himself in the library, which

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was filled with pictures of the woman's illustrious relations. But instead of being in awe, Obama realized that he and the woman lived in different worlds. "And I knew that if we stayed together, I'd eventually live in hers," he writes. "Between the two of us, I was the one who knew how to live as an outsider."

After college, Obama found a home, as well as a sense of himself, working on the South Side of Chicago as a community organizer. "When I started doing that work, my story merges with a larger story. That happens naturally for a John Lewis," he told me, referring to the civil-rights hero and Democratic congressman. "That happens more naturally for you. It was less obvious to me. *How do I pull all these different strains together: Kenya and Hawaii and Kansas, and white and black and Asian—how does that fit?* And through action, through work, I suddenly see myself as part of the bigger process for, yes, delivering justice for the [African American community] and specifically the South Side community, the low-income people—justice on behalf of the African American community. But also thereby

promoting my ideas of justice and equality and empathy that my mother taught me were universal. So I'm in a position to understand those essential parts of me not as separate and apart from any particular community but connected to every community. And I can fit the African American struggle for freedom and justice in the context of the universal aspiration for freedom and justice."

Throughout Obama's 2008 campaign and into his presidency, this attitude proved key to his deep support in the black community. African Americans, weary of high achievers who distanced themselves from their black roots, understood that Obama had paid a price for checking "black" on his census form, and for living black, for hosting Common, for brushing dirt off his shoulder during the primaries, for marrying a woman who looked like Michelle Obama. If women, as a gender, must suffer the constant evaluations and denigrations of men, black women must suffer that, plus a broad dismissal from the realm of what American society deems to be beautiful. But Michelle Obama is beautiful in the way that black people know themselves to be. Her prominence as first lady directly attacks a poison that diminishes black girls from the moment they are capable of opening a magazine or turning on a television.

The South Side of Chicago, where Obama began his political career, is home to arguably the most prominent and storied black political establishment in the country. In addition to Oscar Stanton De Priest, the first African American elected to Congress in the 20th century, the South Side produced the city's first black mayor, Harold Washington; Jesse Jackson, who twice ran for president; and Carol Moseley Braun, the first African American woman to win a Senate race. These victories helped give rise to Obama's own. Harold Washington served as an inspiration to Obama and looms heavily over the Chicago section of *Dreams From My Father*.

Washington forged the kind of broad coalition that Obama would later assemble nationally. But Washington did this in the mid-1980s in segregated Chicago, and he had not had the luxury, as Obama did, of becoming black with minimal trauma. "There was an edge to Harold that frightened some white

voters," David Axelrod, who worked for both Washington and Obama, told me recently. Axelrod recalled sitting around a conference table with Washington after he had won the Democratic primary for his reelection in 1987, just as the mayor was about to hold a press conference. Washington asked what percentage of Chicago's white vote he'd received. "And someone said, 'Well, you got 21 percent. And that's really good because last time'"—in his successful 1983 mayoral campaign—"you only got 8," Axelrod recalled. "And he kind of smiled, sadly, and said, 'You know, I probably spent 70 percent of my time in those white neighborhoods, and I think I've been a good mayor for everybody, and I got 21 percent of the white vote and we think it's good.' And he just kind of shook his head and said, 'Ain't it a bitch to be a black man in the land of the free and the home of the brave?'"

"That was Harold. He felt those things. He had fought in an all-black unit in World War II. He had come up in times—and that and the sort of indignities of what you had to do to come up through the machine really seared him." During his 1983 mayoral campaign, Washington was loudly booed outside a church in northwest Chicago by middle-class Poles, Italians, and Irish, who feared blacks would uproot them. "It was as vicious and ugly as anything you would have seen in the old South," Axelrod said.

Obama's ties to the South Side tradition that Washington represented were complicated. Like Washington, Obama attempted to forge a coalition between black South Siders and the broader community. But Obama, despite his adherence to black cultural mores, was, with his Kansan and Hawaiian roots, his Ivy League pedigree, and his ties to the University of Chicago, still an exotic out-of-towner. "They were a bit skeptical of him," says Salim Muwakkil, a journalist who has covered Obama since before his days in the Illinois state Senate. "Chicago is a very insular community, and he came from nowhere, seemingly."

Obama compounded people's suspicions by refusing to humble himself and go along with the political currents of the South Side. "A lot of the politicians, especially the black ones, were just leery of him," Kaye Wilson, the godmother to Obama's children and one of the president's earliest political supporters, told me recently.

But even as many in the black political community were skeptical of Obama, others encouraged him—sometimes when they voted against him. When Obama lost the 2000 Democratic-primary race against Bobby Rush, the African American incumbent congressman representing Illinois' First Congressional District, the then-still-obscure future president experienced the defeat as having to do more with his age than his exoticism. "I'd go meet people and I'd knock on doors and stuff, and some of the grandmothers who were the folks I'd been organizing and working with doing community stuff, they weren't parroting back some notion of 'You're too

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Harvard,' or 'You're too Hyde Park,' or what have you," Obama told me. "They'd say, 'You're a wonderful young man, you're going to do great things. You just have to be patient.' So I didn't feel the loss as a rejection by black people. I felt the loss as 'politics anywhere is tough.' Politics in Chicago is especially tough. And being able to break through in the African American community is difficult because of the enormous loyalty that people feel towards anybody who has been around awhile."

There was no one around to compete for loyalty when Obama ran for Senate in 2004, or for president in 2008. He was no longer competing against other African Americans; he was representing them. "He had that hybridity which told the 'do-gooders'—in Chicago they call the reformers the do-gooders—that he was acceptable," Muwakkil told me.

Obama ran for the Senate two decades after the death of Harold Washington. Axelrod checked in on the precinct where Washington had been so loudly booed by white Chicagoans. "Obama carried, against seven candidates for the Senate, almost the entire northwest side and that precinct," he said. "And I told him, 'Harold's smiling down on us tonight.'"

Obama believes that his statewide victory for the Illinois Senate seat held particular portent for the events of 2008. "Illinois is the most demographically representative state in the country," he told me. "If you took all the percentages of black, white, Latino; rural, urban; agricultural, manufacturing—[if] you took that cross section across the country and you shrank it, it would be Illinois."

Illinois effectively allowed Obama to play a scrimmage before the big national game in 2008. "When I ran for the Senate I had to go into southern Illinois, downstate Illinois, farming communities—some with very tough racial histories, some areas where there just were no African Americans of any number," Obama told me. "And when we won that race, not just an African American from Chicago, but an African American with an exotic history and [the] name Barack Hussein Obama, [it showed that I] could connect with and appeal to a much broader audience."

The mix of Obama's "hybridity" and the changing times allowed him to extend his appeal beyond the white ethnic corners of Chicago, past the downstate portions of Illinois, and out into the country at large. "Ben Nelson, one of the most conservative Democrats in the Senate, from Nebraska, would only bring in one national Democrat to campaign for him," Obama recalls. "And it was me. And so part of the reason I was willing to run [for president in 2008] was that I had had two years in which we were generating enormous crowds all across the country—and the majority of those crowds were not African American; and they were in pretty remote places, or unlikely places. They weren't just big cities or they weren't just liberal enclaves. So what that told me was, it was possible."

What those crowds saw was a black candidate unlike any other before him. To simply point to Obama's white mother, or to his African father, or even to his rearing in Hawaii, is to miss the point. For most African Americans, white people exist either as a direct or an indirect force for bad in their lives. Biraciality is no shield against this; often it just intensifies the problem. What proved key for Barack Obama was not that he



was born to a black man and a white woman, but that his white family approved of the union, and approved of the child who came from it. They did this in 1961—a time when sex between black men and white women, in large swaths of the country, was not just illegal but fraught with mortal danger. But that danger is not part of Obama's story. The first white people he ever knew, the ones who raised him, were decent in a way that very few black people of that era experienced.

I asked Obama what he made of his grandparents' impressively civilized reception of his father. "It wasn't Harry Belafonte," Obama said laughingly of his father. "This was like an African African. And he was like a blue-black brother. Nilotic. And so, yeah, I will always give my grandparents credit for that. I'm not saying they were happy about it. I'm not saying that they were not, after the guy leaves, looking at each other like, 'What the heck?' But whatever misgivings they had, they never expressed to me, never spilled over into how they interacted with me.

"Now, part of it, as I say in my book, was we were in this unique environment in Hawaii where I think it was much easier. I don't know if it would have been as easy for them if they were living in Chicago at the time, because the lines just weren't as sharply drawn in Hawaii as they were on the mainland."

Obama's early positive interactions with his white family members gave him a fundamentally different outlook toward the wider world than most blacks of the 1960s had. Obama told me he rarely had "the working assumption of discrimination, the working assumption that white people would not treat me right or give me an opportunity or judge me [other than] on the basis of merit." He continued, "The kind of working assumption" that white people would discriminate against him or treat him poorly "is less embedded in my psyche than it is, say, with Michelle."

In this, the first lady is more representative of black America than her husband is. African Americans typically raise their children to protect themselves against a presumed hostility from white teachers, white police officers, white supervisors, and white co-workers. The need for that defense is, more often than not, reinforced either directly by actual encounters or indirectly by observing the vast differences between one's own experience and those across the color line. Marty Nesbitt, the president's longtime best friend, who, like Obama, had positive interactions with whites at a relatively early age, told me that when he and his wife went to buy their first car, she was insistent on buying from a black salesperson. "I'm like, 'We've got to find a salesman,'" Nesbitt said. "She's like, 'No, no, no. We're waiting for the brother.' And I'm like, 'He's with a customer.' They were filling out documents and she was like, 'We're going to stay around.' And a white guy came up to us. 'Can I help you?' 'Nope.'" Nesbitt was not out to condemn anyone with this story. He was asserting that "the willingness of African Americans [in Chicago] to help lift each other up is powerful."

But that willingness to help is also a defense, produced by decades of discrimination. Obama sees race through a different lens, Kaye Wilson told me. "It's just very different from ours," she explained. "He's got buddies that are white, and they're his buddies, and they love him. And I don't think they love him just because he's the president. They love him because they're his friends from Hawaii, some from college and all.

"So I think he's got that, whereas I think growing up in the racist United States, we enter this thing with, you know, 'I'm looking at you. I'm not trusting you to be one hundred with me.' And I think he grew up in a way that he had to trust [white people]—how can you live under the roof with people and think that they don't love you? He needs that frame of reference. He needs that lens. If he didn't have it, it would be ... a Jesse Jackson, you know? Or Al Sharpton. Different lens."

That lens, born of literally relating to whites, allowed Obama to imagine that he could be the country's first black president. "If I walked into a room and it's a bunch of white farmers, trade unionists, middle age—I'm not walking in thinking, *Man, I've got to show them that I'm normal*," Obama explained. "I walk in there, I think, with a set of assumptions: like, these people look just like my grandparents. And I see the same Jell-O mold that my grandmother served, and they've got the same, you know, little stuff on their mantelpieces. And so I am maybe disarming them by just assuming that we're okay."

What Obama was able to offer white America is something very few African Americans could—trust. The vast majority of us are, necessarily, too crippled by our defenses to ever consider such a proposition. But Obama, through a mixture of ancestral connections and distance from the poisons of Jim Crow, can credibly and sincerely trust the majority population of this country. That trust is reinforced, not contradicted, by his blackness. Obama isn't shuffling before white power (Herman Cain's "shucky ducky" act) or flattering white ego (O. J. Simpson's listing not being seen as black as a great accomplishment). That, too, is defensive, and deep down, I suspect, white people know it. He stands firm in his own cultural traditions and says to the country something virtually no black person can, but every president must: "I believe you."

## IV.

### "YOU STILL GOTTA GO BACK TO THE HOOD"

Just after Columbus Day, I accompanied the president and his formidable entourage on a visit to North Carolina A&T State University, in Greensboro. Four days earlier, *The Washington Post* had published an old audio clip that featured Donald Trump lamenting a failed sexual conquest and exhorting the virtues of sexual assault. The next day, Trump claimed that this was "locker room" talk. As we flew to North Carolina, the president was in a state of bemused disbelief. He plopped down in a chair in the staff cabin of *Air Force One* and said, "I've been in a lot of locker rooms. I don't think I've ever heard that one before." He was casual and relaxed. A feeling of cautious inevitability emanated from his staff, and why not? Every day seemed to bring a new, more shocking revelation or piece of evidence showing Trump to be unfit for the presidency: He had lost nearly \$1 billion in a single year. He had likely not paid taxes in 18 years. He was running a "university," for which he was under formal legal investigation. He had trampled on his own campaign's messaging by engaging in a Twitter crusade against a former beauty-pageant contestant. He had been denounced by leadership in his own party, and the trickle of prominent Republicans—both in and out of office—who had publicly repudiated him threatened to become a geyser. At this



moment, the idea that a campaign so saturated in open bigotry, misogyny, chaos, and possible corruption could win a national election was ludicrous. This was America.

The president was going to North Carolina to keynote a campaign rally for Clinton, but first he was scheduled for a conversation about My Brother's Keeper, his initiative on behalf of disadvantaged youth. Announcing My Brother's Keeper—or MBK, as it's come to be called—in 2014, the president had sought to avoid giving the program a partisan valence, noting that it was “not some big new government program.” Instead, it would involve the government in concert with the nonprofit and business sectors to intervene in the lives of young men of color who were “at risk.” MBK serves as a kind of network for those elements of federal, state, and local government that might already have a presence in the lives of these young men. It is a quintessentially Obama program—conservative in scope, with impacts that are measurable.

“It comes right out of his own life,” Broderick Johnson, the Cabinet secretary and an assistant to the president, who heads MBK, told me recently. “I have heard him say, ‘I don’t want us to have a bunch of forums on race.’ He reminds people, ‘Yeah, we can talk about this. But what are we going to do?’” On this afternoon in North Carolina, what Obama did was sit with a group of young men who’d turned their lives around in part because of MBK. They told stories of being in the street, of choosing quick money over school, of their homes being shot up, and—through the help of mentoring or job programs brokered by MBK—transitioning into college or a job. Obama listened solemnly and empathetically to each of them.

Obama visited North Carolina A&T State University in early October for a conversation about My Brother's Keeper, his initiative for disadvantaged youth.

“It doesn’t take that much,” he told them. “It just takes someone laying hands on you and saying, ‘Hey, man, you count.’”

When he asked the young men whether they had a message he should take back to policy makers in Washington, D.C., one observed that despite their best individual efforts, they still had to go back to the very same deprived neighborhoods that had been the sources of trouble for them.

“It’s your environment,” the young man said. “You can do what you want, but you still gotta go back to the hood.”

He was correct. The ghettos of America are the direct result of decades of public-policy decisions: the redlining of real-estate zoning maps, the expanded authority given to prosecutors, the increased funding given to prisons. And all of this was done on the backs of people still reeling from the 250-year legacy of slavery. The results of this negative investment are clear—African Americans rank at the bottom of nearly every major socioeconomic measure in the country.

Obama’s formula for closing this chasm between black and white America, like that of many progressive politicians today, proceeded from policy designed for all of America. Blacks disproportionately benefit from this effort, since they are disproportionately in need. The Affordable Care Act, which cut the uninsured rate in the black community by at least a third, was Obama’s most prominent example. Its full benefit has yet to be felt by African Americans, because several states in the South

have declined to expand Medicaid. But when the president and I were meeting, the ACA's advocates believed that pressure on state budgets would force expansion, and there was evidence to support this: Louisiana had expanded Medicaid earlier in 2016, and advocates were gearing up for wars to be waged in Georgia and Virginia.

Obama also emphasized the need for a strong Justice Department with a deep commitment to nondiscrimination. When Obama moved into the White House in 2009, the Justice Department's Civil Rights Division "was in shambles," former Attorney General Eric Holder told me recently. "I mean, I had been there for 12 years as a line guy. I started out in '76, so I served under Republicans and Democrats. And what the [George W.] Bush administration, what the Bush DOJ did, was unlike anything that had ever happened before in terms of politicized hiring." The career civil servants below the political appointees, Holder said, were not even invited to the meetings in which the key hiring and policy decisions were made. After Obama's inauguration, Holder told me, "I remember going to tell all the folks at the Civil Rights Division, 'The Civil Rights Division is open for business again.' The president gave me additional funds to hire people."

The political press developed a narrative that because Obama felt he had to modulate his rhetoric on race, Holder was the administration's true, and thus blacker, conscience. Holder is certainly blunter, and this worried some of the White House staff. Early in Obama's first term, Holder gave a speech on race in which he said the United States had been a "nation of cowards" on the subject. But positioning the two men as opposites elides an important fact: Holder was appointed by the president, and went only as far as the president allowed. I asked Holder whether he had toned down his rhetoric after that controversial speech. "Nope," he said. Reflecting on his relationship with the president, Holder said, "We were also kind of different people, you know? He is the Zen guy. And I'm kind of the hot-blooded West Indian. And I thought we made a good team, but there's nothing that I ever did or said that I don't think he would have said, 'I support him 100 percent.'"

"Now, the 'nation of cowards' speech, the president might have used a different phrase—maybe, probably. But he and I share a worldview, you know? And when I hear people say, 'Well, you are blacker than him' or something like that, I think, *What are you all talking about?*'"

For much of his presidency, a standard portion of Obama's speeches about race riffed on black people's need to turn off the television, stop eating junk food, and stop blaming white people for their problems. Obama would deliver this lecture to any black audience, regardless of context. It was bizarre, for instance, to see the president warning young men who'd just graduated from Morehouse College, one of the most storied black colleges in the country, about making "excuses" and blaming whites.

**WHAT  
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This part of the Obama formula is the most troubling, and least thought-out. This judgment emerges from my own biography. I am the product of black parents who encouraged me to read, of black teachers who felt my work ethic did not match my potential, of black college professors who taught me intellectual rigor. And they did this in a world that every day insulted their humanity. It was not so much that the black layabouts and deadbeats Obama invoked in his speeches were unrecognizable. I had seen those people too. But I'd also seen the same among white people. If black men were overrepresented among drug dealers and absentee dads of the world, it was directly related to their being underrepresented among the Bernie Madoffs and Kenneth Lays of the world. Power was what mattered, and what characterized the differences between black and white America was not a difference in work ethic, but a system engineered to place one on top of the other.

The mark of that system is visible at every level of American society, regardless of the quality of one's choices. For instance, the unemployment rate among black college graduates (4.1 percent) is almost the same as the unemployment rate among white high-school graduates (4.6 percent). But that college degree is generally purchased at a higher price by blacks than by whites. According to research by the Brookings Institution, African Americans tend to carry more student debt four years after graduation (\$53,000 versus \$28,000) and suffer from a higher default rate on their loans (7.6 percent versus 2.4 percent) than white Americans. This is both the result and the perpetuator of a sprawling wealth gap between the races. White households, on average, hold seven times as much wealth as black households—a difference so large as to make comparing the "black middle class" and "white middle class" meaningless; they're simply not comparable. According to Patrick Sharkey, a sociologist at New York University who studies economic mobility, black families making \$100,000 a year or more live in more-disadvantaged neighborhoods than white families making less than \$30,000. This gap didn't just appear by magic; it's the result of the government's effort over many decades to create a pigmentocracy—one that will continue without explicit intervention.

Obama had been on the record as opposing reparations. But now, late in his presidency, he seemed more open to the idea—in theory, at least, if not in practice.

"Theoretically, you can make obviously a powerful argument that centuries of slavery, Jim Crow, discrimination are the primary cause for all those gaps," Obama said, referencing the gulf in education, wealth, and employment that separates black and white America. "That those were wrongs to the black community as a whole, and black families specifically, and that in order to close that gap, a society has a moral obligation to make a large, aggressive investment, even if it's not in the form of individual reparations checks but in the form of a Marshall Plan."

