

The Atlantic

**What Really Killed
the Dinosaurs?**

BY BIANCA BOSKER

**How *Lolita*
Seduces Us All**
By Caitlin Flanagan

HOW ICE WENT ROGUE

Inside America's
Unfolding
Immigration
Crisis

BY FRANKLIN FOER



The Subversive
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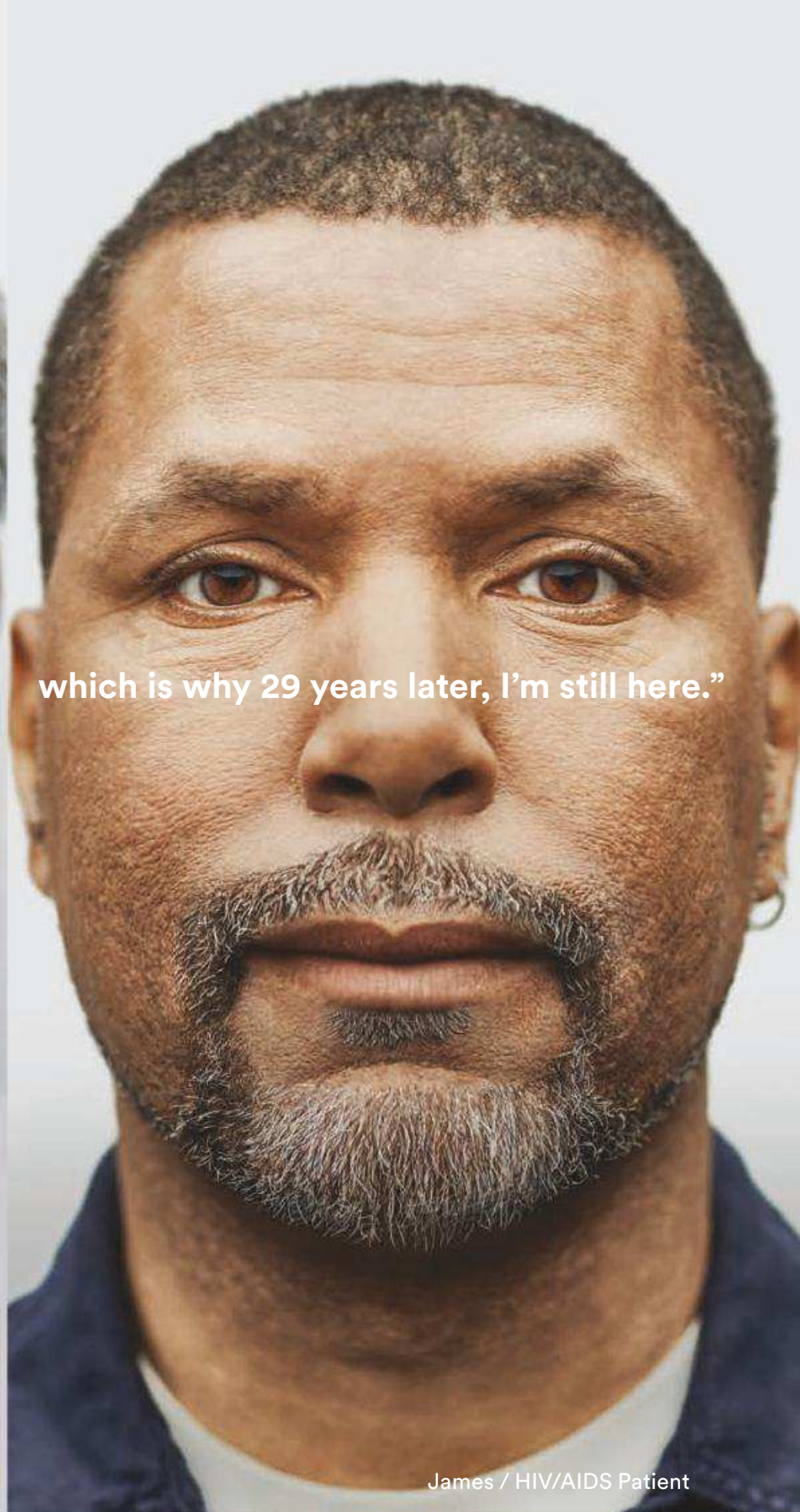


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CONTENTS | SEPTEMBER 2018

VOL. 322-NO. 2

Features



44 What Really Killed the Dinosaurs?

BY BIANCA BOSKER

A Princeton geologist has endured decades of ridicule for arguing that the fifth extinction was caused not by an asteroid but by a series of colossal volcanic eruptions. Her fight with the asteroid camp may be the nastiest feud in all of science.

As Gerta Keller has steadily accumulated evidence to undermine the asteroid hypothesis, the animosity between her and her critics has only intensified. Put them in a room together, and "it may be World War III," one geochemist says.

COVER STORY

56 How ICE Went Rogue

BY FRANKLIN FOER

A long-running inferiority complex, vast statutory power, a chilling new directive from the top—inside America's unfolding immigration tragedy

72 Your Lying Mind

BY BEN YAGODA

Are we hardwired to delude ourselves? Those who study cognitive bias seem to think so. They disagree on whether we can do much about it.

82 May It Please the Court

BY LARA BAZELON

In more than a decade as a trial lawyer, I've watched male attorneys rely on courtroom tactics that are off-limits to women.

Dispatches

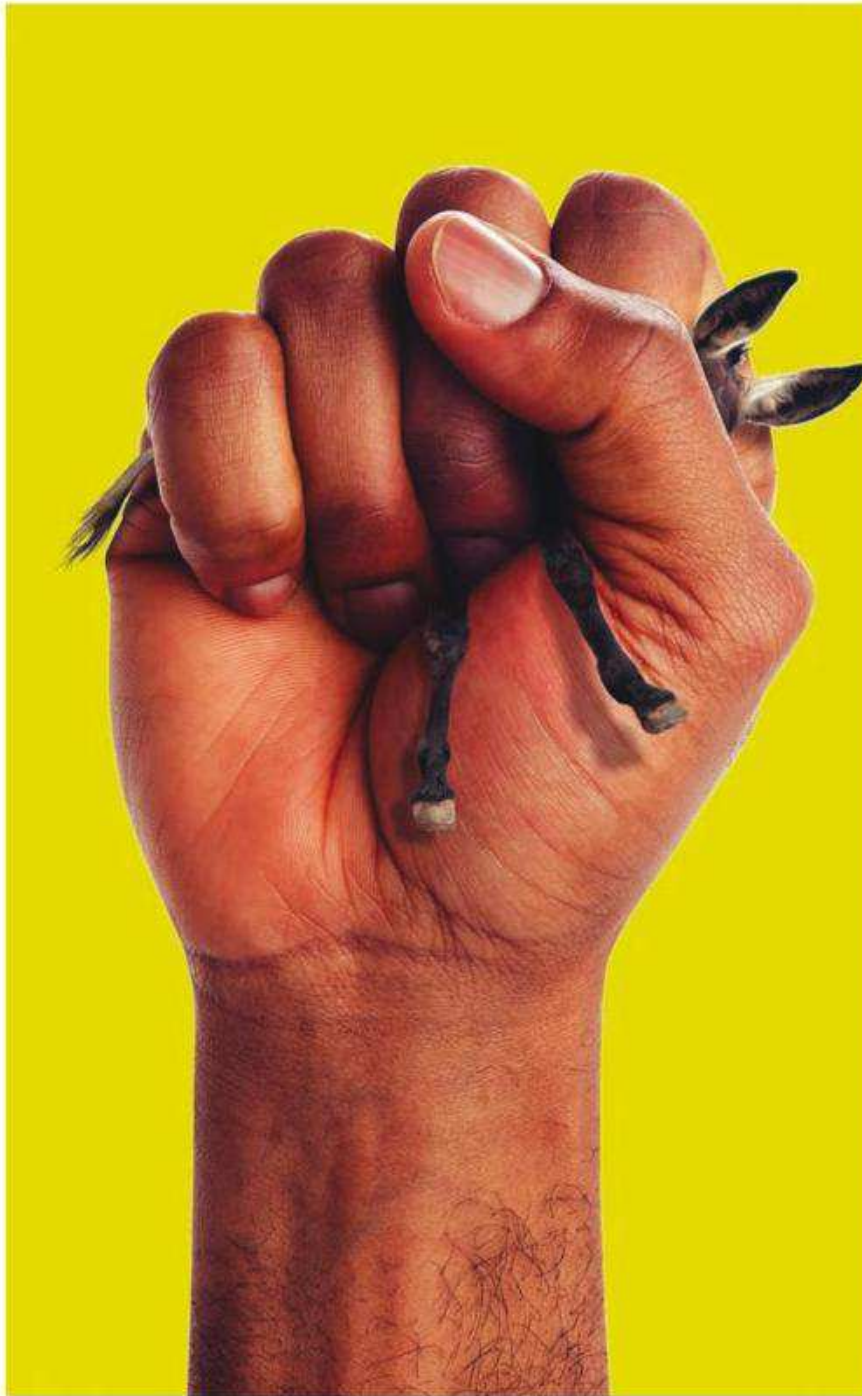
15

POLITICS

The Next Populist Revolution

BY REIHAN SALAM

Establishment Democrats believe that poor immigrants and their children will be part of an emerging majority. They could be very wrong.



STUDY OF STUDIES

24 Make Old Friends

BY BEN HEALY

How to build lasting ties

BUSINESS

26 The Secrets in Your Inbox

BY FRANK PARTNOY

Employee emails contain valuable insights into company morale—and might even serve as an early-warning system for uncovering malfeasance. Bosses are taking an interest.

BIG IN ... AFGHANISTAN

28 Facebook Fake-outs

BY MAIJA LIUHTO

Why some men are pretending to be women online—and vice versa

TECHNOLOGY

20 Thanks for the Memories?

BY ANNA WIENER

For the past 13 years, I've given Facebook my photos, my videos, my likes, and untold hours of my time. Sifting through the detritus was amusing and surprising—and weirdly sad.

SKETCH

22 The Minister of Self-Defense

BY GRAEME WOOD

John Correia, the most popular gun educator on YouTube, wants you to prepare for the worst day of your life.

Departments

8 The Conversation**100 The Big Question**

Whose untimely death would you most like to reverse?



On the Cover



Illustration by
Justin Metz

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THE FUTURE ACCORDING TO NOW
SEASON 2

LOOKING TO TOMORROW FOR A SMARTER TODAY

Episode Spotlight



5

**Status: Your
Package
is Trying to
Find You**

13 min. 20 sec.



KEEPING UP WITH THE LATEST

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up; you have to determine which innovations offer potential opportunities.

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This season on *The Future According to Now*, we explore nine key sectors facing technological disruption, and the potential investment opportunities within them.

Digital health tech is poised to deliver a new era of medical treatment. 5G-enabled applications are blending our cyber and

physical worlds. Even the way we think about our addresses is undergoing a seismic shift as groundbreaking advances revolutionize every aspect of our lives.