The political problems with turning the argument for reparations into reality are manifold, Obama said. "If you look at countries like South Africa, where you had a black majority, there have been efforts to tax and help that black majority, but it hasn't come in the form of a formal reparations program. You have countries like India that have tried to help untouchables,



with essentially affirmative-action programs, but it hasn't fundamentally changed the structure of their societies. So the bottom line is that it's hard to find a model in which you can practically administer and sustain political support for those kinds of efforts."

Obama went on to say that it would be better, and more realistic, to get the country to rally behind a robust liberal agenda and build on the enormous progress that's been made toward getting white Americans to accept nondiscrimination as a basic operating premise. But the progress toward nondiscrimination did not appear overnight. It was achieved by people willing to make an unpopular argument and live on the frontier of public opinion. I asked him whether it wasn't—despite the practical obstacles—worth arguing that the state has a collective responsibility not only for its achievements but for its sins.

"I want my children—I want Malia and Sasha—to understand that they've got responsibilities beyond just what they themselves have done," Obama said. "That they have a responsibility to the larger community and the larger nation, that they should be sensitive to and extra thoughtful about the plight of people who have been oppressed in the past, are oppressed currently. So that's a wisdom that I want to transmit to my kids ... But I would say that's a high level of enlightenment that you're looking to have from a majority of the society. And it may be something that future generations are more open to, but I am pretty confident that for the foreseeable future, using the argument of nondiscrimination, and 'Let's get it right for the kids who are here right now,' and giving them the best chance possible, is going to be a more persuasive argument."

Obama is unfailingly optimistic about the empathy and capabilities of the American people. His job necessitates this: "At some level what the people want to feel is that the person leading them sees the best in them," he told me. But I found it interesting that that optimism does not extend to the possibility of the public's accepting wisdoms—such as the moral logic of reparations—that the president, by his own account, has accepted for himself and is willing to teach his children. Obama says he always tells his staff that "better is good." The notion that a president would attempt to achieve change within the boundaries of the accepted consensus is appropriate. But Obama is almost constitutionally skeptical of those who seek to achieve change outside that consensus.

**"THEY RODE  
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DAVID  
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PARTY.**

**E**ARLY IN 2016, Obama invited a group of African American leaders to meet with him at the White House. When some of the activists affiliated with Black Lives Matter refused to attend, Obama began calling them out in speeches. "You can't refuse to meet because that might compromise the purity of your position," he said. "The value of social movements and activism is to get you at the table, get

you in the room, and then start trying to figure out how is this problem going to be solved. You then have a responsibility to prepare an agenda that is achievable—that can institutionalize the changes you seek—and to engage the other side."

Opal Tometi, a Nigerian American community activist who is one of the three founders of Black Lives Matter, explained to me that the group has a more diffuse structure than most civil-rights organizations. One reason for this is to avoid the cult of personality that has plagued black organizations in the past. So the founders asked its membership in Chicago, the president's hometown, whether they should meet with Obama. "They felt—and I think many of our members felt—there wouldn't be the depth of discussion that they wanted to have," Tometi told me. "And if there wasn't that space to have a real heart-to-heart, and if it was just surface level, that it would be more of a disservice to the movement."

Tometi noted that some other activists allied with Black Lives Matter had been planning to attend the meeting, so they felt their views would be represented. Nevertheless, Black Lives Matter sees itself as engaged in a protest against the treatment of black people by the American state, and so Tometi and much of the group's leadership, concerned about being used for a photo op by the very body they were protesting, opted not to go.

When I asked Obama about this perspective, he fluctuated between understanding where the activists were coming from and being hurt by such brush-offs. "I think that where I've gotten frustrated during the course of my presidency has never been because I was getting pushed too hard by activists to see the justness of a cause or the essence of an issue," he said. "I think where I got frustrated at times was the belief that the president can do anything if he just decides he wants to do it. And that sort of lack of awareness on the part of an activist about the constraints of our political system and the constraints on this office, I think, sometimes would leave me to mutter under my breath. Very rarely did I lose it publicly. Usually I'd just smile."

He laughed, then continued, "The reason I say that is because those are the times where sometimes you feel actually a little bit hurt. Because you feel like saying to these folks, '[Don't] you think if I could do it, I [would] have just done it? Do you think that the only problem is that I don't care enough about the plight of poor people, or gay people?'"

I asked Obama whether he thought that perhaps protesters' distrust of the powers that be could ultimately be healthy. "Yes," he said. "Which is why I don't get too hurt. I mean, I think there is a benefit to wanting to hold power's feet to the fire until you actually see the goods. I get that. And I think it is important. And frankly, sometimes it's useful for activists just to be out there to keep you mindful and not get complacent, even if ultimately you think some of their criticism is misguided."

Obama himself was an activist and a community organizer, albeit for only two years—but he is not, by temperament, a protester. He is a consensus-builder; consensus, he believes, ultimately drives what gets done. He understands the emotional power of protest, the need to vent before authority—but that kind of approach does not come naturally to him. Regarding reparations, he said, "Sometimes I wonder how much of these

debates have to do with the desire, the legitimate desire, for that history to be recognized. Because there is a psychic power to the recognition that is not satisfied with a universal program; it's not satisfied by the Affordable Care Act, or an expansion of Pell Grants, or an expansion of the earned-income tax credit." These kinds of programs, effective and disproportionately beneficial to black people though they may be, don't "speak to the hurt, and the sense of injustice, and the self-doubt that arises out of the fact that [African Americans] are behind now, and it makes us sometimes feel as if there must be something wrong with us—unless you're able to see the history and say, 'It's amazing we got this far given what we went through.'

"So in part, I think the argument sometimes that I've had with folks who are much more interested in sort of race-specific programs is less an argument about what is practically achievable and sometimes maybe more an argument of 'We want society to see what's happened and internalize it and answer it in demonstrable ways.' And those impulses I very much understand—but my hope would be that as we're moving through the world right now, we're able to get that psychological or emotional peace by seeing very concretely our kids doing better and being more hopeful and having greater opportunities."

Obama saw—at least at that moment, before the election of Donald Trump—a straight path to that world. "Just play this out as a thought experiment," he said. "Imagine if you had genuine, high-quality early-childhood education for every child, and suddenly every black child in America—but also every poor white child or Latino [child], but just stick with every black child in America—is getting a really good education. And they're graduating from high school at the same rates that whites are, and they are going to college at the same rates that whites are, and they are able to afford college at the same rates because the government has universal programs that say that you're not going to be barred from school just because of how much money your parents have."

"So now they're all graduating. And let's also say that the Justice Department and the courts are making sure, as I've said in a speech before, that when Jamal sends his résumé in, he's getting treated the same as when Johnny sends his résumé in. Now, are we going to have suddenly the same number of CEOs, billionaires, etc., as the white community? In 10 years? Probably not, maybe not even in 20 years."

"But I guarantee you that we would be thriving, we would be succeeding. We wouldn't have huge numbers of young African American men in jail. We'd have more family formation as college-graduated girls are meeting boys who are their peers, which then in turn means the next generation of kids are growing up that much better. And suddenly you've got a whole generation that's in a position to start using the incredible creativity that we see in music, and sports, and frankly even on the streets, channeled into starting all kinds of businesses. I feel pretty good about our odds in that situation."

The thought experiment doesn't hold up. The programs Obama favored would advance white America too—and without a specific commitment to equality, there is no guarantee that the programs would eschew discrimination. Obama's solution relies on a goodwill that his own personal history tells him exists in the larger country. My own history tells me something different. The large numbers of black men in jail, for instance, are not just

the result of poor policy, but of not seeing those men as human.

When President Obama and I had this conversation, the target he was aiming to reach seemed to me to be many generations away, and now—as President-Elect Trump prepares for office—seems even many more generations off. Obama's accomplishments were real: a \$1 billion settlement on behalf of black farmers, a Justice Department that exposed Ferguson's municipal plunder, the increased availability of Pell Grants (and their availability to some prisoners), and the slashing of the crack/cocaine disparity in sentencing guidelines, to name just a few. Obama was also the first sitting president to visit a federal prison. There was a feeling that he'd erected a foundation upon which further progressive policy could be built. It's tempting to say that foundation is now endangered. The truth is, it was never safe.

## V.

### "THEY RODE THE TIGER"

Obama's greatest misstep was born directly out of his greatest insight. Only Obama, a black man who emerged from the best of white America, and thus could sincerely trust white America, could be so certain that he could achieve broad national appeal. And yet only a black man with that same biography could underestimate his opposition's resolve to destroy him. In some sense an Obama presidency could never have succeeded along the normal presidential lines; he needed a partner, or partners, in Congress who could put governance above party. But he struggled to win over even some of his own allies. Ben Nelson, the Democratic senator from Nebraska whom Obama helped elect, became an obstacle to health-care reform. Joe Lieberman, whom Obama saved from retribution at the hands of Senate Democrats after Lieberman campaigned for Obama's 2008 opponent, John McCain, similarly obstructed Obamacare. Among Republicans, senators who had seemed amenable to Obama's agenda—Chuck Grassley, Susan Collins, Richard Lugar, Olympia Snowe—rebuffed him repeatedly.

The obstruction grew out of narrow political incentives. "If Republicans didn't cooperate," Obama told me, "and there was not a portrait of bipartisan cooperation and a functional federal government, then the party in power would pay the price and they could win back the Senate and/or the House. That wasn't an inaccurate political calculation."

Obama is not sure of the degree to which individual racism played into this calculation. "I do remember watching Bill Clinton get impeached and Hillary Clinton being accused of killing Vince Foster," he said. "And if you ask them, I'm sure they would say, 'No, actually what you're experiencing is not because you're black, it's because you're a Democrat.'"

But personal animus is just one manifestation of racism; arguably the more profound animosity occurs at the level of interests. The most recent Congress boasted 138 members from the states that comprised the old Confederacy. Of the 101 Republicans in that group, 96 are white and one is black. Of the 37 Democrats, 18 are black and 15 are white. There are no white congressional Democrats in the Deep South. Exit polls in Mississippi in 2008 found that 96 percent of voters who described themselves as Republicans were white. The Republican Party

is not simply the party of whites, but the preferred party of whites who identify their interest as defending the historical privileges of whiteness. The researchers Josh Pasek, Jon A. Krosnick, and Trevor Tompson found that in 2012, 32 percent of Democrats held antiblack views, while 79 percent of Republicans did. These attitudes could even spill over to white Democratic politicians, because they are seen as representing the party of blacks. Studying the 2016 election, the political scientist Philip Klinkner found that the most predictive question for understanding whether a voter favored Hillary Clinton or Donald Trump was "Is Barack Obama a Muslim?"

In our conversations, Obama said he didn't doubt that there was a sincerely nonracist states'-rights contingent of the GOP. And yet he suspected that there might be more to it. "A rudimentary knowledge of American history tells you that the relationship between the federal government and the states was very much mixed up with attitudes towards slavery, attitudes towards Jim Crow, attitudes towards antipoverty programs and who benefited and who didn't," he said.

"And so I'm careful not to attribute any particular resistance or slight or opposition to race. But what I do believe is that if somebody didn't have a problem with their daddy being employed by the federal government, and didn't have a problem with the Tennessee Valley Authority electrifying certain communities, and didn't have a problem with the interstate highway system being built, and didn't have a problem with the GI Bill, and didn't have a problem with the [Federal Housing Administration] subsidizing the suburbanization of America, and that all helped you build wealth and create a middle class—and then suddenly as soon as African Americans or Latinos are interested in availing themselves of those same mechanisms as ladders into the middle class, you now have a violent opposition to them—then I think you at least have to ask yourself the question of how consistent you are, and what's different, and what's changed."

Racism greeted Obama in both his primary and general-election campaigns in 2008. Photos were circulated of him in Somali garb. Rush Limbaugh dubbed him "Barack the Magic Negro." Roger Stone, who would go on to advise the Trump campaign, claimed that Michelle Obama could be heard on tape yelling "Whitey." Detractors circulated emails claiming that the future first lady had written a racist senior thesis while at Princeton. A fifth of all West Virginia Democratic-primary voters in 2008 openly admitted that race had influenced their vote. Hillary Clinton trounced him 67 to 26 percent.

After Obama won the presidency in defiance of these racial headwinds, traffic to the white-supremacist website Stormfront increased sixfold. Before the election, in August, just before the Democratic National Convention, the FBI uncovered an assassination plot hatched by white supremacists in Denver. Mainstream conservative publications floated the notion that Obama's memoir was too "stylish and penetrating" to have been written by the candidate, and found a plausible ghostwriter in the radical (and white) former Weatherman Bill Ayers. A Republican women's club in California dispensed "Obama Bucks" featuring slices of watermelon, ribs, and fried chicken. At the Values Voter Summit that year, conventioners hawked "Obama Waffles," a waffle mix whose box featured a bug-eyed caricature of the candidate. Fake hip-hop lyrics were scrawled on the side ("Barry's Bling Bling Waffle Ring") and on the top, the same caricature was granted a turban and tagged with the

instructions "Point box toward Mecca for tastier waffles." The display was denounced by the summit's sponsor, the Family Research Council. One would be forgiven for meeting this denunciation with guffaws: The council's president, Tony Perkins, had once addressed the white-supremacist Council of Conservative Citizens with a Confederate flag draped behind him. By 2015, Perkins had deemed the debate over Obama's birth certificate "legitimate" and was saying that it "makes sense" to conclude that Obama was actually a Muslim.

By then, birtherism—inflamed in large part by a real-estate mogul and reality-TV star named Donald Trump—had overtaken the Republican rank and file. In 2015, one poll found that 54 percent of GOP voters thought Obama was a Muslim. Only 29 percent believed he'd been born in America.

Still, in 2008, Obama had been elected. His supporters rejoiced. As Jay-Z commemorated the occasion:

My president is black, in fact he's half-white,  
So even in a racist mind, he's half-right.

Not quite. A month after Obama entered the White House, a CNBC personality named Rick Santelli took to the trading floor of the Chicago Mercantile Exchange and denounced the president's efforts to help homeowners endangered by the housing crisis. "How many of you people want to pay for your neighbor's mortgage that has an extra bathroom and can't pay their bills?," Santelli asked the assembled traders. He asserted that Obama should "reward people that could carry the water" as opposed to those who "drink the water," and denounced those in danger of foreclosure as "losers." Race was implicit in Santelli's harangue—the housing crisis and predatory lending had devastated black communities and expanded the wealth gap—and it culminated with a call for a "Tea Party" to resist the Obama presidency. In fact, right-wing ideologues had been planning just such a resistance for decades. They would eagerly answer Santelli's call.

ONE OF THE intellectual forerunners of the Tea Party is said to be Ron Paul, the heterodox two-time Republican presidential candidate, who opposed the war in Iraq and championed civil liberties. On other matters, Paul was more traditional. Throughout the '90s, he published a series of racist newsletters that referred to New York City as "Welfaria," called Martin Luther King Jr. Day "Hate Whitey Day," and asserted that 95 percent of black males in Washington, D.C., were either "semi-criminal or entirely criminal." Paul's apologists have claimed that he had no real connection to the newsletters, even though virtually all of them were published in his name ("The Ron Paul Survival Report," "Ron Paul Political Report," "Dr. Ron Paul's Freedom Report") and written in his voice. Either way, the views of the newsletters have found their expression in his ideological comrades. Throughout Obama's first term, Tea Party activists voiced their complaints in racist terms. Activists brandished signs warning that Obama would implement "white slavery," waved the Confederate flag, depicted Obama as a witch doctor, and issued calls for him to "go back to Kenya." Tea Party supporters wrote "satirical" letters in the name of "We Colored People" and stoked the flames of birtherism. One of the Tea Party's most prominent sympathizers, the radio host Laura Ingraham, wrote a racist tract depicting Michelle Obama gorging herself



on ribs, while Glenn Beck said the president was a “racist” with a “deep-seated hatred for white people.” The Tea Party’s leading exponent, Andrew Breitbart, engineered the smearing of Shirley Sherrod, the U.S. Department of Agriculture’s director of rural development for Georgia, publishing egregiously misleading videos that wrongly made her appear to be engaging in antiwhite racist invective, which led to her dismissal. (In a rare act of cowardice, the Obama administration cravenly submitted to this effort.)

In those rare moments when Obama made any sort of comment attacking racism, firestorms threatened to consume his governing agenda. When, in July 2009, the president objected to the arrest of the eminent Harvard professor Henry Louis Gates Jr. while he was trying to get into his own house, pointing out that the officer had “acted stupidly,” a third of whites said the remark made them feel less favorably toward the president, and nearly two-thirds claimed that Obama had “acted stupidly” by commenting. A chastened Obama then determined to make sure his public statements on race were no longer mere riffs but designed to have an achievable effect. This was smart, but still the invective came. During Obama’s 2009 address on health care before a joint session of Congress, Joe Wilson, a Republican congressman from South Carolina, incredibly, and in defiance of precedent and decorum, disrupted the proceedings by crying out “You lie!” A Missouri congressman equated Obama with a monkey. A California GOP official took up the theme and emailed her friends an image depicting Obama as a chimp, with the accompanying text explaining, “Now you know why [there’s] no birth certificate!” Former vice-presidential candidate Sarah Palin assessed the president’s foreign policy as a “shuck and jive shtick.” Newt Gingrich dubbed him the “food-stamp president.” The rhetorical attacks on Obama were matched by a very real attack on his political base—in 2011 and 2012, 19 states enacted voting restrictions that made it harder for African Americans to vote.

Yet in 2012, as in 2008, Obama won anyway. Prior to the election, Obama, ever the optimist, had claimed that intransigent Republicans would decide to work with him to advance the country. No such collaboration was in the offing. Instead, legislation ground to a halt and familiar themes resurfaced. An Idaho GOP official posted a photo on Facebook depicting a trap waiting for Obama. The bait was a slice of watermelon. The caption read, “Breaking: The secret service just uncovered a plot to kidnap the president. More details as we get them ...” In 2014, conservatives assembled in support of Cliven Bundy’s armed protest against federal grazing fees. As reporters descended on the Bundy ranch in Nevada, Bundy offered his opinions on “the Negro.” “They abort their young children, they put their young men in jail, because they never learned how to pick cotton,” Bundy explained. “And I’ve often wondered, are they better

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off as slaves, picking cotton and having a family life and doing things, or are they better off under government subsidy? They didn’t get no more freedom. They got less freedom.”

That same year, in the wake of Michael Brown’s death, the Justice Department opened an investigation into the police department in Ferguson, Missouri. It found a city that, through racial profiling, arbitrary fines, and wanton harassment, had exploited law enforcement for the purposes of municipal plunder. The plunder was sanctified by racist humor dispensed via internal emails among the police that later came to light. The president of the United States, who during his first year in office had reportedly received three times the number of death threats of any of his predecessors, was a repeat target.

Much ink has been spilled in an attempt to understand the Tea Party protests, and the 2016 presidential candidacy of Donald Trump, which ultimately emerged out of them. One theory popular among (primarily) white intellectuals of varying political persuasions held that this response was largely the discontented rumblings of a white working class threatened by the menace of globalization and crony capitalism. Dismissing these rumblings as racism was said to condescend to this proletariat, which had long suffered the slings and arrows of coastal elites, heartless technocrats, and reformist snobs. Racism was not something to be coolly and empirically assessed but a slander upon the working man. Deindustrialization, globalization, and broad income inequality are real. And they have landed with at least as great a force upon black and Latino people in our country as upon white people. And yet these groups were strangely unrepresented in this new populism.