The future holds a lot of promise—just not always in the ways you might expect. ■

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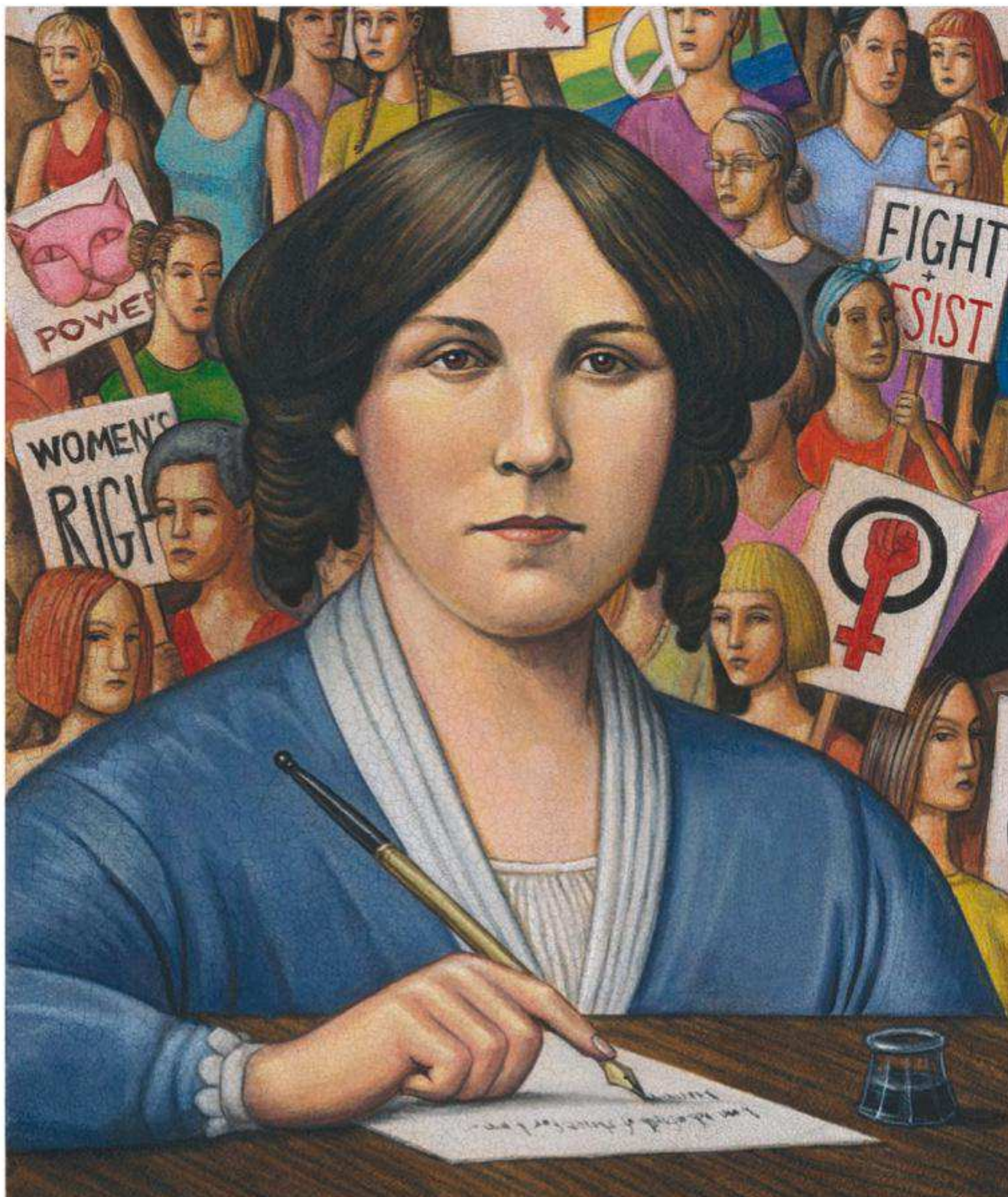
IN THE NEXT FEW YEARS, shipments from online purchases are set to almost double across the globe. But the success of e-commerce in emerging markets hinges on solving a major logistical problem: the nearly four billion people without addresses. In this episode, we talk to those transforming the way we think about location—and an investment expert who's tracking these innovations.

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*The Culture File**Poetry***34** BOOKS**The Lie of *Little Women***

BY SOPHIE GILBERT

Subversive secrets lurk in the gap between Louisa May Alcott's real life and the story she tells.

**36** Providence

BY CARL DENNIS

*Essay***90** How Poetry Came to Matter Again

BY JESSE LICHTENSTEIN

A young generation of outsiders in America has found itself on the inside, winning prizes and acclaim with ambitious debuts.



THE OMNIVORE

30 How *Lolita* Seduces Us All

BY CAITLIN FLANAGAN

A new book about a terrible crime sheds light on the novel's enduring allure.

BOOKS

38 The Whale, Surveilled

BY REBECCA GIGGS

What high-tech tracking of the huge creatures reveals about them—and us

BOOKS

41 Who Gets to Claim Kafka?

BY ADAM KIRSCH

A court battle between German and Israeli archives over his manuscripts raised literary, not just legal, questions.

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• THE CONVERSATION

The Birth of a New American Aristocracy

In June, Matthew Stewart wrote about the gilded future of the top 10 percent—and the end of opportunity for everyone else.

I am moved to write simply because I find Mr. Stewart's cover story one of the best-written, best-reasoned, and most important pieces of journalism I have read in many years. As a longtime citizen of the author's hometown, I have sometimes prided myself on not being a member of the

9.9 percent, unlike many of my neighbors. However, having lived, worked, and been educated among them, I have enjoyed the same lifelong perks and privileges as the new aristocracy.

Over the years a certain gnawing, insistent voice has whispered to me that I, too,

have gamed the system to the exclusion of many I knew when I was young. Now there can be no doubt about my complicity with the 0.1 percent.

Paul R. Constantino
BROOKLINE, MASS.

I think the lack of a military draft since 1973 has con-

tributed to the acceleration of class separation in American society. Remember the days when the likes of John F. Kennedy could serve alongside and develop relationships with people from various socioeconomic levels? Americans have not had that kind of class intermingling for decades.

I don't understand why the idea of mandatory national service does not get more consideration. National service could take many forms and be used as an avenue to education, while giving young people a chance to see how the other half lives.

James Mason
WOODBURY, MINN.

While I certainly appreciate the threat to American society posed by extreme income inequality and the hoarding of cultural capital by the 9.9 percent, I wonder whether gendered and racial aspects of the conversation are being overlooked.

For example, Mr. Stewart's discussion about how "assortative mating" today consolidates social and educational capital by pairing up highly educated people with each other seems to overlook how recently women like me have even had such capital to hoard and pass on to our children.

Women were not admitted to most Ivy League schools until the 1960s (or later). As to race, according to *The Harvard Crimson*, until the 1970s, Harvard admitted fewer than 12 black undergraduates each year. The current freshman class, by contrast, is the most diverse in Harvard's history and the first majority-minority class by a whisker. In my own Ivy League class's Facebook group, it is the minority alumni who are often most passionately against abolishing legacy admissions, seeing such a move as an attempt to deny

them the same opportunities to pass on the social and educational capital they have accrued.

LeeAnn Einert Deemer
MENDHAM, N.J.

I found the way that Matthew Stewart referred to the 9.9 percent as *we* cringeworthy. Also cringeworthy is the notion of the 9.9 percent lauding the 0.1 percent. He assumes that everyone is as anxious as he is to maintain a privileged status. He speaks of education as a means to an end in strictly monetary terms. What about the people whose sole purpose in life isn't financial success? What about those who are literate enough to read *The Atlantic* but who aren't in the 9.9 percent?

Mikaela Kraus
TORONTO, ONTARIO

Matthew Stewart tells us that 9.9 percent of Americans possess nearly 60 percent of U.S. wealth. But the real situation is that the top 1 percent controls about 40 percent of U.S. wealth, and the next 9 percent control another 40 percent. Is it really so terrible that this country has a small professional class (9 percent of Americans) whose members own approximately four times as much as they would if wealth were

Quote of the month

"[A] thought-provoking analysis ... about how economic inequality in America isn't just growing, but self-reinforcing—and what that means for education, health, happiness, even the strength of our democracy."

— **Barack Obama**

in a Facebook post on his reading list, citing "The Birth of a New American Aristocracy"

equally distributed in the United States?

The reality is that the \$1.2 million in assets required to enter this villainous class doesn't go very far in the cities where the villains are concentrated. In Washington, D.C., it will buy you a very narrow rowhouse on Capitol Hill and a college education for two kids (with precious little left over for retirement). The other reality is that despite this, most of us 9 percenters feel just as guilt-ridden as Stewart would like us to feel—that's why we read *The Atlantic*, after all. This magazine does nothing but tell its readers how awful we all are, and we clearly never get tired of hearing it.

Bronwyn Bruton
WASHINGTON, D.C.

"The Birth of a New American Aristocracy" is predicated on the assumption that wealth inequality is a bad thing. Yet the only real negative characteristic Matthew Stewart cites is a tendency for wealth to breed resentment.

Perfect equality is neither possible nor desirable, and it is incompatible with freedom because individual actions will quickly result in differences between people. Perhaps the real problem is

those who—usually for political ends—feed the negative sentiment of envy.

Walter Cuje
LITTLE SILVER, N.J.



How the Enlightenment Ends

Human society is unprepared for the rise of artificial intelligence, Henry Kissinger argued in June—philosophically, intellectually, in every way.

I was dismayed to read former Secretary of State Henry Kissinger's article joining the chorus warning against a future shared by humans and advanced artificial intelligence.

Mr. Kissinger and the rest of the chorus are of course correct that technical development and discussions about AI safety and risks should be top priorities. Fortunately, many smart, thoughtful efforts are already addressing that priority.

What if we applied brilliant AI tools to our biggest problems? Might we be able to combine human and AI genius, and together come up with what would otherwise have taken centuries of iterative human work? Could AI be the breakthrough we need to get to the next levels of understanding, expansive thought, and self-awareness?

Billions of years of evolution and modern-day capitalism have made us think that

competition is the default relationship between any two things, especially things as different as humans and machines. We fail to imagine a world that could prioritize harmoniousness over all else.

AI is the future, and we would do better to thoughtfully and enthusiastically embrace its potential.

Bryan Johnson
VENICE, CALIF.

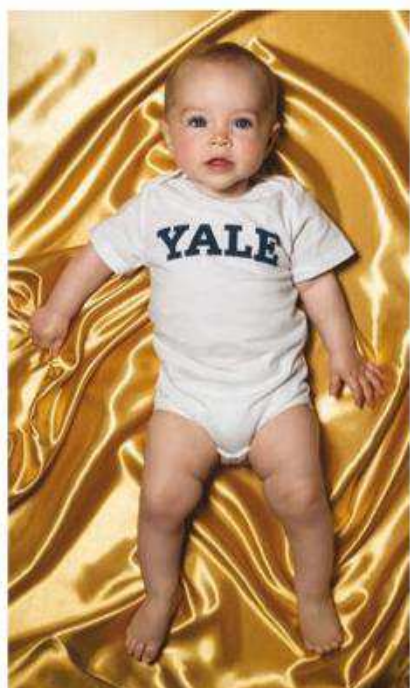
I have rarely, if ever, agreed with Henry Kissinger or his political philosophy, but his article was insightful, thought-provoking, and spot-on. The concerns he raises are precisely the answer to those who dismiss liberal-arts education as an anachronism in 21st-century America. The metaphysical questions surrounding AI are way too important to be left to technocrats or the marketplace. Every computer scientist, engineer, and entrepreneur should be exposed to the kind of classical training that fosters informed contemplation of such deep and difficult issues.

Deborah A. Sivas
ENVIRONMENTAL-LAW PROFESSOR,
STANFORD LAW SCHOOL
STANFORD, CALIF.

When Children Say They're Trans

In the July/August issue, Jesse Singal reported on the choices facing the parents of children who say they're transgender. How can these parents help their children gain access to the support and medical help they might need, he asked, while also keeping in mind that adolescence is, by definition, a time of fevered identity exploration?

I have a trans daughter. The facts clearly show that supporting my trans child is the most important thing I can do to avoid hurting her.



Without support, she is more likely to kill herself. I have already lost the son I thought I had. I feel grateful I still have a child—a very happy child who is finally being herself.

I fear she will regret medical intervention. I wouldn't want to deny my child the ability to have biological children and regret it later. But I'm confident we will figure it out together; she'll be happy with her life and the choices she makes. None of those choices has been made yet. She's 4; we have time to figure it out. But the way the article is written, I feel that Jesse Singal doesn't appreciate how important it is to get this right.

Singal steers the conversation to those who regret their mistakes and their surgery. This is not the norm, as the research shows. These are small pieces of a bigger story—a story of the struggle to exist, to be safe, and to be yourself.

Erik Ostrom
POULSBORO, WASH.

As a primary-care pediatrician and an advocate for children for 20-plus years, I've had the privilege of caring for more than 500 transgender/gender-diverse patients of all ages across the country. I practice medicine honoring both data and professional experience supporting the power of careful listening and encouragement of all patients in their authentic self. "When Children Say They're Trans" (for which Singal interviewed me) focuses on a small but potentially growing number of patients who explore gender and selfhood in ways that may not result in an adult transgender identity. As our knowledge of gender expands, outcomes and care options expand as well. This doesn't negate the role of exploring aspects of self, nor does it erase transgender/gender-diverse persons' need

for care that validates their gender identity.

Listening to young people is crucial to providing patient-centered care, encouraging authenticity, appreciating diversity, and modeling how to support some of our citizens who have little access to resources. We know what happens when transgender/gender-diverse patients are not heard, respected, and supported: higher experiences of anxiety, depression, substance use, HIV, socioeconomic disadvantage, and suicide.

That gender is complex, and is a highly individualized core element of identity, should be no surprise. That each child and adolescent should be recognized and respected for their authentic self just makes common sense. That feeling safe and loved, at home and in their community, is key to healthy outcomes for all children seems obvious, but is a responsibility and call to action that professionals and adults should not ignore.

Michelle Forcier, M.D., M.P.H.
PROVIDENCE, R.I.

There's something so glaringly obvious about the people Singal interviewed for his feature on detransitioning. Did you catch it? They're all alive.

In a 2015 study conducted by Pace, an LGBTQ mental-health charity, 48 percent of trans people under the age of 26 said they had attempted suicide. Additionally, 59 percent reported having considered it in the past year. For the sake of comparison, the Pace study also found that only 26 percent of cisgender people under the age of 26 had ever attempted suicide ...

In Singal's feature, he talks about how there's not a one-size-fits-all solution for what parents should do for their child if they're trans. He's

THE BIG QUESTION

On Twitter, we asked people to pick their favorite reader responses to July/August's Big Question. Here's how they voted.

Q: What book or article would you make required reading for everyone on Earth?



right. There's not. But he goes wrong when he creates fear that exploring a nonnormative gender identity might lead down roads that are dangerous, or fraught. Singal writes, "Some families will find a series of forking paths, and won't always know which direction is best."

No one can ever know which direction is best. That's part of living.

Robyn Kanner
EXCERPT FROM A POST ON
THEATLANTIC.COM

I came out as a transgender man at 38. That was two and a half years ago. After some initial skepticism, my mom and dad are now supportive of this change. I know how relieved they are that their sad, angry, hopeless child has finally found joy and success in adult life ...

I can't help thinking how much richer my relationship with them might have been if they'd had the benefit of raising me in a time when gender nonconformity, gender exploration, and trans identity were better understood. As much love as they feel, as hard as they try, they may never know me—really know me—more as their successful son than as the hapless, unhappy daughter they thought they had ...

Today so much more information is available about what gender-nonconforming kids need, for parents who are willing to learn. But I fear parents won't find that information in this story; they're more likely, it seems to me, to leave the piece questioning whether their child is really trans—especially if, like me, their child didn't experience gender



PIKEVILLE, Kentucky

When miners in the Appalachian Mountains started losing coal jobs, their career options were limited. Local businessmen Lynn and Rusty believed that, “A coal miner is just a tech worker who gets dirty,” so they started Bit Source — a software development company with the goal of training former miners to code. Rusty’s cousin worked in tech, so he returned home to begin teaching them the basics. As their capabilities grew, they used YouTube videos to learn new skills and programming languages. Today, Bit Source’s former miners are developing websites, web tools, and apps for clients across the country.

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THE CONVERSATION

dysphoria until adolescence, or if, like me, their gender nonconformity coexists with depression, anxiety, or other mental-illness symptoms. Kids today don't need to go through what I went through ... Parents can let their child know they will be just as loved whether they're a boy, a girl, or neither of those two. Instead of obsessing about the risks of a wrong medical choice, they can help their child understand the risks and benefits of every option, slowing them down if necessary but all the while guiding them toward well-informed decisions.

Evan Urquhart

EXCERPT FROM A POST ON
THEATLANTIC.COM

I found Jesse Singal's piece to be additive and life-affirming, rather than the "fearmongering" some critics have described. Reactions have tended to focus on how Singal's choice to draw attention to what remains, for now, only a small minority of gender-questioning individuals somehow misconstrues or distracts from the vast majority of people whose dysphoria was treated effectively by medical transition. But by highlighting the cases of people who aren't necessarily trans but whose identities are still, quite clearly, more complicated than "male" or "female," Singal doesn't undermine the trans experience so much as he affirms another experience.

As a person whose gender rebellion didn't require any medical transitions, I'm well aware of how frequently my specific experience is leveraged cheaply by conservative actors to "disprove" and

delegitimize trans stories that do involve hormones and surgery. Medical transition is, more often than not, an effective treatment for gender dysphoria. But this doesn't mean that unraveling the myth that men and women must look and act a certain way couldn't still function as its own kind of medicine. What I heard Jesse Singal asserting, contra the raft of reductive misreadings, was that the rush to avoid coming across as "anti-trans" sometimes prevents us from substantively interrogating what "trans" means on a more granular level. And I sincerely believe that, whatever flaws the piece might actually contain, Singal is absolutely right in this regard. While this interrogation will necessarily involve questioning the trans experience, it needn't take the form of outright skepticism.

The best way to hasten the eventual mainstreaming of gender nonconformity is to peek inside it with a magnifying glass—to inhabit the experience with sympathetic imagination.

Daniel Culbertson

SAN FRANCISCO, CALIF.

Jesse Singal responds:

Robyn Kanner is correct that there is nothing "fraught" about allowing a child to explore "a nonnormative gender identity." As I noted in my article, children and adolescents should be encouraged to engage in such exploration without judgment or stigmatization. What I do believe can be fraught, however, is the decision about whether a teenager should start cross-sex hormones. Over the long term, these hormones change the body, voice, and other aspects of the

person taking them, sometimes permanently. For the moment, while this treatment shows encouraging early signs of benefiting carefully diagnosed teenagers with persistent, severe gender dysphoria, there are little long-term data for those who begin this process during adolescence.

This doesn't mean adolescents shouldn't transition. But some detransitioners—not all—ultimately believe that physical



transition was not the right course for them. And many of the clinicians I spoke with described interactions with teenagers who were certain they required physical transition, then later came to feel differently. It can be difficult for parents to know how best to help children who experience gender dysphoria. But preventing a teenager who has been deeply dysphoric for an extended period of time from starting hormones (or puberty blockers) is not responsible—it can bring terrible consequences, including, as Kanner notes, a potential increase in the risk of suicide. Because different adolescents need different care—and because of the high stakes—I have come to believe that the sorts of comprehensive, compassionate assessment protocols favored by many of

the clinicians I interviewed will result in the best outcomes for the most teenagers.

Evan Urquhart is right that many parents harm their children by refusing to believe that they are "really" trans. But if parents decide to deprive their child of the resources they need to survive and thrive because of my article, they didn't read it very closely. Gender identity is complicated, and no one piece of information—including the age at which a transgender or gender-nonconforming child comes out—can alone reveal which path is best.

More broadly, my article has been criticized as a veiled attempt to scare parents into not letting their gender-dysphoric children and teens transition. That couldn't be further from its actual intent. In my interviews with clinicians, I marveled at the careful, thoughtful work they do, and at their commitment to getting adolescents the relief they need, including through physical transition. My reporting led me to believe that the best way to encourage parents and children to explore gender identity with an open mind is to have an honest discussion about this subject, and to not shy away from its complexity. Since my article appeared, one clinician I interviewed told me she's heard from parents around the country asking for her counsel. That outcome—one in which more parents understand the nuances of gender dysphoria and seek out the guidance of caring, qualified clinicians—is what I hoped to achieve.

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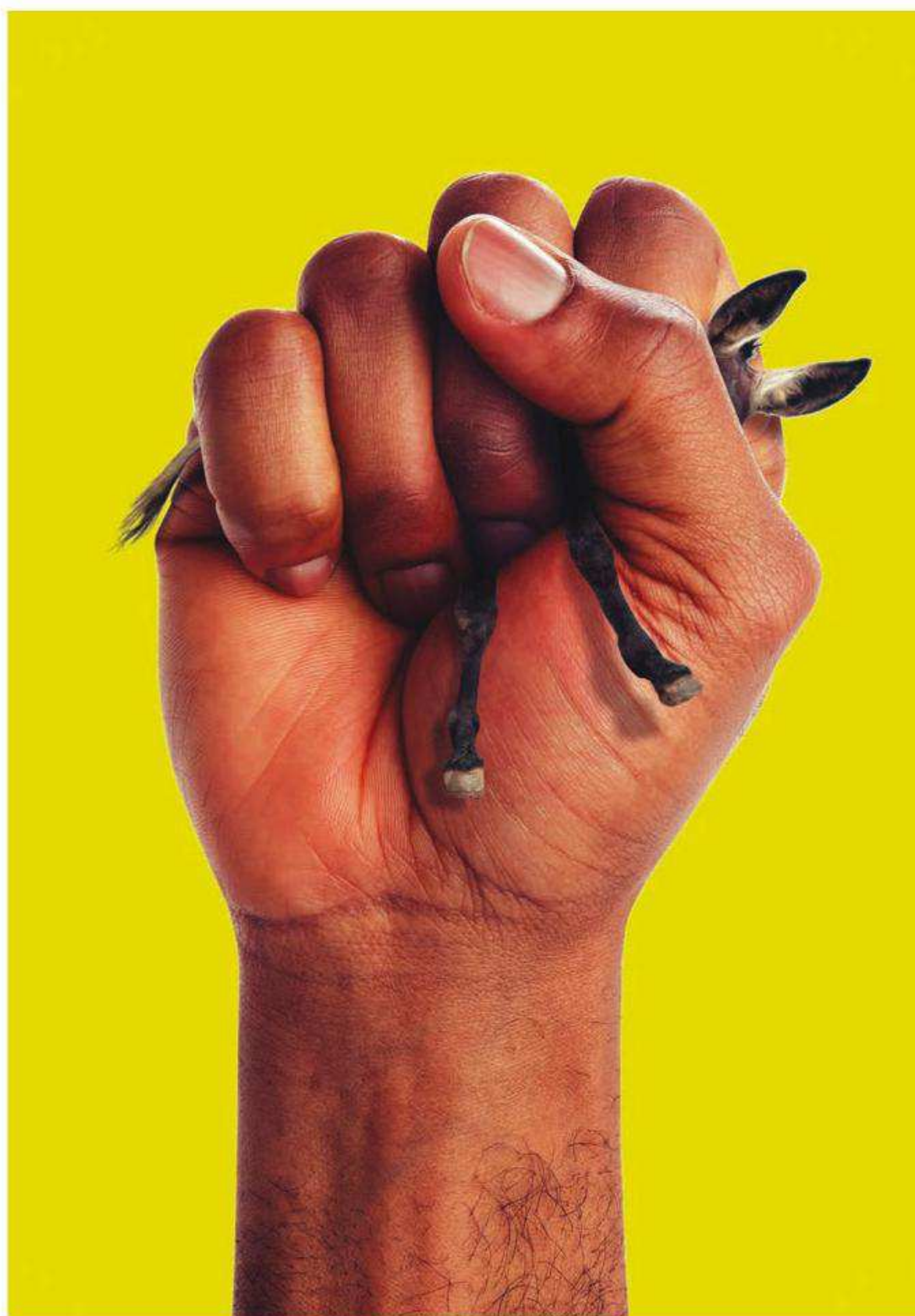
Facebook's Download Your Information tool didn't offer a coherent narrative. Instead, it presented a cascade of references, but few referents. "Digging the bonnet," a dorm hallmate posted in 2005. What bonnet? I wondered, full of remorse. "Shake that thing and violate it," a friend wrote a year later. What thing?
— Anna Wiener, p. 20



DISPATCHES

IDEAS & PROVOCATIONS

SEPTEMBER 2018



• POLITICS

THE NEXT POPULIST REVOLUTION

Establishment Democrats believe that poor immigrants and their children will be part of an emerging majority. They could be very wrong.

BY REIHAN SALAM

IMMERSE YOURSELF IN the pro-immigration literature of Democratic Party thinkers, and you will notice a curious pattern of argument: High levels of immigration have awakened the racism and bigotry that have fueled the rise of right-wing populism, but it is nevertheless best to press forward with the policies that have ostensibly produced this fearsome reaction. Why? Because slowing the pace of immigration would be a callow

surrender to bigotry. But also because, in the fullness of time, a unified coalition of college-educated white liberals, African Americans, and working-class immigrants and their descendants will vanquish the aging rump of reactionary whites.

The dream of a so-called rainbow coalition has been part of the liberal imagination since at least the presidency of Richard Nixon, when the left envisioned it, albeit prematurely, as a counterpoint to his "southern strategy." The term itself was coined in 1968 by the activist Fred Hampton, who hoped to build a multiracial alliance devoted to revolutionary socialism, but it entered the mainstream in the 1980s, when Jesse Jackson endeavored to make racial justice a central tenet of the Democratic Party's platform. Democrats have consistently been more supportive of social programs that benefit low-income people of color, including immigrants, than have their Republican rivals, which has helped cement their minority support.