Christopher S. Parker and Matt A. Barreto, political scientists at the University of Washington and UCLA, respectively, have found a relatively strong relationship between racism and Tea Party membership. “Whites are less likely to be drawn to the Tea Party for material reasons, suggesting that, relative to other groups, it’s really more about social prestige,” they say. The notion that the Tea Party represented the righteous, if unfocused, anger of an aggrieved class allowed everyone from leftists to neoliberals to white nationalists to avoid a horrifying and simple reality: A significant swath of this country did not like the fact that their president was black, and that swath was not composed of those most damaged by an unquestioned faith in the markets. Far better to imagine the grievance put upon the president as the ghost of shambling factories and defunct union halls, as opposed to what it really was—a movement inaugurated by ardent and frightened white capitalists, raging from the commodities-trading floor of one of the great financial centers of the world.

That movement came into full bloom in the summer of 2015, with the candidacy of Donald Trump, a man who’d risen to political prominence by peddling the racist myth that the president was not American. It was birtherism—not trade, not jobs, not isolationism—that launched Trump’s foray into electoral politics. Having risen unexpectedly on this basis into the stratosphere of Republican politics, Trump spent the campaign freely and liberally trafficking in misogyny, Islamophobia, and xenophobia. And on November 8, 2016, he won election to the presidency. Historians will spend the next century analyzing

how a country with such allegedly grand democratic traditions was, so swiftly and so easily, brought to the brink of fascism. But one needn't stretch too far to conclude that an eight-year campaign of consistent and open racism aimed at the leader of the free world helped clear the way.

"They rode the tiger. And now the tiger is eating them," David Axelrod, speaking of the Republican Party, told me. That was in October. His words proved too optimistic. The tiger would devour us all.

## VI.

### "WHEN YOU LEFT, YOU TOOK ALL OF ME WITH YOU"

One Saturday morning last May, I joined the presidential motorcade as it slipped out of the southern gate of the White House. A mostly white crowd had assembled. As the motorcade drove by, people cheered, held up their smartphones to record the procession, and waved American flags. To be within feet of the president seemed like the thrill of their lives. I was astounded. An old euphoria, which I could not immediately place, gathered up in me. And then I remembered, it was what I felt through much of 2008, as I watched Barack Obama's star shoot across the political sky. I had never seen so many white people cheer on a black man who was neither an athlete nor an entertainer. And it seemed that they loved him for this, and I thought in those days, which now feel so long ago, that they might then love me, too, and love my wife, and love my child, and love us all in the manner that the God they so fervently cited had commanded. I had been raised amid a people who wanted badly to believe in the possibility of a Barack Obama, even as their very lives argued against that possibility. So they would praise Martin Luther King Jr. in one breath and curse the white man, "the Great Deceiver," in the next. Then came Obama and the Obama family, and they were black and beautiful in all the ways we aspired to be, and all that love was showered upon them. But as Obama's motorcade approached its destination—Howard University, where he would give the commencement address—the complexion of the crowd darkened, and I understood that the love was specific, that even if it allowed Barack Obama, even if it allowed the luckiest of us, to defy the boundaries, then the masses of us, in cities like this one, would still enjoy no such feat.

These were our fitful, spasmodic years.

We were launched into the Obama era with no notion of what to expect, if only because a black presidency had seemed such a dubious proposition. There was no preparation, because it would have meant preparing for the impossible. There were few assessments of its potential import, because such assessments were regarded as speculative fiction. In retrospect it all makes sense, and one can see a jagged but real political lineage running through black Chicago. It originates in Oscar Stanton De Priest; continues through Congressman William Dawson, who, under Roosevelt, switched from the Republican to the Democratic Party; crescendos with the legendary Harold Washington; rises still with Jesse Jackson's 1988 victory in Michigan's Democratic caucuses; rises again with Carol Moseley Braun's triumph; and reaches its recent apex with the election

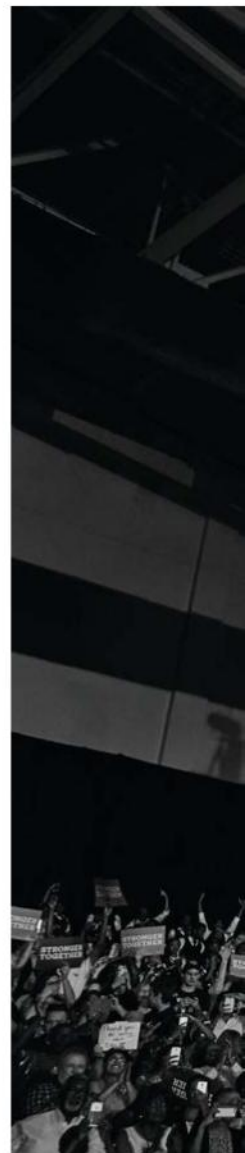
of Barack Obama. If the lineage is apparent in hindsight, so are the limits of presidential power. For a century after emancipation, quasi-slavery haunted the South. And more than half a century after *Brown v. Board of Education*, schools throughout much of this country remain segregated.

There are no clean victories for black people, nor, perhaps, for any people. The presidency of Barack Obama is no different. One can now say that an African American individual can rise to the same level as a white individual, and yet also say that the number of black individuals who actually qualify for that status will be small. One thinks of Serena Williams, whose dominance and stunning achievements can't, in and of themselves, ensure equal access to tennis facilities for young black girls. The gate is open and yet so very far away.

I felt a mix of pride and amazement walking onto Howard's campus that day. Howard alumni, of which I am one, are an obnoxious fraternity, known for yelling the school chant across city blocks, sneering at other historically black colleges and universities, and condescending to black graduates of predominantly white institutions. I like to think I am more reserved, but I felt an immense satisfaction in being in the library where I had once found my history, and now found myself with the first black president of the United States. It seemed providential that he would give the commencement address here in his last year. The same pride I felt radiated out across the Yard, the large green patch in the main area of the campus where the ceremony would take place. When Obama walked out, the audience exploded, and when the time came for the color guard to present arms, a chant arose: "O-Ba-Ma! O-Ba-Ma! O-Ba-Ma!"

He gave a good speech that day, paying heed to Howard's rituals, calling out its famous alumni, shouting out the university's various dormitories, and urging young people to vote. (His usual riff on respectability politics was missing.) But I think he could have stood before that crowd, smiled, and said "Good luck," and they would have loved him anyway. He was their champion, and this was evident in the smallest of things. The national anthem was played first, but then came the black national anthem, "Lift Every Voice and Sing." As the lyrics rang out over the crowd, the students held up the black-power fist—a symbol of defiance before power. And yet here, in the face of a black man in his last year in power, it scanned not as a protest, but as a salute.

Six months later the awful price of a black presidency would be known to those students, even as the country seemed determined not to acknowledge it. In the days after Donald Trump's victory, there would be an insistence that something as "simple"





Obama  
campaigning in  
central Florida  
before the  
unthinkable—  
Donald Trump's  
victory—  
happened

as racism could not explain it. As if enslavement had nothing to do with global economics, or as if lynchings said nothing about the idea of women as property. As though the past 400 years could be reduced to the irrational resentment of full lips. No. Racism is never simple. And there was nothing simple about what was coming, or about Obama, the man who had unwittingly summoned this future into being.

It was said that the Americans who'd supported Trump were victims of liberal condescension. The word *racist* would be dismissed as a profane slur put upon the common man, as opposed to an accurate description of actual men. "We simply don't yet know how much racism or misogyny motivated Trump voters," David Brooks would write in *The New York Times*. "If you were stuck in a jobless town, watching your friends OD on opiates, scrambling every month to pay the electric bill, and then along came a guy who seemed able to fix your problems and hear your voice, maybe you would stomach some ugliness, too." This

strikes me as perfectly logical. Indeed, it could apply just as well to Louis Farrakhan's appeal to the black poor and working class. But whereas the followers of an Islamophobic white nationalist enjoy the sympathy that must always greet the salt of the earth, the followers of an anti-Semitic black nationalist endure the scorn that must ever greet the children of the enslaved.

Much would be made of blue-collar voters in Wisconsin, Pennsylvania, and Michigan who'd pulled the lever for Obama in 2008 and 2012 and then for Trump in 2016. Surely these voters disproved racism as an explanatory force. It's still not clear how many individual voters actually flipped. But the underlying presumption—that Hillary Clinton and Barack Obama could be swapped in for each other—exhibited a problem. Clinton was a candidate who'd won one competitive political race in her life, whose political instincts were questioned by her own advisers, who took more than half a million dollars in speaking fees from an investment bank because it was "what they offered," who proposed to bring back to the White House a former president dogged by allegations of rape and sexual harassment. Obama was a candidate who'd become only the third



black senator in the modern era; who'd twice been elected president, each time flipping red and purple states; who'd run one of the most scandal-free administrations in recent memory. Imagine an African American facsimile of Hillary Clinton: She would never be the nominee of a major political party and likely would not be in national politics at all.

Pointing to citizens who voted for both Obama and Trump does not disprove racism; it evinces it. To secure the White House, Obama needed to be a Harvard-trained lawyer with a decade of political experience and an incredible gift for speaking to cross sections of the country; Donald Trump needed only money and white bluster.

In the week after the election, I was a mess. I had not seen my wife in two weeks. I was on deadline for this article. My son was struggling in school. The house was in disarray. I played Marvin Gaye endlessly—"When you left, you took all of me with you." Friends began to darkly recall the ghosts of post-Reconstruction. The election of Donald Trump confirmed everything I knew of my country and none of what I could accept. The idea that America would follow its first black president with Donald Trump accorded with its history. I was shocked at my own shock. I had wanted Obama to be right.

I still want Obama to be right. I still would like to fold myself into the dream. This will not be possible.

By some cosmic coincidence, a week after the election I received a portion of my father's FBI file. My father had grown up poor in Philadelphia. His father was struck dead on the street. His grandfather was crushed to death in a meatpacking plant. He'd served his country in Vietnam, gotten radicalized there, and joined the Black Panther Party, which brought him to the attention of J. Edgar Hoover. A memo written to the FBI director was "submitted aimed at discrediting WILLIAM PAUL COATES, Acting Captain of the BPP, Baltimore." The memo proposed that a fake letter be sent to the Panthers' co-founder Huey P. Newton. The fake letter accused my father of being an informant and concluded, "I want somethin done with this bootlikin facist pig nigger and I want it done now." The words *somethin done* need little interpretation. The Panthers were eventually consumed by an internecine war instigated by the FBI, one in which being labeled a police informant was a death sentence.


A few hours after I saw this file, I had my last conversation with the president. I asked him how his optimism was holding up, given Trump's victory. He confessed to being surprised at the outcome but said that it was tough to "draw a grand theory from it, because there were some very unusual circumstances." He pointed to both candidates' high negatives, the media coverage, and a "dispirited" electorate. But he said that his general optimism about the shape of American history remained unchanged. "To be optimistic about the long-term trends of the United States doesn't mean that everything is going to go in a

smooth, direct, straight line," he said. "It goes forward sometimes, sometimes it goes back, sometimes it goes sideways, sometimes it zigs and zags."

I thought of Hoover's FBI, which harassed three generations of black activists, from Marcus Garvey's black nationalists to Martin Luther King Jr.'s integrationists to Huey Newton's Black Panthers, including my father. And I thought of the enormous power accrued to the presidency in the post-9/11 era—the power to obtain American citizens' phone records en masse, to access their emails, to detain them indefinitely. I asked the president whether it was all worth it. Whether this generation of black activists and their allies should be afraid.

"Keep in mind that the capacity of the NSA, or other surveillance tools, are specifically prohibited from being applied to U.S. citizens or U.S. persons without specific evidence of links to terrorist activity or, you know, other foreign-related activity," he said. "So, you know, I think this whole story line that somehow Big Brother has massively expanded and now that a new president is in place it's this loaded gun ready to be used on domestic dissent is just not accurate."

He counseled vigilance, "because the possibility of abuse by government officials always exists. The issue is not going to be that there are new tools available; the issue is making sure that the incoming administration, like my administration, takes the constraints on how we deal with U.S. citizens and persons seriously." This answer did not fill me with confidence. The next day, President-Elect Trump offered Lieutenant General Michael Flynn the post of national-security adviser and picked Senator Jeff Sessions of Alabama as his nominee for attorney general. Last February, Flynn tweeted, "Fear of Muslims is RATIONAL" and linked to a YouTube video that declared followers of Islam want "80 percent of humanity enslaved or exterminated." Sessions had once been accused of calling a black lawyer "boy," claiming that a white lawyer who represented black clients was a disgrace to his race, and joking that he thought the Ku Klux Klan "was okay until I found out they smoked pot." I felt then that I knew what was coming—more Freddie Grays, more Rekia Boyds, more informants and undercover officers sent to infiltrate mosques.

And I also knew that the man who could not countenance such a thing in his America had been responsible for the only time in my life when I felt, as the first lady had once said, proud of my country, and I knew that it was his very lack of countenance, his incredible faith, his improbable trust in his countrymen, that had made that feeling possible. The feeling was that little black boy touching the president's hair. It was watching Obama on the campaign trail, always expecting the worst and amazed that the worst never happened. It was how I'd felt seeing Barack and Michelle during the inauguration, the car slow-dragging down Pennsylvania Avenue, the crowd cheering, and then the two of them rising up out of the limo, rising up from fear, smiling, waving, defying despair, defying history, defying gravity. 

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*Ta-Nehisi Coates is a national correspondent for The Atlantic. His most recent book, Between the World and Me, won the National Book Award for Nonfiction.*

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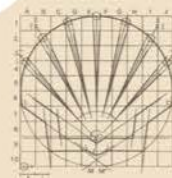
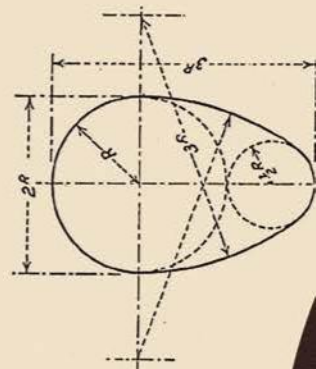
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# SEVERAL DECADES BEFORE HE

became the father of industrial design, Raymond Loewy boarded the SS *France* in 1919 to sail across the Atlantic from his devastated continent to the United States. The influenza pandemic had taken his mother and father, and his service in the French army was over. At the age of 25, Loewy was looking to start fresh in New York, perhaps, he thought, as an electrical engineer. When he reached Manhattan, his older brother Maximilian picked him up in a taxi. They drove straight to 120 Broadway, one of New York City's largest neoclassical skyscrapers, with two connected towers that ascended from a shared base like a giant tuning fork. Loewy rode the elevator to the observatory platform, 40 stories up, and looked out across the island.

"New York was throbbing at our feet in the crisp autumn light," Loewy recalled in his 1951 memoir. "I was fascinated by the murmur of the great city." But upon closer examination, he was crestfallen. In France, he had imagined an elegant, stylish place, filled with slender and simple shapes. The city that now unfurled beneath him, however, was a grungy product of the machine age—"bulky, noisy, and complicated. It was a disappointment."

The world below would soon match his dreamy vision. Loewy would do more than almost any person in the 20th century to shape the aesthetic of American culture. His firm designed mid-century icons like the Exxon logo, the Lucky Strike pack, and the Greyhound bus. He designed International Harvester tractors that farmed the Great Plains, merchandise racks at Lucky Stores supermarkets that displayed produce, Frigidaire ovens that cooked meals, and Singer vacuum cleaners that ingested the crumbs of dinner. Loewy's Starliner Coupé from the early 1950s—nicknamed the "Loewy Coupé"—is still one of the most influential automotive designs of the 20th century. The famous blue nose of *Air Force One*? That was Loewy's touch, too. After complaining to his friend, a White House aide, that the commander in chief's airplane looked "gaudy," he spent several hours on the floor of the Oval Office cutting up blue-colored paper shapes with President Kennedy before settling on the design that still adorns America's best-known plane. "Loewy," wrote *Cosmopolitan* magazine in 1950, "has probably affected the daily life of more Americans than any man of his time."

But when he arrived in Manhattan, U.S. companies did not yet worship at the altars of style and elegance. That era's capitalists were monotheistic: Efficiency was their only god. American factories—with their electricity, assembly lines, and scientifically calibrated workflow—produced an unprecedented supply of cheap goods by the 1920s, and it became clear that factories could make more than consumers naturally wanted. It took executives like Alfred Sloan, the CEO of General Motors, to see that by, say, changing a car's style and color every year, consumers might be trained to crave new versions of the same product. To sell more stuff, American industrialists needed to work hand in hand with artists to make new products beautiful—even "cool."

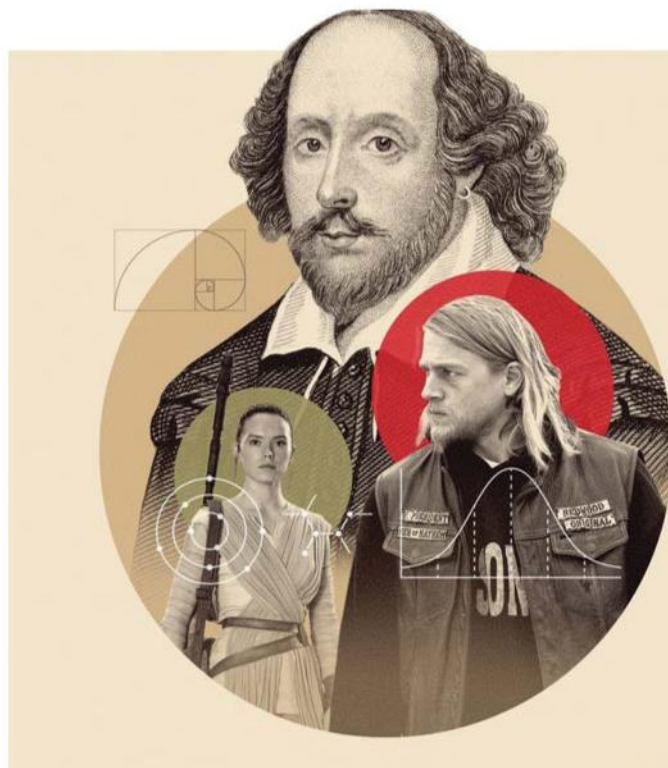
Loewy had an uncanny sense of how to make things fashionable. He believed that consumers are torn between two

opposing forces: neophilia, a curiosity about new things; and neophobia, a fear of anything too new. As a result, they gravitate to products that are bold, but instantly comprehensible. Loewy called his grand theory "Most Advanced Yet Acceptable"—MAYA. He said to sell something surprising, make it familiar; and to sell something familiar, make it surprising.

**W**HY DO PEOPLE like what they like? It is one of the oldest questions of philosophy and aesthetics. Ancient thinkers inclined to mysticism proposed that a "golden ratio"—about 1.62 to 1, as in, for instance, the dimensions of a rectangle—could explain the visual perfection of objects like sunflowers and Greek temples. Other thinkers were deeply skeptical: David Hume, the 18th-century philosopher, considered the search for formulas to be absurd, because the perception of beauty was purely subjective, residing in individuals, not in the fabric of the universe. "To seek the real beauty, or real deformity," he said, "is as fruitless an enquiry, as to pretend to ascertain the real sweet or real bitter."

Over time, science took up the mystery. In the 1960s, the psychologist Robert Zajonc conducted a series of experiments where he showed subjects nonsense words, random shapes, and Chinese-like characters and asked them which they preferred. In study after study, people reliably gravitated toward the words and shapes they'd seen the most. Their preference was for familiarity.

This discovery was known as the "mere-exposure effect," and it is one of the sturdiest findings in modern psychology. Across hundreds of studies and meta-studies, subjects around the world prefer familiar shapes, landscapes, consumer goods, songs, and human voices. People are even partial to the famil-





iar version of the thing they should know best in the world: their own face. Because you and I are used to seeing our countenance in a mirror, studies show, we often prefer this reflection over the face we see in photographs. The preference for familiarity is so universal that some think it must be written into our genetic code. The evolutionary explanation for the mere-exposure effect would be simple: If you recognized an animal or plant, that meant it hadn't killed you, at least not yet.