In recent years, meanwhile, the white working-class share of the electorate has dwindled, in part because of rising education levels, low native birth rates, and an influx of working-class immigrants—trends documented by Ruy Teixeira, the political demographer and prophet of rainbow liberalism, in his new book, *The Optimistic Leftist*. The promise of the rainbow coalition thus seems ever closer to fruition. Among true believers, every liberal defeat, up to and including the 2016 presidential election, is best understood as little more than the dead-cat bounce of white resentment politics.

Confident pronouncements about the coming triumph of the liberal coalition tend to neglect an awkward question, however. Who will be in control of this bloc when it finally achieves its inevitable victory? Will it be college-educated white liberals, who play such an outsize role in shaping the left's ideological consensus today, and who dominate the donor base and leadership of the Democratic Party? Or will it be working-class Latinos, whom white liberals are counting on to provide a decisive electoral punch?

In the age of Donald Trump, college-educated white liberals consider right-wing white populists in small towns and outer suburbs to be the gravest threat to their values and, sotto voce, their power and influence. Many seem to assume that rainbow liberalism will remain deferential

to the demands of avowedly enlightened, well-off people like themselves—yielding a future in which student loans for graduate degrees are forgiven, property values in gentrified urban neighborhoods and fashionable inner suburbs are forever lofty, service-sector wages never quite rise to the point where hiring help becomes unaffordable, and, of course, rural white traditionalists are banished from the public square.

But what if working-class Latinos aren't especially interested in serving as junior partners in a coalition led by their self-proclaimed white allies? What if they instead support new forms of anti-establishment politics, rooted in grievances and vulnerabilities that place them at odds with liberal white elites?

TO SEE WHY members of the Latino second generation might turn against rainbow liberalism, note the essential role their parents play in today's stratified American cities. The mostly white professional classes of the country's prosperous coastal enclaves depend on immigrant laborers to be their helpmates; these laborers, in turn, depend on these employers for their livelihood. Most of these immigrants aren't laying the groundwork for socialist revolution, for the obvious reason that they are more concerned with providing for their families. Relative to native-born workers, newcomers are more inclined to accept low-wage work and to live in insalubrious conditions.

This is especially true of low-skill immigrants, who greatly increase their income by moving to the United States, even when doing so places them among the poorest of America's working poor. Rather than look at other Americans, they typically compare their lot with that of other impoverished immigrants, or with that of the loved ones they've left behind in their native country. To be an immigrant is to be the author of one's own fate—and to accept diminished status, low pay, and even dangerous working conditions as the price of economic betterment.

The political influence of the working-class newcomers is muted. Few low-income immigrants become naturalized, in part because the cost can be prohibitive.

In any case, naturalized citizens vote at lower rates than the native-born. As for unauthorized immigrants, they have even less political influence. If they were citizens, they would undoubtedly demand better wages and working conditions from their employers, and they'd have the political muscle to get their way at least some of the time. Instead, they are forced to toil in the shadows.

But the children of immigrants, born and raised on American soil as American citizens, will have a different experience.

What if working-class Latinos aren't interested in being junior partners in a coalition led by their self-proclaimed white allies?

They're more likely to compare their economic circumstances with other Americans' than with those of the people their parents left behind. The comparison paints an unflattering picture. As the economists Brian Duncan and Stephen Trejo have observed, on average, first-generation Latino immigrants are burdened by a very low level of formal education. Seventy percent of Latino infants in the U.S. are born to mothers with a high-school education or less. Though this deficit grows smaller in the second generation, it remains strikingly large relative to native-born whites.

The immigrant's rise from an impoverished upbringing to middle-class prosperity is one of the great glories of modern American history, and a comforting precedent. Some people insist that the children of today's working-class Latino immigrants will fare just as well as those of the working-class European immigrants who settled in the U.S. during "the Great Wave" of immigration, which stretched from the 1880s to the restrictionist legislation of the 1920s. But there are many differences between that era and our own.

In mid-20th-century America, a flourishing manufacturing sector was desperate for low-skill labor, which provided many children of Great Wave immigrants with an opportunity for economic

• POLITICS

uplift. In recent decades, offshoring has given manufacturing employers an alternative to relying on domestic sources of low-skill labor. Service-sector employment has filled the breach, but many of these jobs are precarious and pay poorly. As I write this, at a time when the labor market is notably tight, wage growth for non-college-educated workers remains dismally slow.

American society has also grown more unequal; the social distance separating the children of working-class immigrants from those of well-off natives has become a chasm. On average, Latino immigrants are at least as well educated as the Great Wave immigrants from Europe were. The difference is that educational attainment among the U.S.-born has increased substantially. Closing this gap in a single generation will not be an easy feat. Among second-generation Latino adults, 47 percent have no more than a high-school diploma.

This painful reality will, I suspect, engender cynicism about whether U.S.-raised Latino youth can expect to live the American dream. That cynicism is already beginning to reveal itself. In December, Conor Williams, a progressive policy researcher and former schoolteacher, interviewed a group of high-achieving students of color at a Brooklyn charter school. All were from immigrant families. One of them, Esther Reyes, told Williams: "The American dream we see in movies or in shows or in books, it's an American dream for white people." She added: "I don't think it exists."

In June, we saw a glimpse of what this cynicism might augur politically. Representative Joseph Crowley of New York, the fourth-ranking Democrat in the House, was ousted in a primary by Alexandria Ocasio-Cortez, a 28-year-old former organizer for Bernie Sanders and a member of the Democratic Socialists of America. "What I see is that the Democratic Party takes working-class communities for granted," Ocasio-Cortez said a few days before voters went to the polls. "They

take people of color for granted, and they just assume that we're going to turn out no matter how bland or half-stepping [their] proposals are." Despite having been vastly outspent by her long-tenured opponent, the Latina candidate won the majority-minority New York City district handily.

THE LOGIC OF rainbow liberalism says that the anger of working-class Latinos and other marginalized minorities ought to be directed at hateful working-class whites in the heartland. But it's not

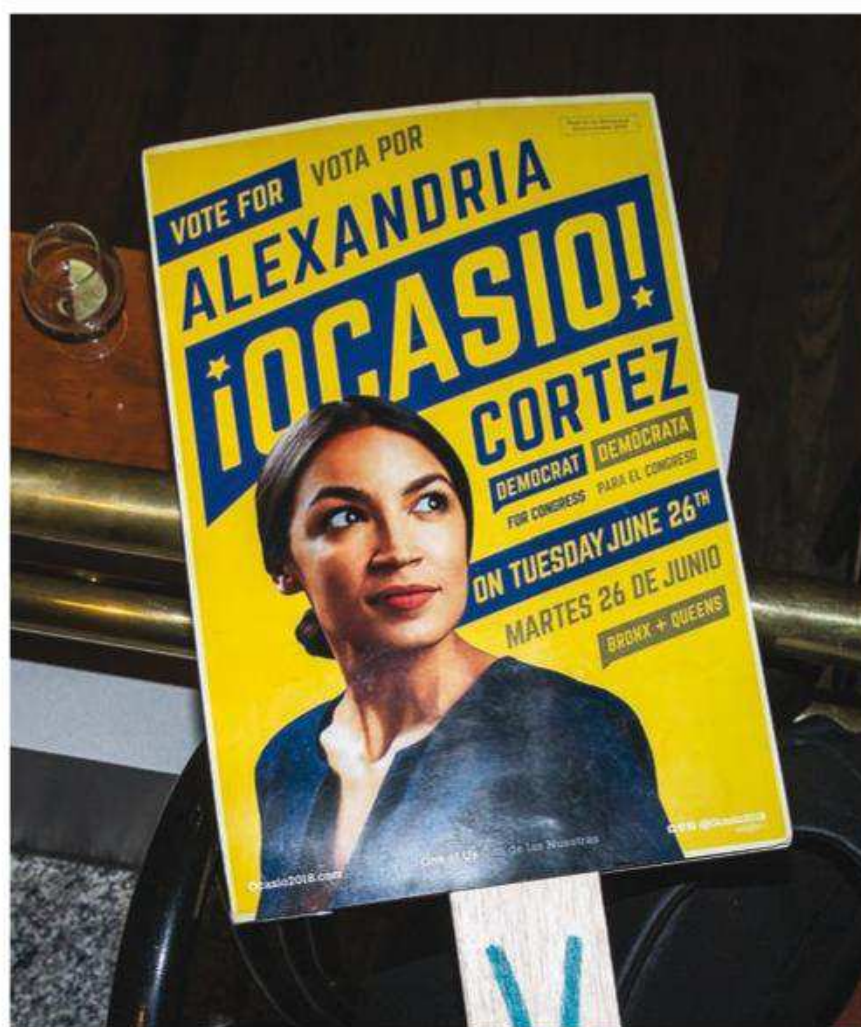
changes promised by Ocasio-Cortez and others like her.

A key principle of rainbow liberalism is that the solution to working-class woes is hiking taxes on the rich to finance a generous suite of wage subsidies, social services, and, for the truly ambitious, basic-income grants. But will white liberals be as enthusiastic about sharp increases in their taxes if they become something other than theoretical? Immigrants in New York, for instance, live in a state where the Democratic governor, Andrew Cuomo,

recently championed a tax reform designed to sharply reduce the total tax burden facing his state's wealthiest residents while stymieing New York City Mayor Bill de Blasio's efforts to raise taxes on the city's ultrarich. Cuomo did so as New York's transit infrastructure was in crisis and rising rents were exposing tens of thousands of families to the risk of eviction.

These betrayals sting in the present. But in the near future, such efforts will be undertaken in the midst of "the Great Wealth Transfer"—in which trillions of dollars in accumulated cash, homes, and other assets will be transmitted from disproportionately white, native-born, college-educated Baby Boomers to their long-waiting heirs. In this context, a brown populism might emerge, one that is sharply to the left of today's rainbow liberalism. Just as Donald Trump appeals to the ethnic self-interest of rural whites, a

tribune of working-class Latinos could call attention to the dearth of Latinos in the uppermost echelons of American society and promise to do something drastic about it, such as redistributing the inherited wealth of privileged whites. In the post-civil-rights era, many charismatic African American politicians—and activists like Fred Hampton—promised to redress the racial injustices plaguing majority-black cities by confronting an ostensibly liberal white elite. Brown populism would pledge to do the same, but from a position of far greater electoral strength. Latinos already outnumber whites in California, and



A campaign poster for Alexandria Ocasio-Cortez, the progressive candidate who won a congressional primary against a Democratic Party stalwart in June

hard to imagine second-generation Americans choosing a different target for their ire: the white overclass of coastal America.

This class has heretofore been able to count on the support of immigrants, in part because of their commitment to helping that group gain access to the safety net that the Democratic Party has championed and fought to protect. But second-generation Americans may have less patience than their parents for a status quo that offers them little hope of advancement, and for a strain of liberalism that talks about redistributing wealth without delivering the more sweeping

DISPATCHES

• POLITICS

aren't far behind in Texas; the electorates of the two most populous states will soon have a Latino plurality.

Yet brown populism could also take a rightward turn. The demands for decent wages and a modicum of respect will run counter to elites' appetite for humble, disciplined workers willing to cater to their needs. This appetite has traditionally been met by immigration, and Latinos have for the most part been favorably disposed toward immigration policies that benefit their co-ethnics. Indeed, this shared enthusiasm for immigration has helped keep the rainbow coalition together. Now we find ourselves on the cusp of a possible reversal.

The foreign-born share of the Latino population is falling fast, and despite the ferocious controversies over Central American migration that have defined the Trump era thus far, the aging of Latin America ensures that future immigration flows will be less Latino in the years to come. For the foreseeable future, it is Africa and South Asia that, in light of their youthful and relatively fast-growing populations, will generate the greatest migratory pressures. And this shift could have seismic consequences.

According to the historian Brian Gratton, America's major restrictionist movements have emerged in response to a dramatic increase in immigration levels coupled with a change in the ethnic origins of new immigrants. Both factors are important. If a dramatic increase in immigration levels occurs but natives by and large see the newcomers as their cultural kin, the reaction might be muted, as cultural affinity overrides other considerations. If a dramatic increase occurs and the newcomers are culturally distinct, however, intergroup tension is all but inevitable. Gratton's thesis partly captures why older whites have been so resistant to Latino immigration.