But the preference for familiarity has clear limits. People get tired of even their favorite songs and movies. They develop deep skepticism about overfamiliar buzzwords. In mere-exposure studies, the preference for familiar stimuli is attenuated or negated entirely when the participants realize they're being repeatedly exposed to the same thing. For that reason, the power of familiarity seems to be strongest when a person isn't expecting it.

The reverse is also true: A surprise seems to work best when it contains some element of familiarity. Consider the experience of Matt Ogle, who, for more than a decade, was obsessed with designing the perfect music-recommendation engine. His philosophy of music was that most people enjoy new songs, but they don't enjoy the effort it takes to find them. When he joined Spotify, the music-streaming company, he helped build a product called Discover Weekly, a personalized list of 30 songs delivered every Monday to tens of million of users.

The original version of Discover Weekly was supposed to include only songs that users had never listened to before. But in its first internal test at Spotify, a bug in the algorithm let through songs that users had already heard. "Everyone reported it as a bug, and we fixed it so that every single song was totally new," Ogle told me.

But after Ogle's team fixed the bug, engagement with the playlist actually fell. "It turns out having a bit of familiarity bred trust, especially for first-time users," he said. "If we make a new playlist for you and there's not a single thing for you to hook onto or recognize—to go, 'Oh yeah, that's a good call!'—it's completely intimidating and people don't engage." It turned out that the original bug was an essential feature: Discover Weekly was a more appealing product when it had even one familiar band or song.

Several years ago, Paul Hekkert, a professor of industrial design and psychology at Delft University of Technology, in the Netherlands, received a grant to develop a theory of aesthetics and taste. On the one hand, Hekkert told me, humans seek familiarity, because it makes them feel safe. On the other hand, people are charged by the thrill of a challenge, powered by a pioneer lust. This battle between familiarity and discovery affects us "on every level," Hekkert says—not just our preferences for pictures and songs, but also our preferences for ideas and even people. "When we started [our research], we didn't even know about Raymond Loewy's theory," Hekkert told me. "It was only later that somebody told us that our conclusions had already been reached by a famous industrial designer, and it was called MAYA."

**R**AYMOND LOEWY'S AESTHETIC was proudly populist. "One should design for the advantage of the largest mass of people," he said. He understood that this meant designing with a sense of familiarity in mind.

In 1932, Loewy met for the first time with the president of the Pennsylvania Railroad. Locomotive design at the time

hadn't advanced much beyond Thomas the Tank Engine—pronounced chimneys, round faces, and exposed wheels. Loewy imagined something far sleeker—a single smooth shell, the shape of a bullet. His first designs met with considerable skepticism, but Loewy was undaunted. "I knew it would never be considered," he later wrote of his bold proposal, "but repeated exposure of railroad people to this kind of advanced, unexpected stuff had a beneficial effect. It gradually conditioned them to accept more progressive designs."

To acquaint himself with the deficiencies of Pennsylvania Railroad trains, Loewy traveled hundreds of miles on the speeding locomotives. He tested air turbulence with engineers and interviewed crew members about the shortage of toilets. A great industrial designer, it turns out, needs to be an anthropologist first and an artist second: Loewy studied how people lived and how machines worked, and then he offered new, beautiful designs that piggybacked on engineers' tastes and consumers' habits.

Soon after his first meeting with the president of the Pennsylvania Railroad, Loewy helped the company design the GG-1, an electric locomotive covered in a single welded-steel plate. Loewy's suggestion to cover the chassis in a seamless metallic coat was revolutionary in the 1930s. But he eventually persuaded executives to accept his lean and aerodynamic vision, which soon became the standard design of modern trains. What was once radical had become MAYA, and what was once MAYA has today become the unremarkable standard.

**C**OULD LOEWY'S MAYA THEORY double as cultural criticism? A common complaint about modern pop culture is that it has devolved into an orgy of familiarity.

In her 2013 memoir cum cultural critique, *Sleepless in Hollywood*, the producer Lynda Obst mourned what she saw as cult worship of "pre-awareness" in the film and television industry. As the number of movies and television shows being produced each year has grown, risk-averse producers have relied heavily on films with characters and plots that audiences already know. Indeed, in 15 of the past 16 years, the highest-grossing movie in America has been a sequel of a previously successful movie (for example, *Star Wars: The Force Awakens*) or an adaptation of a previously successful book (*The Grinch*). The hit-making formula in Hollywood today seems to be built on infinitely recurring, self-sustaining loops of familiarity, like the Marvel comic universe, which thrives by interweaving movie franchises and TV spin-offs.

But perhaps the most MAYA-esque entertainment strategy can be found on award-winning cable television. In the past decade, the cable network FX has arguably produced the deepest lineup of prestige dramas and critically acclaimed comedies on television, including *American Horror Story*, *The Americans*, *Sons of Anarchy*, and *Archer*. The ideal FX show is a character-driven journey in which old stories wear new costumes, says Nicole Clemens, the executive vice president for series development at the network. In *Sons of Anarchy*, the popular drama about an outlaw motorcycle club, "you think it's this super-über-macho motorcycle show, but it's also a soap with handsome guys, and the plot is basically *Hamlet*," she told me. In *The Americans*, a series about Soviet agents posing as a married couple in the United States, "the spy genre has been subverted to tell a classic story about marriage." These are not Marvel's infinity loops of



sequels, which forge new installments of old stories. They are more like narrative Trojan horses, in which new characters are vessels containing classic themes—surprise serving as a doorway to the feeling of familiarity, an aesthetic *aha*.

The power of these eureka moments isn't bound to arts and culture. It's a force in the academic world as well. Scientists and philosophers are exquisitely sensitive to the advantage of ideas that already enjoy broad familiarity. Max Planck, the theoretical physicist who helped lay the groundwork for quantum theory, said that "a new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it."

In 2014, a team of researchers from Harvard University and Northeastern University wanted to know exactly what sorts of proposals were most likely to win funding from prestigious institutions such as the National Institutes of Health—safely familiar proposals, or extremely novel ones? They prepared about 150 research proposals and gave each one a novelty score. Then they recruited 142 world-class scientists to evaluate the projects.

The most-novel proposals got the worst ratings. Exceedingly familiar proposals fared a bit better, but they still received low scores. "Everyone dislikes novelty," Karim Lakhani, a co-author, explained to me, and "experts tend to be overcritical of proposals in their own domain." The highest evaluation scores went to submissions that were deemed slightly new. There is an "optimal newness" for ideas, Lakhani said—advanced yet acceptable.

This appetite for "optimal newness" applies to other industries, too. In Silicon Valley, where venture capitalists also sift through a surfeit of proposals, many new ideas are promoted as a fresh spin on familiar successes. The home-rental company Airbnb was once called "eBay for homes." The on-demand car-service companies Uber and Lyft were once considered "Airbnb for cars." When Uber took off, new start-ups began branding themselves "Uber for [anything]."

But the preference for "optimal newness" doesn't apply just to academics and venture capitalists. According to Stanley Lieberman, a sociologist at Harvard, it's a powerful force in the evolution of our own identities. Take the popularity of baby names. Most parents prefer first names for their children that are common but not too common, optimally differentiated from other children's names.


This helps explain how names fall in and out of fashion, even though, unlike almost every other cultural product, they are not driven by price or advertising. Samantha was the 26th-most-popular name in the 1980s. This level of popularity was pleasing to so many parents that 224,000 baby girls were named Samantha in the 1990s, making it the decade's fifth-most-popular name for girls. But at this level of popularity, the name appealed mostly to the minority of adults who actively sought out common names. And so the number of babies named Samantha has collapsed, falling by 80 percent since the 1990s.

Most interesting of all is Lieberman's analysis of the evolution of popular names for black baby girls starting with the prefix *La*. Beginning in 1967, eight distinct *La* names cracked the national top 50, in this sequence: Latonya, Latanya, Latasha, Latoya, Latrice, Lakeisha, Lakisha, and Latisha. The orderliness of this evolution is astonishing. The step between Latonya and Latanya is one different vowel; from Latonya to Latoya is the loss of the *n*; from Lakeisha to Lakisha is the loss of the *e*; and from Lakisha to Latisha is one consonant change. It's a perfect illustration of the principle that people gravitate to new things with familiar roots. This is how culture evolves—in small steps that from afar might seem like giant leaps.

**IN A POPULAR** online video called "4 Chords," which has more than 30 million views, the musical-comedy group the Axis of Awesome cycles through dozens of songs built on the same chord progression: I-V-vi-IV. It provides the backbone of dozens of classics, including oldies (the Beatles' "Let It Be"), karaoke-pop songs (Journey's "Don't Stop Believin'"), country sing-along anthems (John Denver's "Take Me Home, Country Roads"), animated-musical ballads (*The Lion King*'s "Can You Feel the Love Tonight?"), and reggae tunes (Bob Marley's "No Woman, No Cry").

Several music critics have used videos like "4 Chords" to argue that pop music is derivative. But I think Raymond Loewy would disagree with this critique, for two reasons. First, it's simply wrong to say that all I-V-vi-IV songs sound the same. "Don't Stop Believin'" and "No Woman, No Cry" don't sound anything alike. Second, if the purpose of music is to move people, and people are moved by that which is sneakily familiar, then musicians—like architects, product designers, scholars, and any other creative people who think their ideas deserve an audience—should aspire to a blend of originality and derivation.

These songwriters aren't retracing one another's steps. They're more like clever cartographers given an enormous map, each plotting new routes to the same location.

One of Loewy's final assignments as an industrial designer was to add an element of familiarity to a truly novel invention: NASA's first space station. Loewy and his firm conducted extensive habitability studies and found subtle ways to make the outer-space living quarters feel more like terrestrial houses—so astronauts "could live more comfortably in more familiar surroundings while in deep space in exotic conditions," he said. But his most profound contribution to the space station was his insistence that NASA install a viewing portal of Earth. Today, tens of millions of people have seen this small detail in films about astronauts. It is hard to imagine a more perfect manifestation of MAYA: a window to a new world can also show you home. 

*Derek Thompson is a senior editor at The Atlantic. This article is adapted from his forthcoming book, Hit Makers: The Science of Popularity in an Age of Distraction, which will be published by Penguin Press in February.*

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T H E  
P O I S O N

*An enemy of the Kremlin drops dead in London.*

F L O W E R

BY JEFFREY E. STERN

ILLUSTRATIONS BY TOMER HANUKA



On November 10, 2012, Alexander Perepilichny was feeling a little under the weather. He decided to try to shake it off by taking a few laps around the gated community southwest of London where Russian émigrés like him lived in multimillion-dollar mansions alongside members of the English elite. Perepilichny jogged through a neighborhood of homes once owned by Elton John, Kate Winslet, John Lennon, and Ringo Starr.

He collapsed on Granville Road, within 100 meters of the house he was renting for \$20,000 a month. Police and medics were called to the scene, but within 30 minutes, Perepilichny was pronounced dead.

Police told the press the death was “unexplained.” A 44-year-old man of average build and above-average wealth had simply fallen down and died in the leafy suburb he’d recently begun calling home.

Among the material facts not known at the time was that Perepilichny was in good health, as proved by a physical he’d had for a life-insurance policy soon before his death. That he’d traveled that morning from Paris, where he had, inexplicably, reserved two hotel rooms in different parts of the city for the same nights. That he’d been meeting with a man he said was from the Russian government, but who was actually an affiliate of a Russian criminal syndicate. And that he’d gotten an ominous phone call informing him that police had found his name on a hit list in the home of an alleged Chechen contract killer.

Three years passed before a theory emerged that might explain what had happened to him. But highly interested parties—including a wealthy American-born investor and quite possibly officials in the highest reaches of the British and Russian governments—were watching the story the whole time.

**P**EREPILICHNY’S FRIEND Yuri Panchul learned of his death on a blog maintained by a Russian opposition figure. Panchul thought it was strange that police didn’t immediately suspect foul play: The Perepilichny he knew partook of few vices that could stop the heart of a healthy man.

Panchul works as an engineer in Silicon Valley. He told me he met Perepilichny 30 years ago, in Moscow. He remembers his old friend as a shy young man who walked with his head down and carried his anxiety in his gait. He had the pale complexion and skinny frame of someone who spent most of his time indoors, his nose buried in books.

Growing up in Ukraine in the 1970s and early ’80s, Perepilichny wanted to be a scientist. He performed well enough on the entrance exams to win admission to Phystech, a prestigious science university founded at the beginning of the Cold War, in part to develop better ballistic missiles. The residue of its security-oriented mission lingered: Perepilichny had to sign a document limiting his communication with foreigners. Submitting papers to international journals and traveling to conferences abroad required special permission.

The campus was drab, but Perepilichny was surrounded by some of the brightest minds in the Soviet Union. He dove into his research and discovered his passion: DNA. At parties he was quiet and sober while those around him drank and smoked heavily. He didn’t need the thrill. The applications of what he was working on were limitless, unimaginable—he was exploring what made people *people*.

Perepilichny’s arrival at the university coincided with Mikhail Gor-

bachev’s at the Kremlin; soon after came glasnost, the new leader’s policy of “openness”—including openness to ideas and information from abroad. Aspiring Soviet scientists were able to see more clearly just how far they lagged behind the West. To Perepilichny and Panchul, it felt as though Russia had woken up to a world of important discoveries that had already been made. Perepilichny concluded that if he wanted to be a scientist, he would have to go to America.

He figured he’d need \$3,000—a wildly ambitious sum, considering his stipend at Phystech was about \$10 a month. But the same changes that lifted the veil on Russia’s standing in the sciences brought an opportunity: Before Gorbachev, private enterprise had been virtually forbidden. Now demand soared for products that had been unavailable or very scarce in the Soviet Union. Products like personal computers. Government ministries wanted them; so did the new businesses popping up.

Panchul had been writing software since he was 13, and he began working for a group of fellow students who would buy computers, program them, and sell them at a markup. Their seed money came from a friend who’d tapped into the demand for another Western innovation: the mood ring. He’d made a relative fortune hawking a Soviet version of it on a busy Moscow street.

The group invited Perepilichny to join them. He wasn’t a great coder, but he established himself as something of a middleman, striking deals to outfit government offices and businesses with custom-programmed computers. When the students started out, in the fall of 1989, they managed to sell a single computer every few weeks. But within a year they were moving dozens each month.

Without access to a reliable credit system, Perepilichny had to deal in cash—often in U.S. dollars, which he got on the black market. And because prices for foreign goods were extremely inflated, the amount of cash he had to have on hand was staggering. A single computer could sell for more than 100 times the average Soviet monthly salary.

Attempted robberies became an occupational hazard. Once, in 1989, someone noticed Panchul carrying a computer into his apartment building and sent an attractive young woman to his door, saying she wanted to go out with him. Panchul happily obliged, but asked a friend to stay in the apartment while he was gone. Sure enough, just after he left with his date, a man tried to get in. Perepilichny and Panchul heard stories of businessmen being tortured with electric clothes irons, even sodomized with soldering irons, by thieves trying to find



money stashes. Perepilichny had a heavy metal door installed at the entrance to his apartment.

In 1991, the two friends signed a contract to build a simulator for the computer system used in aircraft like the Su-24, a supersonic Russian fighter jet that could fly at low altitude and had been deployed to devastating effect during the Soviet occupation of Afghanistan. Panchul used his earnings to buy a plane ticket to America. The next year, the United States passed a law that welcomed foreign scientists with expertise in weapons of mass destruction into the country (in order to prevent them from taking their knowledge elsewhere), and Panchul was able to leverage his work on the jet to get a green card.

Perepilichny, meanwhile, made the \$3,000 he needed to study in the U.S.—and then some. But he didn't go. When he graduated, his professors urged him to work toward a doctorate in biochemistry, but by then he'd abandoned his dream of becoming a scientist in favor of a more lucrative calling. Panchul told me that before leaving Russia, he'd earned more in a single year than his parents had in their entire lives. Perepilichny was doing even better.

He had a new vision for his career. Panchul recalls Perepilichny smoking one night, for the first and only time Panchul can remember, and declaring that he no longer wanted to be involved in backroom deals. He wanted to be an aboveboard entrepreneur like those in the West, with a nice office and proper accounting—not someone who had to hide from thugs behind his apartment door. He would learn how to operate in a variety of industries, build companies, and become successful not because he was willing to be a middleman on the black market but because he understood business.

And he did. After that night, Perepilichny began branching out. He got involved in money management, currency trading, and many other areas—even condensed-milk and frozen-vegetable production. Over the next decade, he would amass many millions of dollars. But the path he took didn't lead to the upstanding business career he'd once envisioned. Perhaps that was inevitable: Corruption and graft were rampant, and much of the capital available for investment came from shadowy enterprises.

Among the names in Perepilichny's growing Rolodex, one in particular would prove fateful: Vladlen Stepanov, whom he met in the mid-1990s. Stepanov considered Perepilichny a financial wizard—so much so that by the early 2000s he gave Perepilichny power of attorney, then watched as Perepilichny multiplied his wealth. How Stepanov had money to invest in the first place is unclear; he was a low-wage worker who dug mines and laid fiber-optic cable for a living. The two would later have a falling-out, and Perepilichny would find himself on the wrong side of the Kremlin.

### **PEREPILICHNY WANTED TO BECOME AN ABOVEBOARD ENTREPRENEUR—NOT SOMEONE WHO HAD TO HIDE FROM THUGS BEHIND HIS APARTMENT DOOR.**

**N**OT LONG AFTER Perepilichny gave up his dream of studying in the U.S., an American-born businessman named Bill Browder set out on a path to Moscow.

Browder worked at the Boston Consulting Group and Salomon Brothers before deciding, as he later wrote in his memoir, *Red Notice*, that Russia had “some of the most spectacular investment opportunities in the history of financial markets.”

Browder launched an investment fund in Moscow in 1996—a time when few foreigners would even think about starting businesses there—and, though he didn't speak Russian, managed to bring in staggering returns. By 2000, Browder was running the best-performing emerging-markets fund in the world; by 2005, his firm was managing \$4.5 billion in assets. Browder's personal take reportedly rose to nearly \$250 million a year.

His investment strategy relied on a very well-placed ally: Vladimir Putin, who'd been appointed the acting president of Russia in 1999. Though the two men never met, they had com-

mon adversaries in the oligarchs who controlled most of Russia's wealth, and whose power threatened Putin's. When Browder recognized an opportunity for huge returns at Gazprom, Russia's biggest energy company, he bought as many shares as he could, then gave the press evidence of theft and mismanagement. Putin intervened, firing the CEO and replacing him with one who promised to recover the stolen assets. As confidence in the new management soared, so did the stock price, and eventually the value of Browder's initial shares multiplied by 100 times. Browder and Putin repeated this

dance as Browder's fund grew, and Putin's enemies suffered.

Browder had an obvious financial interest in promoting investment in Russia, and he became one of Putin's most outspoken cheerleaders. For a time, his views weren't far out of step with those of many European and American experts, who thought Putin was willing to work with the West. (These were the days of George W. Bush looking Putin in the eye and seeing his soul.) But as Putin grew more authoritarian and the Western view of him dimmed, Browder continued to praise and defend him. In 2003, for example, a billionaire businessman named Mikhail Khodorkovsky was arrested for tax evasion and fraud and sent to a Siberian labor camp. Many observers in the West saw the move as a chilling abuse of power, the result of Khodorkovsky's having publicly challenged Putin and supported opposition groups. But Browder came to the president's defense. He wrote an article that was published in *The Moscow Times* arguing that “while there may be some things about Putin that we disagree with, we should give him the benefit of the doubt in this area and fully support him in his task of taking back control of the country from the oligarchs.”