But as Latino immigration slows, and as working-class Latino Americans come into their own politically, Gratton's work leaves us with an irony-laden prediction about what is to come: A coalition of cosmopolitan whites, Asian Americans, and blacks may well fight to open the U.S. labor market to growing numbers of desperate people from Asia and Africa, whether out of class interest, ethnic loyalty, or devotion to rainbow liberalism as an ideology—but these new immigrants could be met by a

coalition of working-class whites and Latinos who favor closed borders.

If you doubt that second-generation Latinos who are being raised in disadvantaged circumstances will ever embrace a more hard-edged politics, whether of the right or the left, I can hardly blame you. To believe it would be to accept that the ultimate consequence of working-class Latino immigration will be not merely the availability of low-cost services and the infusion of new cultural energies into our communities but also, in time, a wrenching redistribution of wealth and respect from privileged white liberals to a rising generation of justly

dissatisfied outsiders. The question we face now is how to lay the groundwork for this future: Will we face up to the challenge of delivering the American dream to the millions of working-class newcomers who already live among us, even if that means sacrificing a measure of comfort in the present? Or will we continue to sentimentalize their struggles, confident in the self-serving belief that working-class immigrants and their children will forever accept second-class status? **A**

*Reihan Salam is a contributing editor at The Atlantic and the author of the forthcoming book *Melting Pot or Civil War?**

• VERY SHORT BOOK EXCERPT

A Coup by Any Other Name



Adapted from *Into the Hands of the Soldiers: Freedom and Chaos in Egypt and the Middle East*, by David D. Kirkpatrick, published by Viking in August

BARACK OBAMA SUMMONED his National Security Council to the White House on July 4, 2013, the day after General Abdel Fattah al-Sisi had appeared on television to declare that the Egyptian people had called on him to “secure essential protection for the demands of the revolution,” and the military had encircled the presidential palace, with Egypt's fifth president, Mohamed Morsi, in it. Obama had recently reminded journalists that opponents of the democratically elected Morsi should follow “legal, legitimate processes” to remove him. Now, to a surprised room, he announced that of course the United States could not call Morsi's ouster a coup d'état.

Everyone else had come to the meeting prepared to argue over the application of the “coup law”: the statute that requires cutting off aid to any military that topples an elected government. Wouldn't the White House risk its credibility if it did not call the coup what it was?, asked General Martin Dempsey, the chairman of the Joint Chiefs of Staff. Ben Rhodes, the president's foreign-policy speechwriter, made the same case. But others around the table wanted to back Morsi's ouster. Secretary of State John Kerry argued that Morsi's removal was not, in fact, a coup. Sisi was bowing to the public will and acting to save Egypt, he asserted with passion. The loudest voice in the White House for human rights and democracy, Samantha Power, was absent, preparing for her confirmation as ambassador to the United Nations.

Obama decided not to decide. The administration made no determination about whether what happened on July 3 in Cairo was a military coup. Privately, some White House staff came to call Morsi's ouster “the couplike event.”

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• TECHNOLOGY

THANKS FOR THE MEMORIES?

For the past 13 years, I've given Facebook my photos, my videos, my likes, and untold hours of my time. Sifting through the detritus was amusing and surprising—and weirdly sad.

BY ANNA WIENER

I FOUND MY WAY to the Download Your Information tool in late March, soon after a whistle-blower revealed that the political-consulting firm Cambridge Analytica had gathered information about tens of millions of Facebook users. The tool, which Mark Zuckerberg referenced several times in his testimony to Congress in April, is tucked away in Facebook's account settings. It allows users to access extensive archives of their own content, delivered by Zip file, giving a nod to demands for greater corporate transparency and helping the company satisfy new data-protection requirements in the European Union. It also offers an opportunity to view oneself through the eyes of Facebook's partners, researchers, advertisers, and algorithms, in an act of reverse surveillance.

My own download held the usual digital flotsam—not all the information I had ever volunteered to the platform, but a lot of it: date of birth, phone number, schools. There were IP addresses from every time I'd signed on since 2009 (though I've had an account since 2005). There was a list of advertising topics for which I could be targeted—some accurate, some more like divination than data science—alongside content I'd created: chat transcripts, event listings, photographs, videos.

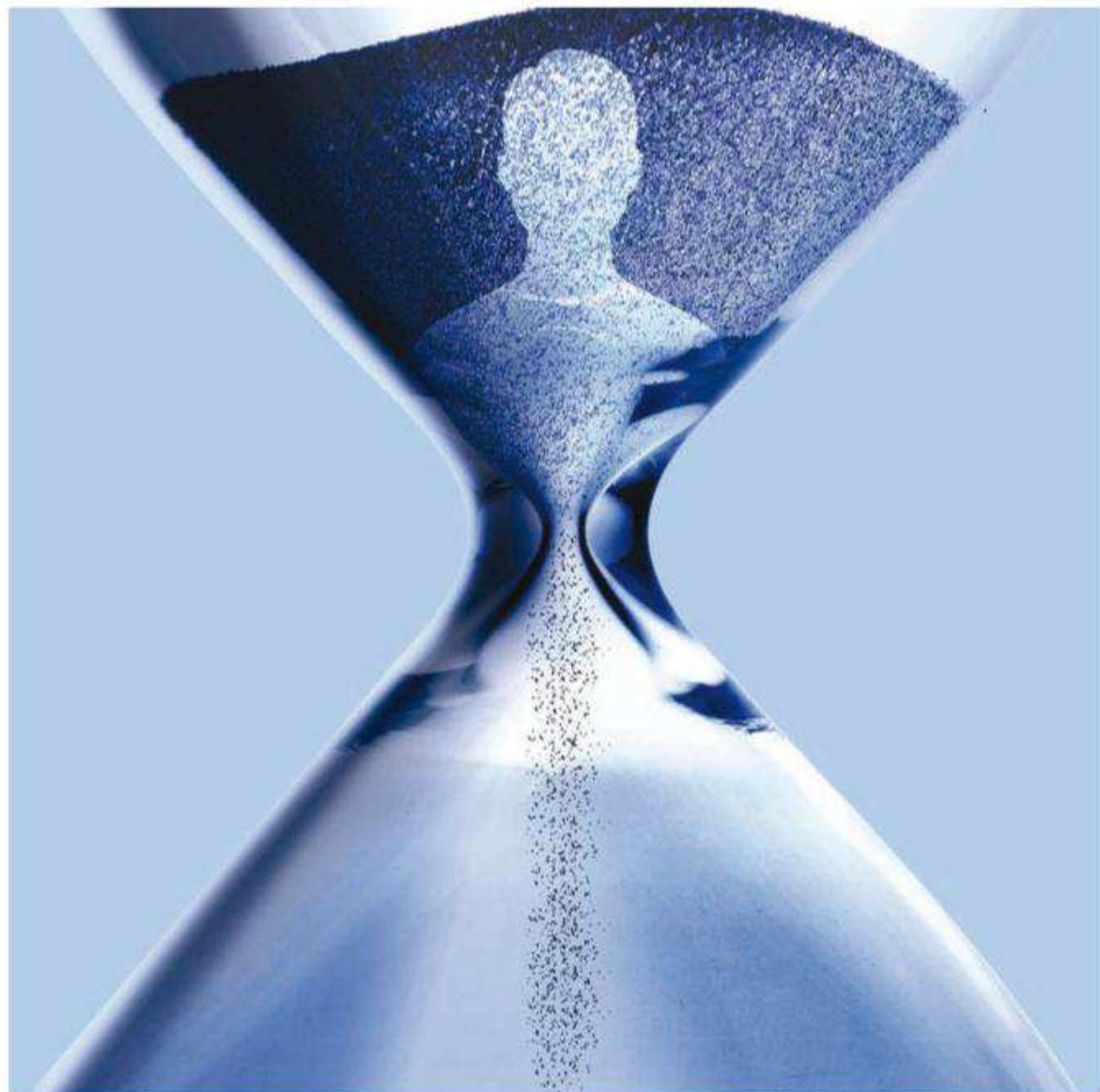
I was startled to find dozens of videos I had deleted before posting or sharing with friends, an embarrassment of outtakes. There I was, lower-resolution and smoother-skinned, staring at the computer camera and adjusting my bangs, looking for a good angle from my dorm

room, my parents' kitchen, a temp job. It was like watching B-roll for a documentary about my insecurities. (Facebook has since announced that the inclusion of deleted videos was the result of a bug, and said it was planning to discard the data from its servers.) The videos were jarring to discover—and suggested questionable data-retention practices at

Facebook—but they were not entirely unwelcome. In an era of personal brands and social-media curation, I was amused, and a little wistful, to have a realistic glimpse of what I had been like as an awkward college student.

The download also included a reverse-chronologically organized list of “friends,” everyone I had connected to—and disconnected from—on the platform. Scrolling through it, I could see the contours of a life taking shape. I'd made an initial flurry of connections around the time I first created an account, the summer before I left for college: relatives and elementary-school friends along with summer-camp crushes and future classmates. At the top of the list were the solutions engineers and CrossFit evangelists I'd met when I'd moved out West to work in tech. It was like looking at the guest list for a party I would never throw.

Download Your Information didn't offer a coherent narrative. Instead, it presented a cascade of references, but few of the referents. Under “Timeline,” I found comments left by friends on the feature formerly known as the “wall,” written with the candor of people who had not yet



heard about Edward Snowden or the ad-tech industry. But because the Facebook download displayed them without links to the original post or images, the comments were also completely decontextualized. "Digging the bonnet," a dorm hallmate posted in 2005. *What bonnet?* I wondered, full of remorse. "Shake that thing and violate it," a friend wrote a year later. *What thing?*

Reading through this archive recalled a moment when time spent online was less anxious, less fraught—a time when Facebook was a website, not a platform; a novelty, not a conglomerate; a lark or procrastination tool, not a threat to democracy. Personalization was the work of the user, not the algorithm—and the dangers of privately controlled, algorithmically determined information flows would have seemed, to me, like the stuff of late-night stoner speculation. These ancient posts were a throwback to a time when nobody knew the name of Facebook's founder. Why should we have? My peers and I saw the website, like the other social networks we had played with—Xanga, LiveJournal, Friendster, Myspace—as a toy with a shelf life. Eventually it would be phased out, disposed of. We could have probably been forgiven for being a little naive.

OVER THE NEXT FEW DAYS, I found myself returning to the download folder, unceremoniously labeled "facebook-annawienner," to sift through conversations and grainy digital photographs. I am a sentimental person. I hold on to things far past their emotional shelf life. I still have a small card, delivered with a bouquet of flowers, from a high-school boyfriend, written in the florist's scrawl and seeking forgiveness for a grievance I no longer remember. Reading through Facebook Messenger transcripts from 2011 was not especially compelling, but I was glad, in a vague way, to see them.

At 31, I've spent a significant portion of my life in front of computers. A beige, boxy Macintosh Classic featured prominently in my childhood; I learned how to manipulate a mouse before I learned how to read. From a young age, I took the internet for granted. Still, the time I spend online has never struck me as worthy of documentation. Instead, I consider it time not just wasted but lost, a regrettable, years-long black hole.

The data download was a time capsule of sorts, a rare record of time spent digitally. But as I returned to the folder, a familiar sense of dread crept in. If anything, Download Your Information is a consolation prize offered to those of us on the losing end of surveillance capitalism. The folder underscored some of social media's most unappealing qualities: the distortion of a natural, human experience of time, and an insistence on never quite letting things go.

In the 13 years that I have had a Facebook account, I have deactivated it 31 times (I got this number, too, from the data download). I dislike Facebook, both the platform and the corporate ethos. I am put off by the company's coyness around its role in the media ecosystem, and by the way some Facebook employees talk about their employer, as if one of the most valuable companies in the world is just a misunderstood do-gooder. I do not even find the website pleasing, with its bland, homogeneous design, corny animations, and attempts to encourage nostalgia at scale. I never quite know what to do on it. I don't have a great reason for sticking around, aside from the nagging feeling that I might miss out.