And then, abruptly, Browder himself learned what it was like to cross Putin. According to Browder and others, Putin quietly switched tactics. Having demonstrated his willingness, and

ability, to destroy one billionaire, he was a credible threat to the rest and could demand a cut of their profits in exchange for leaving them alone. Which meant that when Browder continued calling out oligarchs, he was unwittingly attacking Putin's financial interests.

In November 2005—just months after criticizing “hysteria” and “alarmist predictions” about Putin—Browder was labeled a threat to national security and kicked out of Russia. He fled to England, pulling all his firm's money out of Russia but leaving behind a few dormant companies that he'd need time to properly liquidate.

**T**HOUGH BROWDER AND PEREPILICHNY hadn't yet crossed paths, the defining events in both men's lives began, in part, with the same two people: Vladlen Stepanov and his wife, Olga Stepanova, who ran a tax office. (Stepanov has claimed that he and Olga divorced in 1992, but according to *The Moscow Times*, they were married until 2010. Attempts to reach him were unsuccessful.)

The couple was involved with a Russian crime syndicate run by a man named Dmitry Klyuev. In April 2007, according to a complaint filed by the U.S. Justice Department in an ongoing case, Klyuev flew on a private jet to Larnaca, Cyprus. He was accompanied by a lieutenant colonel in the interior ministry, the primary police arm of the Russian government. Several others arrived soon after, including a lawyer named Andrey Pavlov. The Stepanovs came too, and met with Klyuev in Cyprus on May 8.

(Pavlov told me over email that there is no Klyuev crime syndicate, which he described as “mythical” and “a smokescreen story.” He said that he, Klyuev, and the Stepanovs were in Cyprus separately on vacation.)

Court filings and records from multiple government investigations lay out what happened next. Back in Moscow that June, the group set in motion an audacious plan. The lieutenant colonel led raids on Bill Browder's office and on the law firm that represented him. Dozens of police officers herded employees into conference rooms, drilled into safes, and spent hours taking documents. Klyuev's associates used the stolen documents to register Browder's companies to new owners. Then they forged contracts that would make the companies appear to owe large amounts of money and therefore be eligible for tax refunds.

In late December 2007, they used Browder's companies to apply for what amounted to the biggest known tax refund in Russian history, a total of \$230 million. The applications went to Tax Office No. 25 and to No. 28, where Olga Stepanova worked. The bulk of the refunds were approved within a single business day—on Christmas Eve.

The money was split up and dispatched through thousands of transactions in more than a dozen countries. Vladlen Stepa-

nov had set up a pipeline to get his share out of Russia quickly, opening Swiss bank accounts and registering companies in countries with poorly regulated financial sectors. And he called on an old associate for help. Nearly \$6 million was routed through Moldova and Latvia before reaching a company registered in the British Virgin Islands to a soft-spoken polymath named Alexander Perepilichny.

Perepilichny used another of his companies to send money back to Stepanov, and also bought property for him: a pair of luxury condos on the Palm Jumeirah, a man-made island in Dubai so big that astronauts can see its palm-tree shape from space. And because Stepanov trusted Perepilichny with bank statements and other records, Perepilichny was one of the few people who knew where the money went.

**I**N 2008, BROWDER was trying to launch a new investment fund focused on emerging markets outside of Russia when something strange happened: His office got a call from a bailiff in St. Petersburg, asking when the company planned to pay a \$71 million judgment it owed. Browder had no idea what the bailiff was talking about; he knew that his Moscow office had been raided but didn't know how the stolen documents had been used. He asked a tax attorney in Moscow named Sergei Magnitsky to look into it.

Magnitsky eventually discovered that money had been funneled from the Russian treasury to the companies that had

been stolen from Browder. Magnitsky reported the people he'd found to be behind the theft, including the lieutenant colonel from the interior ministry, and testified against them. But instead of the culprits, Magnitsky himself was arrested. He spent a year in prison, where, despite pressure, he refused to change his testimony. He suffered beatings and a series of health problems that prison doctors treated improperly or not at all. On November 16, 2009, he died.

Browder was devastated and enraged when he heard the news. His team distributed a press release, which included a lengthy description of the torture that Magnitsky had written in prison and given to his lawyer. *Novaya Gazeta*, a major Russian newspaper, published Magnitsky's handwritten letters on its front page. The Russian government announced an investigation and then the firings of 20 prison officials, and a nongovernmental organization that monitors Russian prisons released a damning report confirming that Magnitsky had been tortured. But when the NGO sent its findings to five government agencies, none of them even replied. Browder learned that 19 of the 20 prison officials the government fired had had nothing to do with Magnitsky's death. Some had worked at prisons thousands of miles away.

**LENIN ESTABLISHED A  
LABORATORY TO STUDY  
POISONS AND DEVELOP  
THEM INTO WEAPONS. IT  
BECAME KNOWN AS THE  
KAMERA—THE CHAMBER.**

Browder was determined to get justice. He flew to Washington and began an impassioned lobbying effort that would result, in December 2012, in the passage of the Magnitsky Act, which imposed travel bans and sanctions on those believed to be responsible for the tax heist and Magnitsky's death. And he took to YouTube. When a young secretary in his office suggested posting videos to explain the crime, Browder figured, *What the hell?* He wasn't sure what good might come of it, but he was angry, and willing to try just about anything. Little did he know that 25 miles from his office, in a rented house in St. George's Hill, a Russian who had recently arrived in England and had intimate knowledge of the heist would discover these videos and watch them with great interest.

**D**EEP IN THE AMAZON BASIN, the Tupi Indians have, for hundreds, maybe thousands, of years used a heart-shaped leaf from a plant called curare to treat kidney stones, fever, testicular inflammation, snakebites, and other ailments. By the end of the 16th century, word of the plant's many applications had reached Europe by way of Sir Walter Raleigh and other explorers. Its uses were eventually reported on by medical experts.

But the Tupis knew that the heart-shaped leaf could be poisonous. The word *curare* comes from the Tupi words for "kill" and "bird," and one of its chemical building blocks is an alkaloid that stops signals passing between the brain and muscles. The same leaf that can salve a tribesman's testicular pain can

impede the neurological signals in a monkey high in the tree canopy, interfering with its ability to hang on to a branch, or even to breathe.

It was this use that played a bit part in the course of world history in the summer of 1918, when a young Socialist revolutionary aimed a revolver at Vladimir Lenin and fired three times. Lenin survived, of course. But his doctors determined that the bullets had been coated with poisonous curare resin, which intrigued Lenin. He established a laboratory to study poisons and develop them into weapons. He called it the Special Room. Over the years, the lab would move around and change names—becoming Laboratory No. 1, Lab X, and Laboratory No. 12—but it remained colloquially known as the Kamera. The Chamber. Its purpose, according to former intelligence agents, was to find ways to kill people without leaving a trace.

Curare was one of the Kamera's first projects. The plant was used on a suspected double agent and a Ukrainian archbishop who preached resistance to the Soviets. KGB operatives also used sodium fluoride, which in certain doses is lethal, and is difficult to identify as a cause of death because of its more common use: preventing tooth decay. Many people already have it in their bloodstream.

Irradiated thallium was one of the Kamera's mid-century innovations. A medical team might recognize the symptoms of thallium poisoning—it was commonly used in rat poison—and set about treating a patient, not knowing that the person

was actually dying of radiation exposure. The thallium would disintegrate by the time an autopsy could be performed, leaving no physical evidence of poisoning.

Anytime one of the Kamera's chemical tools was discovered, future deaths from that same poison might be easily linked to Russia. So the lab kept innovating. It developed cyanide that could be deployed as a mist: A KGB defector admitted to having killed a prominent writer by spraying him in a stairwell with a canister hidden in a newspaper.

In 1978, a Bulgarian dissident in London named Georgi Markov died four days after feeling a pinch on the back of his right thigh and turning in time to see a man behind him pick up an umbrella off the ground. Porton Down, the U.K.'s military-science research facility, determined that Markov had been poisoned with ricin. Twenty years later, another KGB defector admitted his involvement in





the assassination: He said that the Kamera had fashioned ricin into a pellet that could be injected from the tip of an umbrella. Markov's death became known as the "umbrella murder." (The former agent later denied his involvement, and British authorities decided that they had insufficient evidence to initiate legal proceedings.)

In 2000, a prominent Russian politician named Anatoly Sobchak died of an apparent heart attack; two of his bodyguards fell ill, too. A Russian forensic expert turned investigative reporter later wrote that Sobchak may have been poisoned by a substance sprayed onto a reading lamp on his bedside table. The heat from the bulb would have diffused the poison throughout the room, its lethal properties diminishing as it dispersed, leaving no trace.

In 2004, the Ukrainian opposition leader Viktor Yushchenko became violently ill. Lesions covered his face and he nearly died. Though he had obviously been poisoned—he had several thousand times the normal level of dioxin in his system, the second-highest level ever recorded—it took a team of some 20 doctors, several of whom flew in from the U.S., to reach that diagnosis. Conspiracy theories began circulating almost immediately: that the U.S. had poisoned Yushchenko; that he had disfigured himself. But the circumstantial evidence pointed strongly to Russia.

Two years later, a former KGB agent turned Putin critic named Alexander Litvinenko was poisoned with a radioactive isotope called Polonium-210. He survived for three weeks, helping investigators and even writing a statement from his hospital bed in London before he finally died. "You may succeed in silencing one man," he wrote. "But the howl of protest from around the world will reverberate, Mr. Putin, in your ears for the rest of your life. May God forgive you for what you have done."

Though poisoning might seem like an easy way to kill someone, ensuring that an assassination will remain anonymous requires a level of technical know-how, resources, and manpower difficult to marshal without government backing. Boris Volodarsky, a veteran of Russia's military-intelligence service and the author of *The KGB's Poison Factory: From Lenin to Litvinenko*, described the process to me by email.

Once a plan is developed, it is passed down a formal chain of command, from the Kremlin to the chief of the secret service to the head of the FSB (the successor to the KGB) to the Kamera. Not even assassinations are exempt from the singular Russian bureaucracy. A target's body type, weight, eating habits, and other details must be known by a specialist, who chooses a poison and calculates the dose. An assassin can't count on a second chance if the dose is too low, and might be exposed as the killer if the dose is too high and symptoms come on before he can escape.

Sometimes—for example, when the assassin and the target know each other—the killer will practice by drawing the victim out of his safety zone during dry runs. The agent tries to get a target into a situation in which his defenses are down—in which he feels comfortable, or is distracted. Sometimes agents perform "passive probes," in which they follow the target, noting details of movement and habit. Agents draw on careful planning and a long history of tradecraft, which is why when enemies of the Kremlin die, blame is almost never conclusively established.

**B**ROWDER WAS SUSPICIOUS when, in August 2010, an email came in from a man who claimed to have seen his YouTube videos, and to know a key player in the massive theft from the Russian treasury. The man called himself "Alejandro Sanches," which was obviously not a Russian name and struck Browder as fake.

Browder had good reason to be cautious—he'd gone from being one of Putin's staunchest supporters to one of his loudest critics, and he believed the Russian government was capable of just about anything. One of Browder's lawyers went to meet Sanches, whoever he was. The lawyer was accompanied by a four-man security detail. One guard carried a signal jammer. Another did a sweep with a Geiger counter, lest Sanches try to use radioactive poison—Browder was acutely aware that another of Putin's enemies, Litvinenko, had been poisoned at a hotel less than a 10-minute walk away.

At the meeting, Sanches revealed his true identity: Alexander Perepilichny. He explained who he was and said he could point Browder to the criminals who had carried out the heist. He said he'd decided to come forward because he was troubled by Magnitsky's death: Corruption may have become an accepted part of doing business in Russia, but killing an innocent man was not okay.

Browder didn't buy this motivation, but Perepilichny dropped clues that allowed him to piece together a story he found easier to believe: Perepilichny and the Stepanovs had fallen out over money Perepilichny had either lost or stolen during the 2008 financial crisis. The Stepanovs had used their influence to have criminal charges brought against him, and he'd fled Russia with his wife and two children. Now he figured if he could shine a light on the Stepanovs' crimes, he could hurt their credibility and weaken the case against him.

To Browder, Perepilichny was a criminal, plain and simple. But he was a criminal who could help him take down the people behind the tax fraud. Perepilichny handed over bank records and other evidence, and explained what it all meant.

With the documents Perepilichny provided, Browder turned to YouTube again, posting a video about the Stepanovs. It went

### THREE OTHERS WHO KNEW ABOUT THE FRAUD HAD DIED UNDER MYSTERIOUS CIRCUMSTANCES. ONE FELL FROM A BALCONY. ANOTHER DROPPED DEAD OF LIVER FAILURE AT AGE 43.

live in mid-April and got 200,000 views by the end of the first day, half a million by the end of the month. Browder's lawyers used Perepilichny's information in a complaint to the attorney general of Switzerland, and the Swiss responded by freezing two accounts, which together contained at least \$10 million. The Swiss also launched an investigation, and Browder's team gained access to the case file.

Journalists from the nonprofit Organized Crime and Corruption Reporting Project turned up information that led to even more criminal investigations. Browder realized that the stolen funds hadn't gone just to exotic island destinations: Members of the criminal syndicate also poured money into Manhattan real estate. He alerted the U.S. Justice Department, which began legal proceedings to seize property. The entire money-laundering scheme was coming into focus. To date, more than a dozen different countries have frozen accounts, launched investigations, or imposed sanctions.

For Perepilichny, coming forward was a risky move: In addition to Magnitsky, at least three others who'd known about the tax fraud had died under mysterious circumstances. One fell

**P**EREPILICHNY WAS EXPOSED. He'd blown the whistle not just on a Russian crime boss but on police and officials high up in the interior ministry. Olga Stepanova had left the tax office to work at the defense ministry. The man who, according to Browder, had approved Magnitsky's arrest was a highly placed official in the FSB. And though no direct evidence exists to link Putin to the Klyuev group's tax fraud, Russia experts have told me it's nearly inconceivable that a theft of that magnitude would have happened without the president's blessing. Which means Perepilichny may have made an enemy of Putin himself.

Troubling things began to happen. A relative in Russia told Perepilichny that his name and other details were on a hit list police had found at the home of an alleged Chechen contract killer. Perepilichny went to Ukraine to visit family, and when he returned he told an acquaintance in England that he'd been confronted in a restaurant by someone who seemed to be after him, and whose bodyguards attacked him. Then a company founded by a suspect in the Litvinenko poisoning brought a series of lawsuits against Perepilichny over alleged debts.

Desperate, Perepilichny began meeting with a man he told acquaintances was from the Russian interior ministry—a man he said threatened him with more criminal charges but also offered a way for him to make things right with the Stepanovs. They met at least twice, first in Zurich, then at a café in Heathrow Airport. But the man was not from the Russian government. He was an associate of the Klyuev group—the lawyer Andrey Pavlov. (Pavlov told me Perepilichny initiated the meetings, asking for help in determining whether there were any Russian investigations against him, and that Perepilichny knew he was a lawyer, not a government official.)



from a balcony. Another dropped dead of liver failure at age 43. A third died of heart failure at 53. Browder and his associates tried to protect Perepilichny's identity by redacting details in court documents. But enough clues slipped through to tip off Vladlen Stepanov. Browder's YouTube video and his complaint to the Swiss listed the address of a property Stepanov had bought in Dubai. The only person who knew that address, besides the Stepanovs themselves, was Alexander Perepilichny.

Stepanov placed an ad in a Russian newspaper, formatted as an open letter, in which he asserted his innocence and threatened Perepilichny by name. "To the scam artists who have filched my money, inflicted tangible financial damage upon me and, on top of everything, smeared my reputation," he wrote, "I shall seek redress."

In November, Perepilichny traveled to France. The details of this trip are murky and suspicious. He reserved rooms in two different Paris hotels—one that had five stars, and a more modest one across town—for the same nights, perhaps in an attempt to make his movements harder to follow. He spent more than \$1,500 at a Prada store, but didn't bring anything back with him to London. When he got home, he told his wife he wasn't feeling well and went for a jog.

After Perepilichny collapsed, a few neighbors turned him on his back and tried to administer CPR. A shaky cellphone video taken by a young man who happened to be nearby shows the blurred outline of the whistle-blower, lying on a mostly dark street in the glare of a car's headlights. He was pronounced dead just before 5:40 p.m.

Browder had no doubt that Perepilichny was murdered. His lawyers wrote to the Surrey police to lay out the evidence and demand a toxicology report. Unsatisfied with the response from the police, Browder slipped reporters the letters he'd sent to them, and as the circumstances surrounding Perepilichny's death circulated in the papers, the police officially opened a murder investigation. Toxicology tests were performed. Police also met with Browder's team and took a witness statement from one of his employees. Then they ruled the death unsuspicious.

The coroner, who in England must open an inquest if the post-mortem examination does not reveal a cause of death, scheduled hearings, but denied Browder's request to take part in them. Relegated to the sidelines, there was nothing else he could do.

**I**N THE SUMMER of 1879, an English medical student named Arthur Conan Doyle began experimenting. Several years earlier, while seeking a cure for his nerve pain, he had learned about an exotic flower. Now he got a fresh tincture of the plant, called gelsemium, which has been known for hundreds of years to Chinese herbalists and to the hill tribes of Vietnam. He gave himself a tiny dose, less than one-tenth of a fluid ounce, and increased the amount ever so slightly each day.

On the third day he took about one-fifth of an ounce. The effect was strange, and almost immediate. He became giddy, his limbs felt weak, and his pulse was faint. The next day, he had trouble focusing on distant objects. The day after that: headache, diarrhea, and fatigue. Then came persistent and prostrating diarrhea and depression. His headache didn't abate. He deduced from his symptoms that the plant acted as a motor paralyzer, and he wasn't far off. It interferes with a receptor responsible for managing critical functions all over the body.

Had Doyle continued increasing his dose, he would have become paralyzed and short-circuited his respiratory system. Instead, he decided he'd had enough. He submitted his findings to a journal and later gave up the practice of medicine entirely—becoming a novelist and narrating the exploits of Sherlock Holmes.

A century later and about 100 miles away, a researcher named Monique Simmonds at the Royal Botanic Gardens at Kew was studying another plant that caused strange physiological effects. She was investigating a condition that afflicted people in poor parts of the world, especially parts prone to extreme weather. The most visible symptom was that, simply put, they walked funny. Researchers discovered that the one thing people with the condition all had in common was that they'd eaten legumes from the lathyrus plant, often used as a food of last resort because it can survive both drought and flood.

Simmonds used insects to test the ways in which chemicals in the plant might be acting on the brain. She learned that the lathyrus plant contained neurotoxins that confused signals

## MILMO SAT UP.

## DID THE LAWYER

## JUST SAY "POISON"?

between the brain and muscles. As she continued in her research, Simmonds identified other plant compounds that could have strange effects. She found that chemicals in some plants actually hacked insects' brains and manipulated their feeding behavior, presumably as a kind of evolutionary armor against hungry predators. If plants could have such profound effects on insects, whose central nervous systems are similar to ours, how might they affect humans?

The further she got into her research, the more she became known in the criminal-justice system, because in studying plants, she was also identifying poisons—many of them exotic. When people turned up sick or dead and police suspected poison but didn't find anything with standard toxicology tests, Simmonds was an invaluable resource. (Simmonds agreed to talk to *The Atlantic* about her research on the condition that no open cases be discussed.) So when a life-insurance company needed an expert to determine whether a client named Alexander Perepilichny had been murdered, even though a toxicology test hadn't detected anything, Simmonds was well placed to help.