For all the bittersweet charm they offer, Facebook's downloadable user-data packets are artifacts of corporate cowardice. The information they provide is a slapdash, selective assortment of digital ephemera. It is by no means a complete record of the company's data-collection practices; Facebook itself has said as much. The data-analytics software that facilitates the collection and aggregation of user information is sophisticated—it is likely keeping track of the sort of metrics that have become standard across the industry, such as the pathways users take across the site and the app; what is clicked, and when; and how frequently a user searches for a name or keyword. My data download contained no traces of this sophistication. In the past, the company has had neither a legal imperative nor a business incentive to tell users where (and for how long) data are stored—or who at Facebook has permission to access it, and to what ends. As for the company's third-party partners,

Facebook policy states that there are "strict restrictions" on how they can use information. (Facebook has also said that it is in the process of making changes to its platform that "will continue to enable developers to create social experiences, while protecting people's information.")

Still, as I rifled through all these intimacies—transcripts and photographs; evidence of heartbreaks and petty rivalries; a slurry of insecurities, bad jokes, and raw emotional output—I wanted to feel angrier than I did. But after a while, I no longer felt spied on. I didn't even feel especially nostalgic. I just felt sad. Here was the stuff of a life, and I had given it

The archive recalled a time when Facebook was a novelty—a procrastination tool, not a threat to democracy.

away to the internet—much of it would likely be stored on Facebook's servers ad infinitum, useful only to advertisers and algorithms.

I saved some pictures and videos to my hard drive, promising myself that I'd look at them again someday. A few photos I sent to family members, using a shared iPhoto album; others went to old friends via Gmail (another act of data-collection cross contamination). Rediscovering these photos with my friends gave us an excuse to briefly reminisce and catch up, to wax nostalgic and commune in our mutual embarrassment that our late-night liberal-arts philosophizing had not only been caught on camera but now belonged to a gigantic tech corporation. It was a welcome reminder that my actual social network runs deep, that these relationships, however dispersed, are the realest things I have going. For the first time in my experience, Facebook lived up to its marketing materials: In providing a way off the platform, it had fostered a human connection. **A**

Anna Wiener is a writer living in San Francisco. She is currently working on a book about Silicon Valley, to be published by MCD in 2019.

DISPATCHES



• SKETCH

THE MINISTER OF SELF-DEFENSE

John Correia, the most popular gun educator on YouTube, wants you to prepare for the worst day of your life.

BY GRAEME WOOD

S

OMEDAY JOHN Correia will meet Jesus. As an ordained pastor, he has thought about how their first

conversation will go. That is why he keeps his Heckler & Koch VP9 loaded with a 9-mm magazine in pristine condition. "You're only going to draw a gun on the worst day of your life," Correia told me. "You want to make sure the equipment works. I treat these mags like babies." If he drops one and dents it, he never carries it again. "I don't want Jesus to look at me and go, 'How come you didn't test your equipment, dummy?'" Better to be shot dead in a fair fight. "At the very least I want him to say,

'He smoked you! He was better than you!' And I'll say, 'Yes, Lord, I got smoked.'"

Until two years ago, Correia, who is 42, was not well known outside Phoenix, where he was raising four kids, tending a conspicuously well-armed flock at West Greenway Bible Church, and teaching part-time at Arizona Christian University. (He co-wrote a book about the Koine Greek word *pistis*, or "belief.") I had come to visit him in Phoenix because in 2016 he was born again, professionally, as YouTube's top expositor of mayhem, a subject in which I take both personal and professional interest. "I'm the John Madden of on-camera violence," he says. About once a day, he posts a video depicting graphic real-life violence. Then he slows down the video and explains what happened, and how the good guys might have prevailed, or avoided the confrontation altogether. If you have never seen a person stabbed, shot, or (in one case) bludgeoned with a fish tank, go watch the 800 videos Correia has edited and analyzed. His popularity on YouTube has made him a minor celebrity at gun conventions. In deep-red states, people recognize his bearish, jovial figure on the street and greet him. "They're always nice," he says. "Maybe that's because they know I'm probably armed."

Correia's transformation began when he asked his self-defense teacher how to guard against a knife attack. "The way we practiced didn't seem right," he told me. On YouTube, Correia had watched a few real-life stabbings caught on surveillance video, and "they didn't look like what we were training against." In the safety of the dojo, Correia and his classmates were practicing for an attacker who would extend his blade with one elegant thrust, like an Olympic fencer. "There was no energy, no resistance, no ill will," he added. A real killer, the surveillance footage suggested, will hook you by the neck with one arm and plunge the knife into you repeatedly with the other, shredding your belly into strips of human bacon and chitterlings. "I asked him, 'What do we do about this?'" The sensei, normally hard to stump, didn't have an answer. "Right now," he shrugged, "we die."

Since then, Correia has watched approximately 13,000 more videos of deadly and near-deadly encounters, in an effort to bring reality to a field distorted by fantasy. As violence has

become rarer, fewer people have had the misfortune of becoming personally acquainted with it. We harbor illusions about how muggings, gangland slayings, and bar fights go down, and about what we can do to intervene or protect ourselves. The new ubiquity of video surveillance could force gun nuts and gun haters alike to confront reality. Correia says he is “an evidence-based self-defense trainer”—a sabermetrician of violence who, having cataloged the events of each video, can tell you with nerdy accuracy that a third of attacks involve multiple assailants. Pepper

“I’m the John Madden of on-camera violence,” says Correia, who has seen some 13,000 videos of deadly and near-deadly encounters.

spray works about 90 percent of the time. Twenty-three percent of the videos come from Brazil, so if you don’t want to be stabbed on camera, don’t go to Rio.

“Every situation is a snowflake,” he says. “But the same principles show up again and again. All I do is to teach people and give them a vocabulary for what to do.” In Correia’s most popular video, which is from Venezuela, an armed robber approaches his victim, an off-duty cop, in an ATM line. After dropping his wallet and necklace on the ground, the cop falls back, lets the mugger stoop to pick up the loot, and takes advantage of his distraction to draw a pistol and shoot the criminal four times. There are “some significant lessons here,” Correia says. He approves of the distraction. “This was incredibly wise ... Give [the mugger] something else to think about. Don’t just stand there and fight him when he’s strong.” He commends the cop for “concealing his draw.” (The cop hid, somewhat ungallantly, behind a civilian for a few seconds to do so.) “This guy did a great job.”

Correia’s narration is notable for its sanity and practicality, and (a rarity in the gun world) for not viewing all problems as solvable with more and larger guns.

He used to carry more than one gun on his person, plus a spare mag in case he needed to reload. But in his study of violent encounters, he has seen zero emergency reloads and zero uses of a backup gun (or BUG, in gun lingo), so he seldom carries extra mags anymore and has stopped carrying an extra gun altogether. He replaced them with a first-aid kit—which he has used twice, once to save a life—and pepper spray, which he has used twice to defend himself against stray dogs.

Overwhelmingly, the lesson of his videos is to avoid violence in the first place. “The answer to most social violence is:

Check your ego,” he told me. Give up your valuables. Don’t kill to save your car, and don’t die to save your wallet. Don’t play “the monkey game,” an escalating display of dominance, often but not always between two drunk men. Many of the videos take place at ATMs or in what he calls “transitional spaces,” such as convenience stores and parking

lots. He enumerated for me his “rules of stupid”: “Don’t do stupid things with stupid people at stupid times.”

Fans have come to love his folksy catchphrases. His pepper-spray canister is a “spicy-treat dispenser.” When a woman pulls a gun from her purse and sends a mugger scrambling, the mugger is experiencing the “FIBSA factor” (“Fudge, I’m being shot at”). A victim who disarms his assailant then pummels him for good measure is administering (against Correia’s advice) an “educational beatdown.” When uniformed cops jump on a suspect, it’s a “polyester pileup.” Armed robbers killed by their victims have “taken the room-temperature challenge.” Murder victims remind us, Pastor John says, of the need for “spiritual fitness”—mental preparedness for the possibility that “today might be your last, and you need to be right with your loved ones and right with God.”

“IF YOU KNOW how many guns you own,” Correia told me, “you don’t have enough guns.” I have watched nearly all of Correia’s videos but do not carry a gun, or wish to. (I once owned one—a single-shot assassination tool,

designed to look like a Montblanc pen—but couldn’t manage the paperwork necessary to bring it home from Pakistan.) Nevertheless, before we parted, I asked him to teach me to shoot, so he took me to a gun range for a lesson.

Like a flight attendant, Correia started the session with a litany of safety measures, reminding his assistant and me to keep our guns pointed downrange, to always treat them as if they were loaded, and to exercise trigger discipline (which is to say, keep your finger off the trigger when you’re not aiming downrange). He started by sending about 30 rounds through a human silhouette on a paper target, clustering them with each burst around the head and the heart. He liked the gun, an H&K P30sk, and admired its polymer-based frame. He used to carry a Glock, he says, but has become an H&K “fanboy” and a brand ambassador for the company. (“I prefer German murder-plastic to Austrian murder-plastic.”)

The jokes ended when Correia turned and offered to let me fire a few rounds. He handed the gun to me ritualistically, repeating verbatim his earlier safety reminders. Before he placed it in my hand, he popped out the magazine and invited me to probe the chamber with my finger, to satisfy myself that the gun was empty. “Nothing in there, right?” My finger emerged a little blackened. “Nothing,” I said, and he handed me the gun and a fresh magazine. I loaded it and aimed.

“Press the trigger slowly,” he said. “Let it go off. Let it surprise you.”

I lined up the iron sights with my left eye and the target. I snaked my finger around the trigger and applied pressure like he’d suggested, with the slow, deliberate squeeze of a python’s tail. *Boom*. The first shot poked an ovoid hole in the target’s epigastric region. “You’re a fast learner,” he said, generously. “That was about as perfect a shot as existed. We’re going to make an honorary Arizonan out of you.” The next two shots landed off-center. Correia remained encouraging.

On Second Amendment issues, Correia is very nearly a gun-rights absolutist. But he advised me, as gently as possible, that if I didn’t intend to put in time at the range, I might be safer unarmed. “You should be able to put five shots in five seconds in that circle,” he said, indicating an area seven yards away and about the size of a dinner plate. I could probably have

DISPATCHES

hit a dinner *table* at that distance. A plate would've taken some work.

I DON'T THINK I'm an especially incompetent shot. I'm just lazy and unwilling to spend hours at the range on the off chance that I run into a killer in a dark Brazilian alley. In Correia, however, I saw the perfect concealed-weapon carrier: someone who has trained to a high standard, who will avoid confrontation whenever possible, and who is much more eager to save lives with his first-aid training than to take lives with his VP9.

As Correia drove me to the airport, I told him about a news story I once read about a man, described as a "Good Samaritan," who saw a kidnapping under way in a Walmart parking lot in Kansas. This was an armed Good Samaritan, and he killed the aggressor on the spot. I told him I remembered the biblical Good Samaritan story going differently, with the Samaritan administering first aid and nourishment rather than hot lead.

Correia, unsurprisingly, had thought a lot about how a Christian life might be reconciled with instruments of death. "I look forward to a day when there's peace on Earth and goodwill toward men," he told me. "That's not going to happen till Jesus comes back."

It sounded like a cop-out. But Correia wasn't finished. "I have devoted my life to two things," he said, his eyes on the road. The first was pastoring, and the second was armed self-defense. "And if my theological commitments are correct, neither of them will exist in the perfect state in which we'll find ourselves later. If the picture of the afterlife that the Bible presents is true, we won't be sitting on a cloud strumming a harp. There will be some continuity with the current world, but living in perfection."

I asked whether there would be guns in heaven.

"No," he said firmly. "When everyone follows the Lord and knows him and loves him and doesn't have any problems, we won't need guns." (He later allowed that heaven might have target shooting, but only for recreation, not in training for self-defense.) "We won't need preachers," he added. "I'll be out of work. I will have to find a new profession in eternity." **A**

Graeme Wood is a national correspondent for The Atlantic.

• STUDY OF STUDIES

Make Old Friends

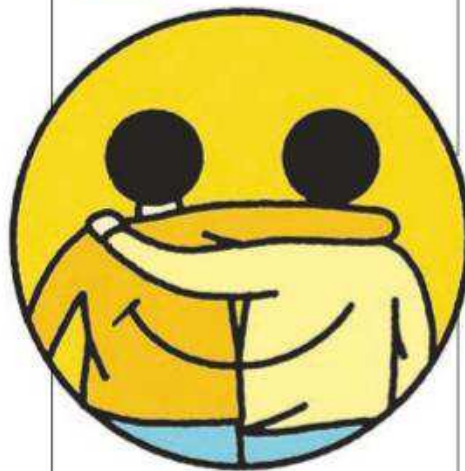
How to build lasting ties

BY BEN HEALY

WHAT ARE friends for? This isn't a rhetorical question. Friendship is one of life's most important features, and one too often taken for granted.