**I**N MAY 2015, Cahal Milmo, then a reporter for *The Independent*, showed up for the opening hearing of the inquest into Perepilichny's death to find that he was one of the only reporters there. Others had checked in with the court and knew that the hearing had been downgraded to one of the usually boring affairs called a "pre-inquest review hearing," where the parties talk about logistics. Should we empanel a jury? What dates work for everyone? But Milmo hadn't remembered to check. So when he arrived at the courthouse and figured out what was going on, he resigned himself to a wasted morning.

Then, a bombshell: Bob Moxon Browne, a lawyer for the life-insurance company, began speaking in a booming voice about how Monique Simmonds from Kew Gardens had found a chemical in the dead man's stomach associated with a poisonous plant that grows in China: gelsemium.

Milmo sat up. Did the lawyer just say "poison"?

The coroner responded without surprise, giving Milmo the impression that this wasn't the first he'd heard about Simmonds's findings.

"The real issue is," the coroner said, "is there evidence that Mr. Perepilichny was poisoned?"

"We have a suspect substance in the stomach. That compound is only found in nature in five forms, all of which are associated with the highly toxic gelsemium plant," Browne said. "Given that it only grows in China and is a known weapon of assassination by Chinese and Russian contract killers, why was it in his stomach?"

He asked that whatever samples from the body remained be sent to Simmonds so that she could do more tests. The coroner agreed, delaying the proceedings for four months.

As soon as the hearing ended, Milmo raced to a coffee shop to file his story: "Billionaire Russian Businessman Found Dead Outside Surrey Home Could Have Been Poisoned." By that



night, other articles about the exotic flower that had apparently killed the whistle-blower were flying around the web.

All of which set up a bizarre spectacle. With the suspicion of poison providing a new, even stronger suggestion of murder, Browder was allowed back into the proceedings as an “interested party.” His lawyers made so many demands before the next hearing that the exasperated coroner opened it by castigating them. Browder didn’t care. He remained certain that Perepilichny had been murdered.

But Browder’s crusade put him at odds with the victim’s own family. Perepilichny left behind two children and a widow, who has an opinion of her own—and it’s not what one might expect. Whether because of pressure to keep quiet, or because she wants to move on from a painful chapter, or because murder jeopardizes the millions of dollars in life insurance Perepilichny took out weeks before he died, her lawyers have fought Browder’s efforts to prove Perepilichny was assassinated. She has said she believes her husband probably died of something called sudden adult death syndrome. (Requests for comment to three different law firms that have represented her have gone unanswered.)

Browder has suggested that Surrey police didn’t thoroughly investigate Perepilichny’s death in part because they’re incompetent and in part because of the enormous influence that wealthy Russians wield in British business and politics. He told a parliamentary committee that the stolen money Perepilichny helped expose passed through 12 British banks, and that millions of dollars went toward “an orgy of spending on luxury goods and services in the U.K.”

Browne, the insurance-company lawyer, has also criticized the police investigation. He argued at a hearing in May that Pavlov, the lawyer from the Klyuev group who’d been meeting with Perepilichny, should be considered a “candidate for the killing.” Browne said that Pavlov was in England when Perepilichny died and that he flew out of Heathrow the next day. For his part, Pavlov says he had nothing to do with the death and that he was in England for just a few hours, to meet with clients, and only learned that Perepilichny had died from news reports a few days later.

The coroner asked the British government to share any intelligence it had on threats to Perepilichny’s life and contact between him and certain members of the Klyuev group. But in an extraordinary turn, the British Home Secretary invoked a national secrecy law to avoid sharing evidence from two of the U.K.’s spy agencies with the court. At a hearing in September, a government lawyer argued that there were certain files even the coroner should not be permitted to see. Exactly what those files say and why they pose a threat to the nation is of course impossible to know. The coroner was forced to allow a High Court to hear legal arguments over whether to grant the secrecy request and to put the inquest on hold yet again.

Perepilichny’s old friend Yuri Panchul told me by email that he has little hope justice will be served. The inquest is ongoing, but recent history supports Panchul’s pessimism. This past January saw the conclusion of the official inquiry into the death of Alexander Litvinenko, the Putin critic who died of radiation poisoning in England. Before dying, Litvinenko had sat up in bed and laid out the case against the Kremlin—but still Russia’s involvement could not be conclusively established. The strongest assertion the inquiry could

## ASSISTED LIVING

They sit at tables close enough around  
To nudge, reach for salt, and chat about the day,  
But none of them has all that much to say.  
Their voices dissipate and ravel. They sound  
As though they’re calling out from far away.

As though there were a shy ventriloquist  
Between them, unskilled in how to steady  
Gestures, turn the torso, turn the head,  
So wholly focused on not moving his lips,  
He half forgets to follow his own scripts.

Their children come infrequently, arriving  
Shortly before they leave. They always leave.  
The kids, the jobs, the house, the car, so brief  
A time for reconnecting and forgiving,  
For meeting each other’s eyes, and forgiving,

They may as well live in some country far away.  
Maybe they do, yes, or just one, perhaps  
One of them once did. But now it’s time for naps  
And *Jeopardy*, then bingo, crafts, crochet.  
So many activities, so little to do, they say.

— J. Allyn Rosser

*J. Allyn Rosser’s most recent collection is Mimi’s Trapeze (2014).*

make about Vladimir Putin was that he “probably approved” the murder. The inquiry’s chairman, a retired judge, had to admit that he didn’t have solid proof of the link, and had based his findings on “strong circumstantial evidence of Russian state responsibility.”

In Perepilichny’s case, a number of factors might make it impossible to prove he was murdered, including the long delay before his stomach contents were examined for exotic poisons. We may never get definitive answers about his death, unless someone comes forward and admits involvement—which has been the case with nearly every death that has been linked back to the Kamera. It is, after all, an institution whose calling card is the absence of a calling card. Its members have a near-perfect record of killing without leaving conclusive evidence, only a trail of suspicion. Whether or not Alexander Perepilichny is part of that record, only they know. **A**

*Jeffrey E. Stern is the author of The Last Thousand: One School’s Promise in a Nation at War.*

# HOW TO SLEEP

Should you drink more coffee?  
Should you take melatonin?  
Can you train yourself to need  
less sleep? A physician's guide  
to sleep in a time-pressed age.

**BY JAMES HAMBLIN**  
PHOTOGRAPHS BY **MAURICIO ALEJO**



DURING RESIDENCY, I worked hospital shifts that could last 36 hours, without sleep, often without breaks of more than a few minutes. Even writing this now, it sounds to me like I'm bragging or laying claim to some fortitude of character. I can't think of another type of self-injury that might be similarly lauded, except maybe binge drinking. Technically the shifts were 30 hours, the mandatory limit imposed by the Accreditation Council for Graduate Medical Education, but we stayed longer because people kept getting sick. Being a doctor is supposed to be about putting other people's needs before your own. Our job was to *power through*.

The shifts usually felt shorter than they were, because they were so hectic. There was always a new patient in the emergency room who needed to be admitted, or a staff member on the eighth floor (which was full of late-stage terminally ill people) who needed me to fill out a death certificate. Sleep deprivation manifested as bouts of anger and despair mixed in with some euphoria, along with other sensations I've not had before or since. I remember once sitting with the family of a patient in critical condition, discussing an advance directive—the terms defining what the patient would want done were his heart to stop, which seemed likely to happen at any minute. Would he want to have chest compressions, electrical shocks, a breathing tube? In the middle of this, I had to look straight down at the chart in my lap, because I was laughing. This was the least funny scenario possible. I was experiencing a physical reaction unrelated to anything I knew to be happening in my mind. There is a type of seizure, called a gelastic seizure, during which the seizing person appears to be laughing—but I don't think that was it. I think it was plain old delirium. It was mortifying, though no one seemed to notice.

No matter what happened to my body, I never felt like it was dangerous for me to keep working. I knew I was irritable and sometimes terse, and I didn't smell the best, but I didn't think anything I did was unsafe. Sleep experts often liken sleep-deprived people to drunk drivers: They don't get behind the wheel thinking they're probably going to kill someone. But as with drunkenness, one of the first things we lose in sleep deprivation is self-awareness.

It's this way of thinking—that you can power through, that sleep is the easiest corner to cut—that makes sleep disturbance among the most common sources of health problems in many countries. Insufficient sleep causes many chronic and acute medical conditions that have an enormous impact on quality of life, not to mention the economy. While no one knows why we sleep, it is a universal biological imperative; no animal with a brain can survive without it. Dolphins are said to sleep with only half their brain at a time, keeping partially alert for predators. Many of us spend much of our lives in a similar state.

Since my residency, I've become sort of obsessive about sleep—how much we really need, how to optimize it, whether there are ways to game the system. What can be said definitively about sleep and wakefulness? What I've found is a perpetual divide between what's known to scientists and what most people do.

### How much sleep do I actually need?

One 2014 study of more than 3,000 people in Finland found that the amount of sleep that correlated with the fewest sick days was 7.63 hours a night for women and 7.76 hours for men. So either that is the amount of sleep that keeps people well, or that's the amount that makes them least likely to lie about being sick when they want to skip work. Or maybe people who were already sick with some chronic condition were sleeping more than that—or less—as a result of their illness. Statistics are tough to interpret. Isolated studies are tougher. That's why the American Academy of Sleep Medicine and the Sleep Research Society convened a body of scientists from around the world to answer this question through a review of known research. They looked at the effects of sleep on cardiovascular disease, cancer, obesity, cognitive failure, and human performance, vetting each paper based on its scientific strength.

The consensus: Most adults function best after seven to nine hours of sleep a night. Going to sleep and waking up at consistent times each day is valuable too. When we get fewer than seven hours, we're impaired (to degrees that vary from





person to person). When sleep persistently falls below six hours per 24, we are at an increased risk of health problems.

### Can I train myself to need less sleep?

As an experiment for his high-school science fair in 1964, a 17-year-old San Diego boy named Randy Gardner stayed awake for 264 hours. That is 11 days. Since 1964, the standards for science-fair safety have changed.

The project attracted the attention of the Stanford sleep researcher William Dement, among others. Dement and other researchers took turns watching and assessing the young man's consciousness. By all accounts, he took no stimulant medications. Nor did he seem to suffer any permanent deficits. Dement said that on day 10, Gardner even beat him at pinball. The boy later said of his experiment that the key to staying awake was "just talking yourself into it."

I asked David Dinges, the chief of the division of sleep and chronobiology at the University of Pennsylvania, how many people could do anything close to that without dying. He replied that "when animals are sleep-deprived constantly, they will suffer serious biological consequences. Death is one of those consequences."

tended to be the people who slept the least, often in multiple short bursts.

The concept of sleeping in short bursts has spread since those races began, in the 1960s. Today, a small global community of people practices "polyphasic sleeping," based on the idea that by partitioning your sleep into segments, you can get away with less of it.

Though it is possible to train oneself to sleep in spurts instead of a single nightly block, Dinges says it does not seem possible to train oneself to need less sleep per 24-hour cycle. And he notes that even for the 1 percent (or so) who can survive on less sleep and function well cognitively, we still don't know how the practice might be affecting metabolism, mood, and myriad other factors. "You may be cheerful, but not cognitively fit. Or you may be cognitively fit, but hard to be around because you're pushy or hyperactive."

Around the time of Gardner's historic science project, the U.S. military got interested in sleep-deprivation research: Could soldiers be trained to function in sustained warfare with very little sleep? The original studies seemed to say yes. But when the military put soldiers in a lab to make certain they stayed awake, performance suffered. Cumulative deficits accrued with each night of suboptimal sleep. The less sleep the

on cognitive tests plummet. The crucial finding was that throughout their time in the study, the sixers thought they were functioning perfectly well.

Effective sleep habits, like many things, seem to come back to self-awareness.

### I drink coffee instead of sleeping, so I'm fine.

Caffeine is the most consumed stimulant in the world. The chemical induces reactions throughout the body that normally occur in intense situations. When we sense danger, for example, the pituitary gland activates the adrenal glands to secrete epinephrine, or adrenaline, into our blood. Adrenaline is the hormone that's meant to be released when we are under stress and need to muster energy to, say, outrun a bear or lift a fallen boulder off our climbing partner. (He's probably not alive anymore, but it's worth checking.) Caffeine increases adrenaline levels in the blood. It has repeatedly been shown to improve athletic performance in the short term, from how high a person can jump to how fast a person can swim.

The hormone surge also creates a buzz. To lift that boulder we need a flood of energy to fuel our muscles, but first we need to *think* we can lift the boulder. The "psychoactive" component of caffeine is what makes anything seem possible when brainstorming during your third hour in a coffee shop.

Caffeine works primarily by blocking the action of a chemical called adenosine, which slows down our neural activity, allowing us to relax, rest, and sleep. By interfering with it, caffeine cuts the brake lines of the brain's alertness system. Eventually, if we don't allow our body to relax, the buzz turns to anxiety.

Thanks to caffeine, many of us stimulate that fight-or-flight response not just occasionally, under dire circumstances, but daily, in our offices. Eighty-five percent of U.S. adults consume some form of caffeine most days, with an average daily dose of 300 milligrams (roughly 27 ounces of coffee). Strategic use of small amounts of caffeine can be cognitively advantageous, but at such a high dose, caffeine is likely to throw off our sleep and energy cycles in the long term, altering the body's internal clock. At that point, many people go in search of products to help them sleep.

## In a high-school science-fair experiment in 1964, a 17-year-old stayed awake for 11 days. Since then, standards for science-fair safety have changed.

That said, cases like Gardner's—of people who suffered great sleep deprivation without major setbacks—are well documented. A small number of people, sometimes called "short sleepers" and commonly thought to make up perhaps 1 percent of the population, seem to thrive on only four or five hours a night. Dinges said that "we probably do have people among us—and not necessarily 1 percent; there may be many more than that—who can actually tolerate sleep loss better than others." This proposition has been borne out in studies of participants in transoceanic sailing races, which did not afford them the luxury of long blocks of sleep. The winners

soldiers got, the more deficits they suffered the next day. But as with my own residency experience, they couldn't tell that they had a deficit.

"They would insist that they were fine," said Dinges, "but weren't performing well at all, and the discrepancy was extreme."

This finding has been replicated many times over the intervening decades, even as many professions continue to encourage and applaud sleep deprivation. In one study published in the journal *Sleep*, researchers kept people just slightly sleep deprived—allowing them only six hours to sleep each night—and watched the subjects' performance



**But there's no real danger in consuming a lot of caffeine, right? Can't caffeine make you live longer?**

We frequently hear that drinking a small amount of coffee can be healthy. This always comes back to the evidence that some coffee-drinking is a common behavior among long-lived, healthy people across populations. News stories tend to interpret this evidence optimistically, reporting that coffee may be good for you. In reality, it might just be an interesting correlation. Randomized, controlled trials on nutrition are extremely difficult to conduct, as the effects of dietary changes are complex and often take years, if not a lifetime, to reveal themselves.

Those who claim that coffee is healthful tend to point to its high level of antioxidants. But antioxidant supplements have not been proved to correlate with health or longevity. Antioxidants represent a vast spectrum of substances. Vitamin E is an antioxidant, and taking vitamin-E supplements has been shown to increase men's risk of prostate cancer.

If coffee does have an effect on longevity, it is likely a result of something more global than the potential effect of antioxidants—such as the fact that constant exposure to caffeine, even at low levels, suppresses appetite (in a world where most people eat more than is ideal). Or that it encourages social interaction—it inclines us to go out and do things with people—which itself is generally beneficial to health. These

are legitimately positive results. But as with all chemicals, the comprehensive effect of caffeine on our health depends on how, and how much, we use it.

In 2013, a 24-year-old advertising copywriter in Indonesia died after prolonged sleep deprivation, collapsing a few hours after tweeting “30 hours of working and still going strooong.” She went into a coma and died the next morning. A family acquaintance wrote on Facebook, “She died because too much of overtime working, and too much *kratingdaeng* attacks her heart.” *Kratingdaeng* is the Thai name for the product known elsewhere as Red Bull.

Sleep deprivation is clearly linked to heart disease and strokes. Beyond that, the vitamin/caffeine/amino-acid concoctions known collectively as energy drinks have been implicated in thousands of emergency-room visits in recent years; energy-drink-related ER visits doubled from 2007 to 2011, according to the U.S. Substance Abuse and Mental Health Services Administration. For now, this is simply a correlation, with a plausible explanation that one could be causing the other; it is not proof of harm. And yet, notes Michael Jacobson, the head of the Center for Science in the Public Interest, “there are several fatalities possibly related to energy drinks, and several lawsuits. In some people, it appears to be due to underlying heart defects—when they get this dose of caffeine, they succumb.”

Although the FDA warns us rather unambiguously that “caffeine overdose is dangerous and can kill you,” I’ve not seen that happen, and Jacobson, a public-health advocate, confirms that except at extraordinarily high levels, caffeine isn’t known to kill otherwise healthy people. It may not be the sole culprit in hospitalizations related to energy drinks. After all, many of the people who have been hospitalized after consuming energy drinks are presumably also coffee drinkers, notes Jacobson—but few, if any, have been made acutely ill by coffee.

**I can't sleep. Is my phone really keeping me up? Should I seriously not be reading my phone in bed? That seems impossible.**

The United Nations declared 2015 to be the International Year of Light and

Light-Based Technologies. That summer, the New York Blue Light Symposium brought together experts who are trying to reckon with the invasion of all this new light into our lives. A keynote speaker was the Japanese ophthalmologist Kazuo Tsubota, the president of the International Blue Light Society, which aims to “promote public awareness of pertinent research on the physical effects of light.” Its founding followed a 2012 report by the American Medical Association titled “Light Pollution: Adverse Health Effects of Night-time Lighting.”

Of all the things to have health concerns about, nighttime lighting? Well, yes. When light enters your eye, it hits your retina, which relays signals directly to the core of your brain, the hypothalamus. The size of an almond, the hypothalamus has more importance per volume than any other part of your body. Yes, that includes the sex organs—you would have no sex drive without the hypothalamus. This almond is the interface between the electricity of the nervous system and the hormones of the endocrine system. It takes sensory information and directs the body’s responses, so that the body can stay alive.

Among other roles in maintaining bodily homeostasis—appetite, thirst, heart rate, etc.—the hypothalamus controls sleep cycles. It doesn’t bother consulting with the cerebral cortex, so you are not conscious of this. But when your retinas start taking in less light, your hypothalamus assumes it’s time to sleep. So it wakes up its neighbor the pineal gland and says, “Hey, make some melatonin and shoot it into the blood.” And the pineal gland says, “Yes, okay,” and it makes the hormone melatonin and shoots it into the blood, and you become sleepy. In the morning, the hypothalamus senses light and tells the pineal gland to stop its work, which it does. Test your blood for melatonin during the daytime, and you will find almost none.

All of this is why we’re told to minimize screen time before bed. Phones and tablets emit light that’s skewed heavily toward the blue end of the visible spectrum, and some research suggests that these frequencies are especially influential in human sleep cycles. Using a “night mode,” available

on some phones, is supposed to minimize that effect. That’s probably worth doing—so long as you don’t end up canceling out any benefit by spending more time looking at the lit screen.

### Can’t I just take a melatonin supplement if I can’t get to sleep?

Melatonin is one of the very few hormones that you can purchase in the United States without a prescription. It is considered a dietary supplement and therefore held to essentially no pre-market standards of quality, safety, or efficacy. The pharmacist can’t give me the eye drops that help control my glaucoma without a prescription. The pharmacist can’t give insulin to a diabetic person without the recurring order of a doctor, to which not all people have easy access. But melatonin, which tinkers with the work of the most crucial part of your brain? It’s over there in Aisle 5. Buy as much as you like. It’s next to the caffeine pills.

In 2015, Ben Yu, who’d dropped out of Harvard to form a biotech start-up, launched a product called Sprayable Sleep, which contains melatonin. Spray it onto your skin, and it’s supposed to put you to sleep. (Sprayable Sleep is the company’s second product. Its first was the perfect complement: Sprayable Energy, or topical caffeine.)

When I spoke with Yu, he referred to melatonin not as a hormone but as a “biological signaling molecule.” I asked him whether he did this because customers might be averse to spraying themselves with a hormone. “I thought that might be a loaded word,” he agreed, “but it turns out, people don’t seem to care.”

In a sleep-deprived culture, the promise of sleep can lead people to abandon caution. In its initial crowd-funding campaign on Indiegogo, Sprayable Sleep raised \$409,798. (That’s 2,106 percent of what the company set out to raise, collected from nearly 5,000 people.)


Unlike melatonin pills, which are absorbed into and eliminated from the blood before the night is over, Sprayable Sleep is supposed to keep you asleep through the night, as the hormone gradually percolates through your skin and into your bloodstream. I tried it for a couple of weeks, and I did sleep, but it

was tough to tell what effect the product was having: I sleep most nights. That said, I can confirm that it didn’t burn my skin. Also, that people don’t like it when you pretend you are going to spray it on them.

Melatonin supplements have been shown to make some people fall asleep more quickly, but they aren’t proven to increase the total time or quality of sleep. And of course, as with most things sold as supplements in the United States, the effects of long-term use are unknown.

What is clear is that supplement overuse can be dangerous. Melatonin is crucial to the functioning of the most finely tuned apparatuses in the body, and David Dinges is especially concerned about its use by young people. As he put it, “No child should have a melatonin supplement—or a caffeinated drink—without a doctor being involved.” Adults, he says, “at least might make informed decisions.”

The delicate word there is *informed*. Many people seem engaged in a daily arms race between wakefulness and unconsciousness, using various products to mask and manage poor sleep habits, and ultimately just needing more products. Spray-on caffeine followed by spray-on melatonin. Or alcohol, which only further messes with our physiological rhythms.

So how does one break that cycle? Factors outside of our control—jobs and families and light pollution, to name a few—can make this hard to do. But when possible, here are a few simple ideas that many experts recommend. Try to keep a somewhat constant bedtime and wake-up time, even on weekends. Keep caffeine use moderate, even if you don’t feel like a nighttime coffee affects you. The same goes for nightcaps. (Not necessarily a joyless suggestion—maybe you can meet a friend for a beer at 4 p.m. instead of 10 p.m.) Use screens judiciously, too. Remember that even on night mode, a phone is shooting light into your brain. Have sex with someone instead. Or, sometimes preferable, read something on paper. 

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*James Hamblin is a senior editor at The Atlantic. This article is adapted from his new book, If Our Bodies Could Talk: A Guide to Operating and Maintaining a Human Body, published by Doubleday in December.*



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ESSAY

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FACTS

A new history of the essay gets the genre all wrong, and in the process endorses a misleading idea of knowledge.

By WILLIAM DERESIEWICZ

*Illustration by Javier Jaén*

**J**OHAN D'AGATA HAS ACCOMPLISHED an impressive feat. In three thick volumes, over 13 years, he has published a series of anthologies—of the contemporary American essay, of the world essay, and now of the historical American essay—that misrepresents what the essay is and does, that falsifies its history, and that contains, among its numerous selections, very little one would reasonably classify within the genre. And all of this to wide attention and substantial acclaim (D'Agata is the director of the

Nonfiction Writing Program at the University of Iowa, the most prestigious name in creative writing)—because effrontery, as everybody knows, will get you very far in American culture, and persistence in perverse opinion, further still.

D'Agata's rationale for his "new history," to the extent that one can piece it together from the headnotes that preface each selection, goes something like this. The conventional essay, nonfiction as it is, is nothing more than a delivery system for facts. The genre, as a consequence, has suffered from a chronic lack of critical esteem, and thus of popular attention. The true







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essay, however, deals not in knowing but in “unknowing”: in uncertainty, imagination, rumination; in wandering and wondering; in openness and inconclusion.

Every piece of this is false in one way or another. There are genres whose principal business is fact—journalism, history, popular science—but the essay has never been one of them. If the form possesses a defining characteristic, it is that the essay makes an argument (and does so, unlike academic writing and other forms, for a general rather than a specialized audience). That argument can rest on fact, but it can also rest on anecdote, or introspection, or cultural interpretation, or some combination of all these and more. There are “public essays” and “personal essays” and essays that are both or neither; the form is broad and various and limitlessly flexible. Yet what distinguishes an op-ed, for instance, from a news report is that the former seeks to persuade, not simply inform. And what makes a personal essay an essay and not just an autobiographical narrative is precisely that it uses personal material to develop, however speculatively or intuitively, a larger conclusion. Near the end of the title essay in Leslie Jamison’s *The Empathy Exams*, to take the most celebrated recent example, we read the following: “Empathy isn’t just something that happens to us ... It’s also a choice we make: to pay attention, to extend ourselves.” The movement that culminates in that passage—from instance to precept, from observation to idea—is the hallmark of the essay.

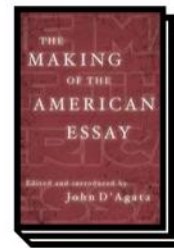
**D**’AGATA’S PROBLEM, conceptually and psychologically, appears to begin with the term *nonfiction*. *Nonfiction* is the source of the narcissistic injury that seems to drive him. “Nonfiction,” he suggests, is like saying “not art,” and if D’Agata, who has himself published several volumes of what he refers to as essays, desires a single thing above all, it is to be known as a maker of art. But the syllogism is false. *Nonfiction* may not be a very

useful term, and it certainly is an ill-defined (and, with its double negation, a very odd) one, but no one believes that the thing it names cannot be art.

At least, no one has believed it for a long time. D’Agata tells us that the term has been in use since about 1950. In fact, it was coined in 1867 by the staff of the Boston Public Library and entered widespread circulation after the turn of the 20th century. The concept’s birth and growth, in other words, did coincide with the rise of the novel to literary preeminence, and *nonfiction* did long carry an odor of disesteem. But that began to change at least as long ago as the 1960s, with the New Journalism and the “non-fiction novel.” By decade’s end, the phrase *creative nonfiction* had entered the lexicon—a term that’s since become ubiquitous and that explicitly negates D’Agata’s claim about the anti-artistic implication of its second word.

As for the essay—a form whose exponents in English had included, from the 1860s to the 1960s, Virginia Woolf, George Orwell, and James Baldwin—its prestige was never less than high, and the emergence of creative nonfiction as a rallying point (and of the memoir as a publishing phenomenon) was soon followed by that of the personal essay, in particular, as an increasingly prominent and celebrated genre. The annual *Best American Essays* debuted in 1986, the first addition to the *Best American* franchise since the series was launched (with *The Best American Short Stories*) in 1915. Phillip Lopate’s anthology *The Art of the Personal Essay* was published in 1994. Joseph Epstein’s anthology *The Norton Book of Personal Essays* was published in 1997. Joyce Carol Oates’s anthology *The Best American Essays of the Century* was published in 2000. Also in 2000, the National Magazine Awards established a category exclusively for essays. D’Agata, whose first anthology did not appear until 2003, has hardly saved the genre from oblivion. If anything, he was rather late to the party.

Of course, D’Agata would say that the essays he collects are not essays, or not those kinds of essays. They are “lyric”



THE MAKING OF  
THE AMERICAN  
ESSAY

EDITED AND  
INTRODUCED BY  
JOHN D'AGATA  
Graywolf

essays—something altogether different. They deal not in information or assertion but in ambivalence and ambiguity; in emotion, exploration, and suggestion. And that is certainly worthy as an organizing principle. But the qualities D'Agata claims to prize are not confined to a single genre, no matter what

## D'Agata believes the essay has suffered from a lack of critical esteem and thus of popular attention.

he wants to call it. They exist in fiction as well, and in poetry and memoir and indeed in the essay itself. And the clearest proof they do is that a large number of D'Agata's selections are, in fact, stories, poems, autobiographical sketches, and personal essays. He gives us Jean Toomer's "Blood-Burning Moon" and Renata Adler's "Brownstone" (short stories), T. S. Eliot's "The Dry Salvages" and Stéphane Mallarmé's "A Throw of the Dice Will Never Abolish Chance" (poems), Leonard Michaels's "In the

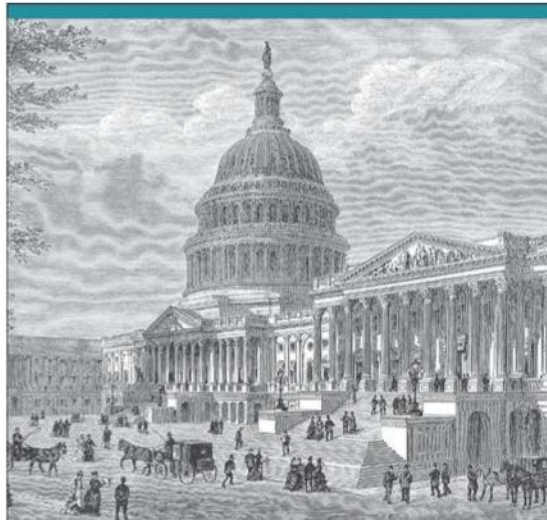
Fifties" and Natalia Ginzburg's "He and I" (autobiographical sketches), and personal essays by E. B. White, Joan Didion, Annie Dillard, and others.

Yet that is not enough. D'Agata also gives us pieces that indubitably trade in fact, argument, and assertion. We get ethnographic selections by Plutarch and Bernardino de Sahagún, works of travel by Petrarch and Michel Butor, and lots and lots of journalism (by Norman Mailer, Lillian Ross, Tom Wolfe, John McPhee, and more). We get a sermon by Jonathan Edwards, a catalog of maxims by Francis Bacon and another by Anne Bradstreet, and works of satire by Jonathan Swift, Washington Irving, and Mark Twain, among others.

What we really seem to get in D'Agata's trilogy, in other words, is a compendium of writing that the man himself just happens to like, or that he wants to appropriate as a lineage for his own work. To be sure, there does appear to be a kind of prose that he's particularly partial to and that is mainly what he seems to have in mind when he talks about the lyric essay. We find it, especially, in many of his more

modern selections, including the bulk of the first anthology, *The Next American Essay*, which covers the period from 1975 to 2003. We find it, that is, when he isn't limited by the literary record of older ages and can show us what his taste is like when granted full indulgence.

What it's like is abysmal: partial to trivial formal experimentation, hackneyed artistic rebellion, opaque expressions of private meaning, and modish political posturing. We get gimmick pieces like Donald Barthelme's "Sentence" and Kenneth Goldsmith's "All the Numbers From Numbers," flaccid "theme" writing like Fabio Morabito's "Oil" and Alexander Theroux's "Black," lightweight narrative vignettes like Susan Steinberg's "Signified" and Brian Lennon's "Sleep," and overwrought poeticizations like Dino Campana's "The Night" and Saint-John Perse's "Anabasis." D'Agata is a professor of creative writing, and a lot of this material is indeed "creative writing" in the worst, collegiate sense: not fiction or poetry or memoir or essay, but verbiage that manages to be both all of them and none—formless, monotonous, self-indulgent, and dull.



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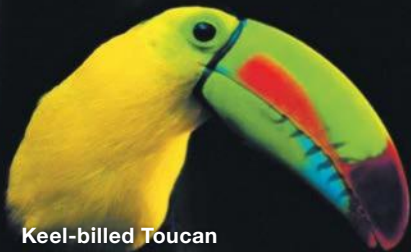
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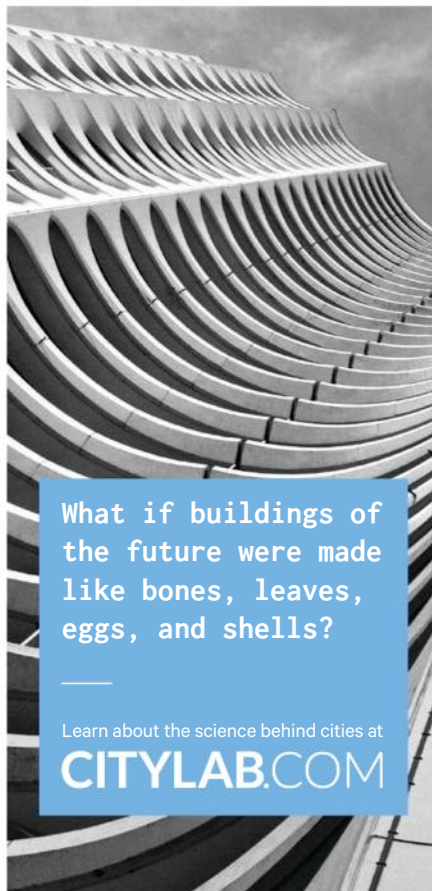
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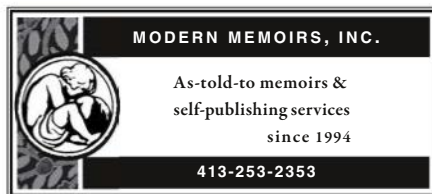
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If D'Agata wants to call these pieces "lyric essays," he is free to do so (this is America, after all), but he might want to give us some warning, in a truth-in-advertising kind of way—might want to let us know that the word *essay* in his titles is used in a sense that is, let us say, idiosyncratic. If I bought a bag of chickpeas and opened it to find that it contained some chickpeas, some green peas, some pebbles, and some bits of goat poop, I would take it back to the store. And if the shopkeeper said, "Well, they're 'lyric' chickpeas," I would be entitled to say, "You should've told me that before I bought them."

**B**UT TO EXPECT that kind of honesty from John D'Agata is to misunderstand his relationship to truth, amply documented in *The Lifespan of a Fact*, a book he co-authored in 2012. *Lifespan* is the record of D'Agata's struggles with a fact-checker at *The Believer* over an article D'Agata had written about the death in Las Vegas of a 16-year-old named Levi Presley. Presley had jumped from the observation deck of the Stratosphere Hotel, and D'Agata sought to use the event as the occasion for a narrative meditation on suicide, Las Vegas, and other themes. There is nothing wrong with that per se; the trouble arose when the checker, Jim Fingal, began to do his job. It turned out that D'Agata had "taken some liberties," as he puts it to Fingal, by altering or inventing whatever he chose to in order to make the story, or the writing, sound better. "The rhythm of 'thirty-four' works better in that sentence than the rhythm of 'thirty-one,' so I changed it," he explains, or, "I need her to be from a place other than Las Vegas in order to underscore the transient nature of the city." Fingal finds seven fabrications in the first sentence alone.

Nor do these inventions relate only to Presley's life and death, as bad as that would be, or to incidental details like the number of strip clubs in the city. "Native Americans," D'Agata writes, "once tended to kill themselves more often than any other group, but then, fifteen years ago, stopped killing themselves significantly." The second half of that sentence (aside from being poorly written) is, as Fingal discovers, entirely false. Suicide rates among Native Americans did not change significantly



during the period in question and remain much higher than among the U.S. population as a whole. D'Agata appears untroubled by the prospect of purveying misinformation about an entire racial group.

And when he isn't cooking quotes or otherwise fudging the record, he is simply indifferent to issues of factual accuracy, content to rely on a mixture of guesswork, hearsay, and his own rather faulty memory. "There are always nine Muses alive at any time," he solemnly explains, as if a new one were appointed when one of the incumbents (who are immortal deities, of course) passed away—you know, kind of like the Supreme Court. When Fingal reports that the verses D'Agata describes as having been graffitied on a bridge in Magic Marker are in fact formally inscribed in the concrete—official public art, not a scrawl of countercultural rebellion—D'Agata gives a verbal shrug: "OK, I may have imagined the magic marker."

It is a rare instance, on his part, of temperate behavior. His rejoinders are more commonly a lot more hostile—not to mention juvenile ("Wow, Jim, your

penis must be so much bigger than mine"), defensive, and in their overarching logic, deeply specious. He's not a journalist, he insists; he's an essayist. He isn't dealing in anything as mundane as the facts; he's dealing in "art, dickhead," in "poetry," and there are no rules in art. Besides, he says, to think,

## For the self-appointed curator of an entire genre, D'Agata shows a stunning paucity of literary judgment.

like journalists and other writers of so-called nonfiction, that you can "find" the "facts" is as delusory as thinking that you can find God.

When Fingal points out that D'Agata, far from revealing the meaning of Presley's life by sifting through its particulars, is inventing and imposing his own meanings on it—this is during an exchange about tae kwon do, which Presley practiced and for which D'Agata concocts an elaborate originary legend involving an "ancient Indian

prince"—D'Agata replies that there is something between history and fiction. "We all believe in emotional truths that could never hold water, but we still cling to them and insist on their relevance." The "emotional truths" here, of course, are D'Agata's, not Presley's. If it *feels* right to say that tae kwon do was invented in ancient India (not modern Korea, as Fingal discovers it was), then that is when it was invented. The term for this is *truthiness*.

Yet D'Agata, as Fingal notes, is not presenting Presley's story to the reader as something that has been "poetically embellished" (Fingal's phrase), or as the chronicle, as D'Agata insists, of his own search for meaning. He is presenting it as a work of nonfiction. D'Agata clearly wants to have it both ways. He wants the imaginative freedom of fiction without relinquishing the credibility (and for some readers, the significance) of nonfiction. He has his fingers crossed, and he's holding them behind his back. "John's a different kind of writer," an editor explains to Fingal early in the book. Indeed he is. But the word for such a writer isn't *essayist*. It's *liar*.



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**D**ON'T ASK ME why this book was ever published. What I can tell you is that D'Agata brings the same regard for truth, and for his readers, to the anthologies. The headnotes that preface each selection offer not only a theory of the essay but also a running commentary on the history of literature, art, and the world, as well as introductions to the pieces in question. The selections are arranged by year, and are sometimes given context with enumerations of a few of the events of the year. The procedure is odd for someone with so little respect for facts (including the possibility that they can even be established), but what isn't odd is how consistently D'Agata bungles, garbles, or simply falsifies them.

We haven't gotten six lines into the first headnote of the first anthology before we read that in 1975, "we are on the moon, again, for the eighteenth time." There were six lunar landings, the last in 1972. D'Agata's headnote to A.D. 105, introducing a selection from Seneca, confuses the emperor Trajan, who conquered the Dacians that year, with Nero, Seneca's pupil. Seneca was

long since dead by A.D. 105, as was Pliny, whose work D'Agata mentions as having begun in the wake of Trajan's conquest.

And so it goes throughout the collections. D'Agata misquotes the first line of E. B. White's "Once More to the Lake" (adding an entire word) on the page that

## What distinguished Montaigne's new form was that it was scrupulously investigative.

faces the correct version. He tells us that the middle class was born around 1860, several centuries late, and that radio telescopes were invented to receive signals from extraterrestrials. He marvels that the computer could have been invented during the "turmoil" of World War II, oblivious to the fact that it was invented *because of* World War II. His headnote to the selection for 1997 mentions six events. Two did not occur that year, and a third did not occur as he implies. One of those mistakes concerns the piece the headnote introduces. "In this year,"

D'Agata says, "David Foster Wallace turns his fact-obsessed attention to the Illinois State Fair." "Ticket to the Fair" was published in 1994 and reported, as it says in its opening line, in 1993.