The human desire for companionship may feel boundless, but research suggests that our social capital is finite—we can handle only so many relationships at one time. Social scientists have used a number of ingenious approaches to gauge the size of people's social networks; these have returned estimates ranging from about 250 to about 5,500 people. **[1]** (An undergraduate thesis from MIT focusing exclusively on Franklin D. Roosevelt, a friendly guy with an especially social job, suggested that he might have had as many as 22,500 acquaintances. **[2]**) Looking more specifically at friendship, a study using the exchange of Christmas cards as a proxy for closeness put the average person's friend group at about 121 people. **[3]**

However vast our networks may be, our inner circle tends to be much smaller. The average American trusts only 10 to 20 people. **[4]** Moreover, that number may be shrinking: From 1985 to 2004, the average number of confidants that people reported having decreased from three to two. **[5]** This is both



sad and consequential, because people who have strong social relationships tend to live longer than those who don't. **[6]**

So what should you do if your social life is lacking? Here, too, the research is instructive. To begin with, don't dismiss the humble acquaintance. Even interacting with people with whom one has weak social ties has a meaningful influence on

well-being. **[7]** Beyond that, building deeper friendships may be largely a matter of putting in time. A recent study out of the University of Kansas found that it takes about 50 hours of socializing to go from acquaintance to casual friend, an additional 40 hours to become a "real" friend, and a total of 200 hours to become a close friend. **[8]**

If that sounds like too much effort, reviving dormant social ties can be especially rewarding. Reconnected friends can quickly recapture much of the trust they previously built, while offering each other a dash of novelty drawn from whatever they've been up to in the meantime. **[9]** And if all else fails, you could start randomly confiding in people you don't know that well in hopes of letting the tail wag the relational dog. Self-disclosure makes us more likable, and as a bonus, we are more inclined to like those to whom we have bared our soul. **[10]**

The academic literature is clear: Longing for closeness and connection is pervasive. Which suggests that most of us are stumbling through the world pining for companionship that could be easily provided by the lonesome stumblers all around us. So set aside this article (after you've renewed your subscription and clicked every ad on the website, of course), turn to someone nearby, and try to make a friend. You both could probably use one. **A**

THE STUDIES:

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[2] Rosenthal, "Acquaintances and Contacts of Franklin Roosevelt" (MIT, 1960)
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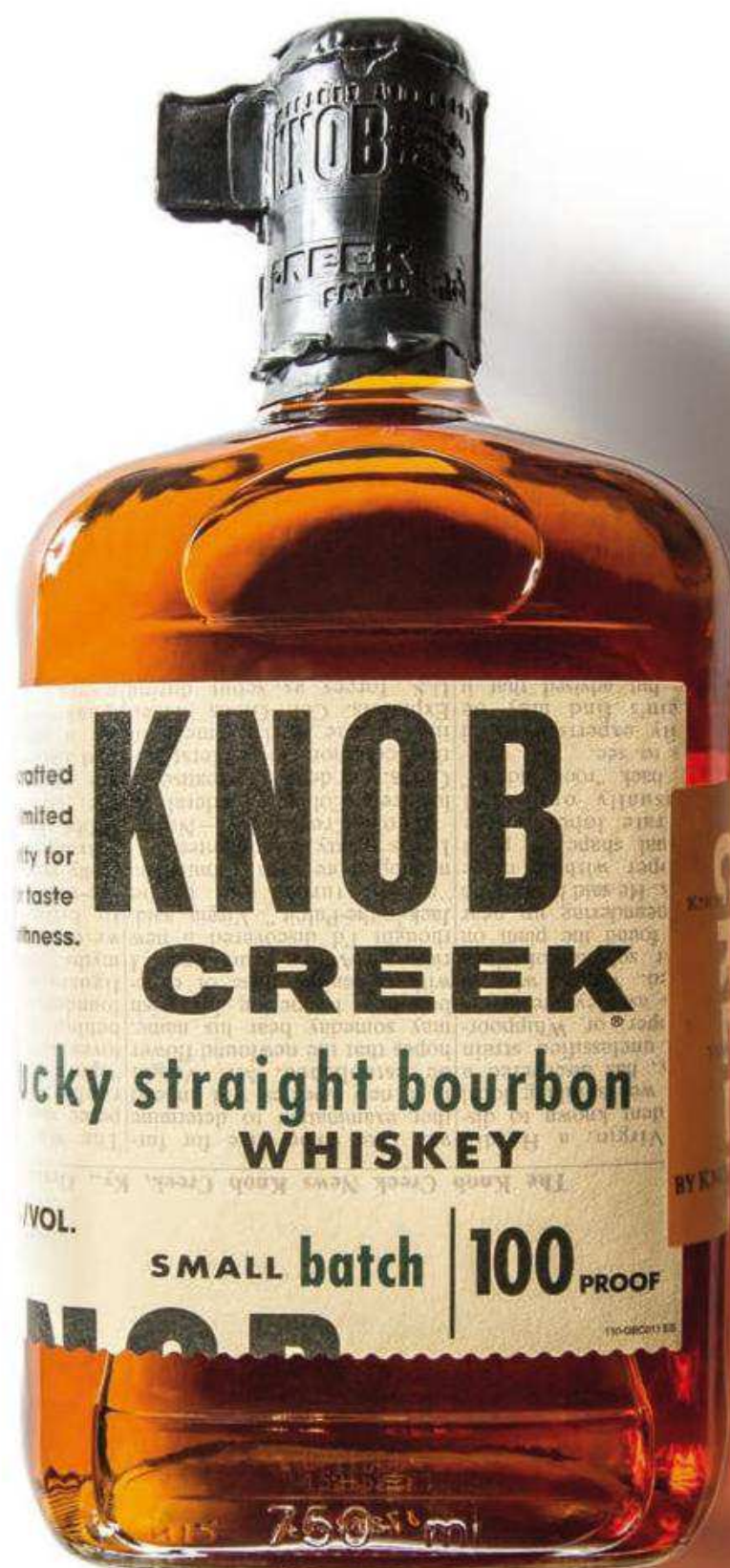
- Network Size in Humans" (*Human Nature*, March 2003)
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• BUSINESS

THE SECRETS IN YOUR INBOX

Employee emails contain valuable insights into company morale—and might even serve as an early-warning system for uncovering malfeasance. Bosses are taking an interest.

BY FRANK PARTNOY

WHEN ANDREW FASTOW, the former chief financial officer of Enron, finishes a public-speaking gig these days, a dozen or so people from the audience are typically waiting to talk to him. Some ask about his role in the scandal that brought down the energy company. Others want to know about his six years in prison. After a 2016 event in Amsterdam, as the crowd was thinning out, Fastow spotted two men standing in a corner. Once everyone else had left, they walked up to him and handed him a laminated chart.

The men were there on behalf of KeenCorp, a data-analytics firm. Companies hire KeenCorp to analyze their employees' emails. KeenCorp doesn't read the emails, exactly—its software focuses on

word patterns and their context. The software then assigns the body of messages a numerical index that purports to measure the level of employee "engagement." When workers are feeling positive and engaged, the number is high; when they are disengaged or expressing negative emotions like tension, the number is low.

The two men in Amsterdam told Fastow that they had tested the software using several years' worth of emails sent by Enron's top 150 executives, which had become publicly available after the company's demise. They were checking to see how key moments in the company's tumultuous collapse would register on the KeenCorp index. But something appeared to have gone wrong.

The software had returned the lowest index score at the end of 2001, when Enron filed for bankruptcy. That made sense: Enron executives would have been growing more agitated as the company neared insolvency. But the index had also plummeted more than two years earlier. The two men had scoured various books and reports on Enron's downfall, but it wasn't clear what made this earlier date important. Pointing to the sudden dip on the left side of the laminated chart, they told Fastow they had one question: "Do you remember anything unusual happening at Enron on June 28, 1999?"

THE SO-CALLED TEXT-ANALYTICS industry is booming. The technology has been around for a while—it powers, among other things, the spam filter you rely on to keep your inbox manageable—but as the tools have grown in sophistication, so have their uses. Many brands, for instance, rely on text-analytics firms to monitor their reputation on social media, in online reviews, and elsewhere on the web.

Text analytics has become especially popular in finance. Investment banks and hedge funds scour public filings, corporate press releases, and statements by executives to find slight changes in language that might indicate whether a company's stock price is likely to go up or down; Goldman Sachs calls this kind of natural-language processing "a critical tool for tomorrow's investors." Specialty-research firms use artificial-intelligence algorithms to derive insights from earnings-call transcripts, broker research, and news stories.

Does text analytics work? In a recent paper, researchers at Harvard Business School and the University of Illinois at Chicago found that a company's stock price declines significantly in the months after the company subtly changes descriptions of certain risks. Computer algorithms can spot such changes quickly, even in lengthy filings, a feat that is beyond the capacity of most human investors. The researchers cited as an example NetApp, a data-management firm in Silicon Valley. NetApp's 2010 annual report stated: "The failure to comply with U.S. government regulatory requirements could subject us to fines and other penalties." Addressing the same concern in the 2011 report, the company clarified that "failure to comply" applied to "us or our reseller partners." Even a savvy human stock analyst might

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DISPATCHES

have missed that phrase, but the researchers' algorithms set off an alarm.

Granted, the study scoured old filings; the researchers had the benefit of hindsight. Still, a skeptical investor, armed with the knowledge that NetApp had seen fit to make this change, might have asked herself why. If she'd turned up an answer, or even just found the change worrying enough to sell her stock, she'd have saved a fortune: Embedded in that small edit was an early warning. Six months after the 2011 report appeared, news broke that the Syrian government had purchased NetApp equipment through an Italian reseller and used that equipment to spy on its citizens. By then, NetApp's stock price had already dropped 20 percent.

WHILE TEXT ANALYTICS has become common on Wall Street, it has not yet been widely used to assess the words written by employees at work. Many firms are sensitive about intruding too much on privacy, though courts have held that employees have virtually no expectation of privacy at work, particularly if they've been given notice that their correspondence may be monitored. Yet as language analytics improves, companies may have a hard time resisting the urge to mine employee information.

One obvious application of language analysis is as a tool for human-resources departments. HR teams have their own, old-fashioned ways of keeping tabs on employee morale, but people aren't necessarily honest when asked about their work, even in anonymous surveys. Our grammar, syntax, and word choices might betray more about how we really feel.

Take Vibe, a program that searches through keywords and emoji in messages sent on Slack, the workplace-communication app. The algorithm reports in real time on whether a team is feeling disappointed, disapproving, happy, irritated, or stressed. Frederic Peyrot, one of Vibe's creators, told me Vibe was more an experiment than a product, but some 500 companies have tried it.

Keeping tabs on employee happiness is crucial to running a successful business. But counting emoji is unlikely to prevent the next Enron. Does KeenCorp really have the ability to uncover malfeasance through text analysis?

That question brings us back to June 28, 1999. The two men from KeenCorp didn't

realize it, but their algorithm had, in fact, spotted one of the most important inflection points in Enron's history. Fastow told me that on that date, the company's board had spent hours discussing a novel proposal called "LJM," which involved a series of complex and dubious transactions that would hide some of Enron's poorly performing assets and bolster its financial statements. Ultimately, when discovered, LJM contributed to the firm's undoing.

According to Fastow, Enron's employees didn't formally challenge LJM. No one went to the board and said, "This is wrong; we shouldn't do it." But KeenCorp says its algorithm detected tension at the company starting with the first LJM deals.

Today, KeenCorp has 15 employees, half a dozen major clients, and several

consultants and advisers—including Andy Fastow, who told me he had been so impressed with the algorithm's ability to spot employees' concerns about LJM that he'd decided to become an investor. Fastow knows he's stuck with a legacy of unethical and illegal behavior from his time at Enron. He says he hopes that, in making companies aware of KeenCorp's software, he can help "prevent similar situations from occurring in the future."