But the more important pratfalls are the literary ones. For the self-appointed curator in chief of an entire genre, D'Agata shows a stunning paucity of literary judgment, even of literary knowledge. He labels a sentence by Jonathan Edwards a run-on when it is merely long and complex. He claims a prose poem by James Wright "scans perfectly" (consists, that is, of perfect iambic pentameters), when its very first unit ("Deep into spring, winter is hanging on") manifestly does not. He asserts that it is "hard to imagine" that British readers understood that "A Modest Proposal," which advocates the eating of babies, was meant ironically—this in the golden age of English satire, no less—because, among other things, Sir Isaac Newton, "the smartest person in the world," had recently calculated the exact date of Armageddon. (No, I don't get it either.) D'Agata brings to mind the kind of undergraduate who seizes on a single fact, innocent of its context, and builds upon

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it an entire, inane idea. Natalia Ginzburg wrote economical prose because she lived "under the confines of Italian fascism," he tells us, and in the course of misquoting, mischaracterizing, and generally misconstruing a passage from "Urn Burial," he notes that its author, Sir Thomas Browne, one of the great rhetoricians of the 17th century, "does not believe in the efficacy of rhetoric."

**T**HE POINT OF all this nonsense, and a great deal more just like it, is to advance an argument about the essay and its history. The form, D'Agata's story seems to go, was neglected during the long ages that worshiped "information" but slowly emerged during the 19th and 20th centuries as artists learned to defy convention and untrammel their imaginations, coming fully into its own over the past several decades with the dawning recognition of the illusory nature of knowledge.

It takes a lot of hammering and bending to try to get this argument to fit reality. D'Agata's claims about the conventional essay, to start with, are ludicrous—for example, that as late as 1960, "essayists who are trying to offer more than information are still not being recognized as practitioners of the form." (Woolf? Emerson?) Or that essays have a tendency "to dilute a potent image by dissecting it, inspecting it, and explaining it away"—a claim, like many, that he seems to make up on the spot. Most delectable is when he speaks about "the essay's traditional 'five-paragraph' form." I almost fell off my chair when I got to that one. The five-paragraph essay—introduction, three body paragraphs, conclusion; stultifying, formulaic, repetitive—is the province of high-school English teachers. I have never met one outside of a classroom, and like any decent college writing instructor, I never failed to try to wean my students away from them. The five-paragraph essay isn't an essay; it's a paper.

D'Agata's running argument about the essay is also where the lies come in, though they aren't as blatant as they are in *The Lifespan of a Fact*. He slips the word *essay* into his translation of Petrarch's account of the poet's ascent of Mont Ventoux, written more than two centuries before Montaigne coined the word. He undoubtedly knows that the term *nonfiction* was not invented around 1950,

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but that is when it lost its hyphen, and that's presumably excuse enough. He informs us, in his chip-on-the-shoulder way, that something called *The Directory of American Writers* began publication in 1993, but that authors could qualify only with credits in poetry and fiction. I have searched for that title and failed to find it. What I have found (feeling a lot like Jim Fingal) is *A Directory of American Poets and Fiction Writers*. But the fact that essayists are excluded from such a resource does not make for much of a story. I wouldn't trust a thing this person says.

Yet the worst of it, and the clue to what is finally so bad about D'Agata's whole misbegotten project, is what he does, in introducing them, to so many of the selections themselves. He tries to make them over in his own image. "Knowledge—real knowledge—is problematized the moment we start trying to nail it down," he says in his preface to Gay Talese's "Frank Sinatra Has a Cold," a straightforward piece of reportage in which knowledge is never problematized and most efficiently nailed down. Jonathan Edwards, we are told, "obey[s] the rules" of the Puritan plain style "so that he might later break them," as if the hellfire preacher were a student in art school. Of the 16th-century Spanish missionary Bernardino de Sahagún's monumental ethnography of the Aztecs, compiled over more than 40 years, D'Agata asserts, with eye-popping chutzpah, that "it's unlikely that the book's point is the accuracy of its data." ("I think the point," he moistly adds, "is song.") Socrates, D'Agata confides, "was an essayist." Yes, Socrates, who not only never wrote anything but famously rejected writing altogether, and whose disciples, when they came to make a record of his words, created dialogues, not essays—as they hardly could have, given that the form did not exist in ancient Athens.

The appropriation goes beyond what's said in any given headnote, though. D'Agata's trilogy, by its very nature, misrepresents almost every piece it includes. When he refers to his selections as essays, he does more than falsify the essay as a genre. He also effaces all the genres that they do belong to: not only poetry, fiction, journalism, and travel, but, among his older choices, history, parable, satire, the sermon, and more—genres that possess their own

particular traditions, conventions, and expectations, into and against which the pieces in question were written. By ignoring all this—by ignoring the actual contexts of his selections, and thus their actual intentions—D'Agata makes the familiar contemporary move of imposing his own conceits and concerns upon the past. That is how ethnography turns into “song,” Socrates into an essayist, and the whole of literary history into a single man’s “emotional truth.”

**T**HE HISTORY OF the essay is indeed intertwined with “facts,” but in a very different way than D'Agata imagines. D'Agata's mind is Manichaean. Facts bad, imagination good. Commerce bad, art good. Reason, data, scholars, critics, scientific knowledge: bad, bad, bad, bad, bad. What he fails to understand is that facts and the essay are not antagonists but siblings, offspring of the same historical moment. But to see as much, one needs to recognize that facts themselves have a history.

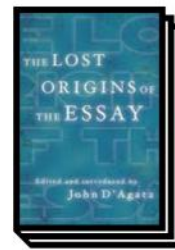
Facts are not just any sort of knowledge, such as also existed in the ancient and medieval worlds. A fact is a unit of information that has been established through uniquely modern methods. *Fact*, etymologically, means “something done”—that is, an act or deed—a sense that still survives in phrases like *accessory after the fact*. It was only in the 16th century—an age that saw the dawning of a new empirical spirit, one that would issue not only in modern science, but also in modern historiography, journalism, and scholarship—that the word began to signify our current sense of “real state of things.”

It was at this exact time, and in this exact spirit, that the essay was born. What distinguished Montaigne's new form—his “essays” or attempts to discover and publish the truth about himself—was not that it was personal (precursors like Seneca also wrote personally), but that it was scrupulously investigative. Montaigne was conducting research into his soul, and he

was determined to get it right. His famous motto, *Que sais-je?*—“What do I know?”—was an expression not of radical doubt but of the kind of skepticism that fueled the modern revolution in knowledge. A generation later, Galileo turned his telescope upon the outer world. Montaigne aimed his instruments within. It is no coincidence that the first English essayist, Galileo's contemporary Francis Bacon, was also the first great theorist of science.

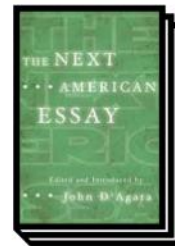
That knowledge is problematic—difficult to establish, labile once created, often imprecise and always subject to the limitations of the human mind—is not the discovery of postmodernism. It is a foundational insight of the age of science, of fact and information, itself. “The life span of a fact is shrinking” goes the fuller version of the phrase. D'Agata heard it, he tells us in the trilogy, from a famous biologist, but he clearly failed to catch its meaning. The point is not that facts do not exist, but that they are unstable (and are becoming more so as the pace of science quickens). Knowledge is always an attempt. Every fact was established by an argument—by observation and interpretation—and is susceptible to being overturned by a different one. A fact, you might say, is nothing more than a frozen argument, the place where a given line of investigation has come temporarily to rest.

Sometimes those arguments are scientific papers. Sometimes they are news reports, which are arguments with everything except the conclusions left out (the legwork, the notes, the



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triangulation of sources—the research and the reasoning). And sometimes they are essays. When it comes to essays, though, we don't refer to those conclusions as facts. We refer to them as wisdom, or ideas. And yes, they are often openly impressionistic and provisional, colored by feeling, memory, and mood. But the essay draws its strength not from separating reason and imagination but from putting them in conversation. A good essay moves fluidly between thought and feeling. It subjects the personal to the rigors of the intellect and the discipline of external reality. The truths it finds are more than just emotional.

If you want to get a sense of what the process looks like, read Phillip Lopate's anthology, or Joyce Carol Oates's, which between them offer just about every relevant

selection in D'Agata's trilogy (or better ones by the same authors), plus a great many more. But those are older books, and I fear D'Agata now commands the field, if only by dint of claiming it. No doubt one or more of his anthologies are being used as college texts, imposed on students who, in many cases, are bereft of other sources of cultural information. It kills me to think that there are going to be people walking around who believe that Socrates was an essayist because a self-important ignoramus named D'Agata told them so. Honestly, can't we do better than this? **A**

*William Deresiewicz is the author of Excellent Sheep: The Miseducation of the American Elite and the Way to a Meaningful Life.*

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## THE BIG QUESTION

Q:

## Who Is the Worst Leader of All Time?

**Matthew Karp, author, *This Vast Southern Empire***

The bad leader I know best is **Jefferson Davis**. He embraced America's deadliest conflict, over the right to own people as property, and by the end of it, he had earned the hatred of almost everyone involved, including his fellow people-owners. But c'mon, the answer is **Hitler**. It has to be Hitler.

**Laurence Leamer, author, *The Price of Justice***

I was thinking of Dan Snyder, the owner of the Washington Redskins, when the goofy, smiling face of **President George W. Bush** appeared out of nowhere. Bush's invasion of Iraq was responsible for the deaths of hundreds of thousands and the displacement of millions, was a major

factor in the dismemberment of nation-states, and the tally goes on.

**Teresa Shawcross, history professor, Princeton**

There were the bad and the mad—Nero, Caligula—and then there was **Romulus Augustus**. Named after the founders of Rome and the Roman empire, he surrendered to the barbarians. Contemporaries called him the “little disgrace.” Hard to imagine a more ineffectual ruler than the youth remembered as the last emperor.

**Chris Cuomo, co-host, CNN's *New Day***

**The devil**, for appealing to the weakness in human nature, disconnecting people from the basic love of one another in order to secure a leader's power over them. Look at **Pol Pot, Idi Amin, Adolf Hitler**—different times and places, but they all share that diabolical influence.

**Bryan Safi, co-host, *Throwing Shade* podcast**

**Ronald Reagan**. Tens of thousands of gay men were wiped off the map simply because he refused to speak, much less act. What's worse than ignoring a national health crisis while you stuff your face full of jelly beans and your wife reads her horoscope in the next room?

## READER RESPONSES

**Gerald Bazer, Toledo, Ohio**

**Neville Chamberlain:** “Peace for our time” led to World War II and millions of civilian and military casualties.

**Dan Fredericks, Janesville, Wis.**

Few can compare to the enigmatic **Napoleon Bonaparte**, whose grandiose, ambitious foreign policies and epic military blunders ultimately

led to the collapse of the first French empire.

**Ahmad Alsaleh, Edinburgh, U.K.**

**Nicholas II**, the last emperor of Russia, took a reasonably functioning country and left it vulnerable to radical revolutionaries. He lost the war with Japan and was losing his side of World War I. His misjudgment allowed Rasputin to become influential. That was a huge mistake.

**Michael J. Nighan, Rochester, N.Y.**

The worst leader would be **Kaiser Wilhelm II**, whose decision to back Austria-Hungary against Serbia led to World War I, which in turn led to World War II, which then led to the atomic and hydrogen bombs and the Cold War. **A**

Want to see your name on this page? Email [bigquestion@theatlantic.com](mailto:bigquestion@theatlantic.com) with your response to the question for our April issue: **What is the most significant fad of all time?**





# City in the Cloud

INSIDE:

## SOLUTIONS FOR THE DATA-ENABLED CITY

How Technology Is Cutting Through the Noise

INCLUDING:

Fighting Drought in  
California and Floods  
in Singapore

Preventing Crime  
in the Cloud

MOBILIZING  
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## Saving Our Water

The population explosion promises only greater pressure on the planet's already strained resources, none more critical than water. In a time of climate change, with droughts and floods increasing, many cities have turned to cloud-based analytics, fed by data-collecting sensors throughout their water supplies. During California's drought, San Francisco reduced water usage by 25 percent thanks to a new system of sensors and cloud-based analytics, and Singapore, which has to combat floods as well as shortages, has managed both more efficiently by giving residents similarly structured data through a smartphone app. Most city dwellers are projected to have smartphones by the time population peaks, and by that time mobile solutions will be far more robust and even more useful.

## 24/7 Education

Cities' future public-education systems will be taxed as never before by larger, more diverse student populations as well as a need for more teachers and learning tools. The Al Amal School for Deaf Students in the United Arab Emirates is already addressing those problems with such cloud-based solutions as interactive, self-teaching tools for use in the classroom, at home, and everywhere else. Cicero public schools, in Illinois, are teaching English to their Spanish-speaking majority through tablets loaded with cloud-based, interactive ESL programs that stay with students full time. And thanks to another data-analytics solution powered by the cloud, Tacoma, Washington, brought its high-school graduation rate from 55 percent, 26 points below the national average, to 82.6 percent, just above it. It did that in just five years, thanks to a system that

# 27.6%

Tacoma, Washington, schools were able to raise the graduation rate 27.6 percent in just five years thanks to a cloud-based machine-learning platform.

put schools' historical data—grades, attendance, behavior, health, and so on—through a cloud-based machine-learning platform that identified key correlations to dropout rates. Early interventions based on those data made all the difference.

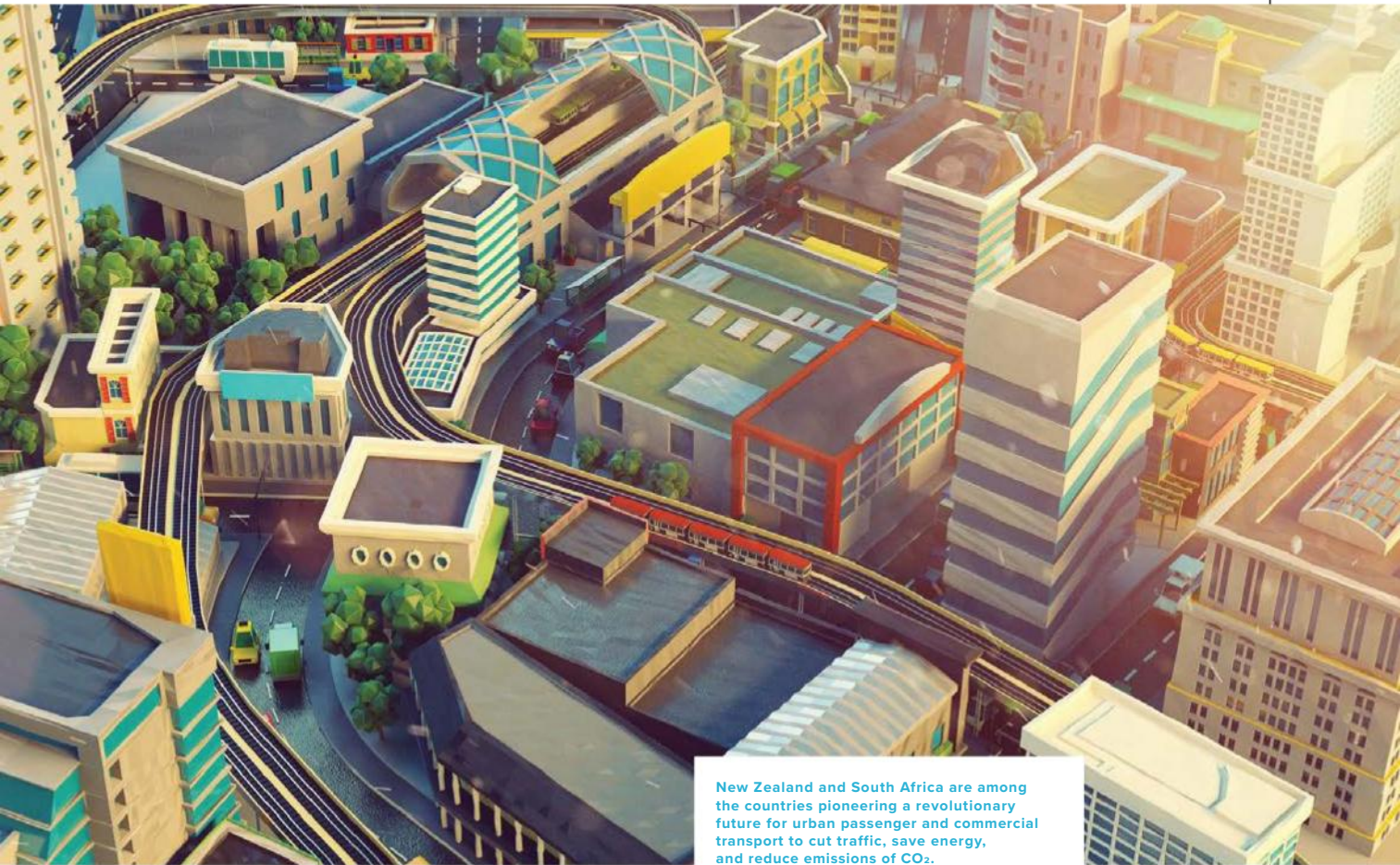
## 360° Health Care

Densely packed cities will encourage accelerated disease outbreaks, and the over-60 population, which is growing at a rate 3.5 times faster than that of the general population, will tax health-care services as never before. Cloud-based technology can help solve those problems and others. Data on entire populations, driven through predictive analytics, are already speeding health care to people in need before they need it, cutting future hospital visits and slowing the rise of health-care costs. In Toronto, where 20 percent of patients undergoing hip and knee replacement got no relief following surgery, cloud-based analytics are improving both outcomes and recovery time. The Mississippi Department of Mental Health and other health-care agencies are using cloud-based mobile apps to connect patients and providers as a way of monitoring recovery and obtaining early-warning signs of relapse or new health issues. Cloud solutions for telemedicine are improving health care for low-income and at-risk populations in cities from Seattle to Toronto. All these uses for cloud-based analytics could someday yield an arsenal of structured data capable of predicting and responding to population-health problems anywhere in the world.

## Clean Transportation

Transportation systems are quickly overrun by population growth, and foresighted city leaders from Cape Town, South Africa, to Brampton, Ontario, are already deploying cloud-based apps to reduce traffic congestion and get more people onto city buses and trains. Some of the solutions are incremental—for example, a cloud-based payment system that lets passengers into the London Underground with just the wave of a wallet.





New Zealand and South Africa are among the countries pioneering a revolutionary future for urban passenger and commercial transport to cut traffic, save energy, and reduce emissions of CO<sub>2</sub>.

Learn more about this story and others at the "City in the Cloud" interactive experience.

Others are massive. Auckland, New Zealand, is building a \$1.65 billion underground subway system on the back of a cloud-based platform that gives engineers and city planners access to everything from design plans and construction files to financial and legal documents. Eight million people in the Paris metro area share a cloud-based electric-car-sharing program that by 2023 will have replaced 60 million gas-fueled commuter trips and cut 75 metric tons of CO<sub>2</sub> from the atmosphere.

## Data vs. Crime

The dashboard- and body-mounted cameras increasingly in use by U.S. police departments clearly deter crime. Charleston's crime rate has dropped by 70 percent since it started using body cameras nine years ago. That could happen only because of a cloud-based platform capable of structuring the massive amount of data those cameras produce. Miami-Dade's department has 1,000 cameras in the field now, as well as a cloud-based community-policing app that lets any citizen with a smartphone send an alert

directly to headquarters. Along with safer streets, cloud solutions are helping to make prisons safer in Illinois, speeding up forensic work in Colorado, and prompting quicker response to natural disasters and crimes in San Bernardino. In these and other cities, the transparency and real-time communication between citizens and law enforcement that such cloud-based solutions provide will make the world's cities as safe as cities can be—and keep police departments and the citizens they protect on the same side.

These cloud- and IoT-based innovations as well as others yet to be imagined will be critical for reinventing the world's cities. In a time of climate change and global population growth, there is no better proof that invention follows from necessity. ☁

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