I WAS SKEPTICAL ABOUT KeenCorp at first. Text analysis after the fact was one thing, but could an analysis of employee emails actually contain enough information to help executives spot serious trouble in real time? As evidence that it can, KeenCorp points to the

• BIG IN ... AFGHANISTAN

Facebook Fake-outs

Why some men are pretending to be women online—and vice versa

BY MAIJA LIUHTO

WHEN MAKIZ Nasirahmad, a 24-year-old Afghan American who recently lived in Afghanistan, received a Facebook friend request from a woman with an unfamiliar name, she didn't think twice about accepting it. The woman's profile picture had clearly been copied off the internet, but Nasirahmad figured that the woman could be a relative of hers, trying to hide her identity; many families in Afghanistan disapprove of women posting their pictures online, so women sometimes hide behind fake names and photos.

Before long, the woman started sending Nasirahmad private messages. "Hello," she wrote. Then, a couple of days later, another "Hello," followed by hearts.

Nasirahmad's new friend, it turned out, wasn't an aunt or a cousin but a stranger—and a male one at that. As she soon learned, many young Afghan men and women from cities and villages alike have begun using Facebook to skirt strict social rules governing interaction between the sexes. In fact, posing as a member of the opposite sex online has become a popular pastime. In the

months following that first request, Nasirahmad received many other friend requests from fake females (a disproportionate number of whom, oddly enough, had profiles bearing Turkish soap-opera stars' pictures).

Until recently, dating was almost nonexistent in Afghanistan, because of religious and cultural norms that prohibit relationships before marriage. Communication was difficult too: During Taliban rule, people had to cross the border into Pakistan to make an international phone call (domestic calls weren't easy either). Today, with the arrival of cheap smartphones and affordable mobile internet—about 90 percent of Afghanistan's population has access to a cellphone—even the poorest people can get on Facebook. Although premarital relationships are still taboo, social media have provided the younger generation with a covert means of online dating.

"Boys usually use this technique to get closer to

“heat maps” of employee engagement that its software creates. KeenCorp says the maps have helped companies identify potential problems in the workplace, including audit-related concerns that accountants failed to flag. The software merely provides a warning, of course—it isn’t trained in the Sarbanes-Oxley Act. But a warning could be enough to help uncover serious problems.

Such early tips might also become an important tool to help companies ensure that they are complying with government rules—a Herculean task for firms in highly regulated fields like finance, health care, insurance, and pharmaceuticals. An early-warning system, though, is only as good as the people using it. Someone at the company, high or low,

has to be willing to say something when the heat map turns red—and others have to listen. It is hard to imagine Enron’s directors heeding any warning about the use of complex financial transactions in 1999—the bad actors included the CEO, and we know that whistle-blowers at the company were ignored.

The potential benefits of analyzing employee correspondence must also be weighed against the costs: In some industries, like finance, the rank and file are acutely aware that everything they say in an email can be read by a higher-up, but in other industries the scanning of emails, however anonymous, will be viewed as intrusive if not downright Big Brotherly.

But it is managers who might have the most to fear from text-analysis tools.

Viktor Mirovic, KeenCorp’s CFO, told me that the firm’s software can chart how employees react when a leader is hired or promoted. And one KeenCorp client, he said, investigated a branch office after its heat map suddenly started glowing and found that the head of the office had begun an affair with a subordinate.

When I asked Mirovic about privacy concerns, he said that KeenCorp does not collect, store, or report any information at the individual level. According to KeenCorp, all messages are “stripped and treated so that the privacy of individual employees is fully protected.” Nevertheless, Mirovic concedes that many companies do want to obtain information about individuals. Those seeking that information might turn to other software, or build their own data-mining system.

the girls they like,” says Naweed, an 18-year-old male student in Kabul who had a fake female Facebook profile for more than a year. (He asked to be identified by only his first name, because his family would not approve of him dating.) “I was talking to girls for fun, and I enjoyed it a lot.” Many men first try to friend their crushes using their real profile; if this fails, they resort to creating a fake account.

Naweed says a man typically waits before revealing his true identity. After he’s made the woman feel comfortable, he lays his cards on the table and says he has liked her for a while, but because she didn’t

accept his friend request, he had to use a fake profile. This, Naweed says, helps build trust.

Women sometimes seek out boyfriends this way too. They create a fake male profile, friend a crush, and try to find out whether he has a girlfriend. But instead of confessing her trick, a woman will tell the object of her affection that she knows a woman who likes him, direct him to her true profile, and wait for him to make a move.

Maryam Mehtar, an Afghan journalist, told me she has received so many friend requests from fake female profiles on Facebook that she’s lost count—and some are from people whose intentions

are anything but amorous. Once, she accepted a request from a female user with whom she had many mutual Facebook friends, most of them relatives. “I thought I knew her,” she says. “Everything she asked me, I usually honestly answered.” Later, she found out from friends that the profile belonged to a man who tried to collect private information and photos from women and then use it to blackmail them.

This problem is so pervasive that some women now create fake male profiles on Facebook—often using their brothers’ or cousins’ names—just to avoid such harassment.

An amorous man posing as a woman ... to woo a woman. An amorous woman posing as a man ... to woo a man. Still other women pretending to be men to avoid the attention of men—avaricious, amorous, and otherwise. As gender-bending plot devices go, these ones seem worthy of a Shakespearean comedy. **A**

TEXT ANALYSIS is a fledgling technology. It remains unclear how often such tools might suggest a problem when none exists, and not all wrongdoing will register on a heat map, no matter how finely tuned.

Still, a market will surely emerge for services claiming that they can find useful information in our work emails. Adam Badawi, a colleague of mine at UC Berkeley, uses natural-language algorithms to assess regulatory filings. He predicts that text analytics will become part of legal-and-compliance culture as the tools grow more sophisticated. Firms will want to protect themselves from liability by examining employee communications more comprehensively, particularly with respect to allegations of bias, fraud, and harassment. “This is something companies are hungry for,” Badawi told me.

In an ideal world, employees would be honest with their bosses, and come clean about all the problems they observe at work. But in the real world, many employees worry that the messenger will be shot; their worst fears stay bottled up. Text analytics might allow firms to gain insights from their employees while intruding only minimally on their privacy. The lesson: Figure out the truth about how the workforce is feeling not by eavesdropping on the substance of what employees say, but by examining how they are saying it. **A**

Frank Partnoy is a law professor at UC Berkeley.





THE CULTURE FILE

BOOKS, ARTS, AND ENTERTAINMENT

THE OMNIVORE

How *Lolita* Seduces Us All

A new book about a terrible crime sheds light on the novel's enduring allure.

BY CAITLIN FLANAGAN

LET US NOW REREAD the old texts, examining them with a cold eye to determine what they reveal about the #MeToo transgressions of the artistic past. Even the popular entertainments must be probed for common savagery. Molly Ringwald watched her film *The Breakfast Club* in the company of her young daughter and realized that one scene contains within it a suggestion of offscreen physical harassment. And just like that, the movie—the *Citizen Kane* of 1980s teen cinema—went whistling down the memory hole, a plaintive echo of its hit song fading to silence as it plummeted: “Don’t You (Forget About Me).”

Is nothing safe? Perhaps—and at Vegas odds—only *Lolita* can survive the new cultural revolution. No one will ever pick up that novel and issue a shocked report about its true contents; no feminist academic will make her reputation by revealing its

oppressive nature. Its explicit subject is as abhorrent today as it was upon the book’s publication 60-plus years ago.

Bored on a quiet afternoon during my first year out of college, I looked through some books I kept in a milk crate and reached for one I’d never read: *Lolita*. I’d spent the previous summer in Italy, where every jukebox and car radio seemed to play either a dance track called “Vamos a la Playa,” or the mesmerizing hits from the Police album *Zenyatta Mondatta*, including “Don’t Stand So Close to Me,” which informed me of the smoldering allure of “that book by Nabokov.” With that endorsement—hadn’t Jim Morrison directed us happily to William Blake?—and with nothing else to do, I opened the book, and the room quickly faded around me, and then I faded, too, leaving behind a girl-shaped vapor.

The opening pages: a delight. O, Nabokov! O, Sting! Didn’t we speak the same language? Weren’t we sophisticates? There was the charmed, European childhood of Humbert Humbert, “a bright world of illustrated books, clean sand, orange trees, friendly dogs, sea vistas.” There was the comically unsentimental dispatch of his lovely mother in a freak accident—“picnic, lightning”—and the fellow feeling he shared with a little girl named Annabel during a childhood romance: “The softness and fragility of baby animals caused us the same intense pain.”

But then, just a few pages later, he is an adult who is—*what the hell?*—cursed to live in “a civilization which allows a man of twenty-five to court a girl of sixteen but not a girl of twelve.” One had heard certain things about *Lolita*—but 12? Here was Humbert extolling “certain East Indian provinces [where men of] eighty copulate with girls of eight, and nobody minds.” And here he was on his habit of seeking out very young girls wherever he could find them, in orphanages and reform schools and public places: “Ah, leave me alone in my pubescent park, in my mossy garden. Let them play around me forever. Never grow up.”

And this is the exact point at which the sensible reader—the moral reader, the reader who does not leave behind a vapor when she enters the book but keeps one foot squarely planted in the corporeal world—parts company with Humbert



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Humbert. A sound decision. *Lolita* is a novel about a man who kidnaps and repeatedly rapes a 12-year-old girl, holding her captive until she escapes at 14. No one can blame the people who won't read it.

BUT THEN there are the rest of us. The book is about obsession, and its uncanny feat is to create that very same emotional state in the successive generations of readers who defend it. Moreover, many who have loved it most ardently are young women—the ones whom we might imagine being its most furious critics. Lena Dunham has called it her favorite novel. The singers Lana Del Rey and Katy Perry have declared their passion for the character Lolita, whom they envision as both sexually knowing and deeply innocent. Countless Tumblrs and Instagram accounts show teenage girls and young women similarly inspired by this combination, picturing themselves the objects of an older man's transfixing lust. That they are all far too old for Humbert Humbert—who cooled on girls once they hit 15, and was repelled once they hit the college years and were “buried alive” in the flesh of womanhood—is of no concern to them.

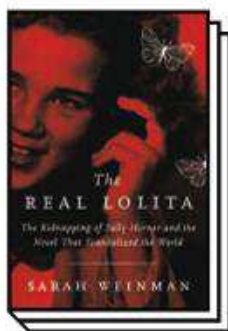
What is to be done with us, the women and girls who love *Lolita*? Can nothing bring us to our senses, break the spell? A new book is determined to set us straight: *The Real Lolita: The Kidnapping of Sally Horner and the Novel That Scandalized the World*. In it, Sarah Weinman unearths the case of Sally Horner, a schoolgirl who was kidnapped in 1948 from Camden, New Jersey, by a serial child molester. For almost two years, they traveled across the country under the guise of father and daughter; for a time she was even enrolled in school. It was a sensational news story, and Weinman argues that the road-trip and school details provided Nabokov with the scaffolding he needed to finish *Lolita*. Weinman is not the first to note the connection—Vladimir and Véra Nabokov both bristled when they were asked about it—but she's essentially clinched the case: The stories are starkly similar, and Nabokov even makes direct reference to the Horner case in the novel.

But Weinman's claim that awareness of the case “augment[s] the horror he also captured in the novel” isn't quite right. Knowing what was done to Sally Horner is indeed ghastly. But for “horror,” little can match the mural that Humbert Humbert dreams of painting on the dining-room walls of the Enchanted Hunters motel, the site of his first sexual congress with Lolita: “There would have been a fire opal dissolving within a ripple-ringed pool, a last throb, a last dab of color, stinging red, smearing pink, a sigh, a wincing child.”

If anything, *Lolita* augments the horror of reading about Sally Horner. I always forget how direct the novel is about the crimes at its center. All of that ugliness was hidden, we tell ourselves each time



***Lolita* never pardons us for the sin of participating in it.**



**THE REAL LOLITA:
THE KIDNAPPING OF
SALLY HORNER AND
THE NOVEL THAT
SCANDALIZED THE
WORLD**
SARAH WEINMAN
Ecco

we close its pages, covered in Nabokov's exquisite language. But then, at some remove of years, we pick up the book once again and discover what frauds we've been. Here is Humbert Humbert telling himself, and us, what he's done: “This was a lone child, an absolute waif, with whom a heavy-limbed, foul-smelling adult had had strenuous intercourse three times that very morning.” And here she is, in the passenger seat of his car, “complaining of pains,” he tells us. She “said she could not sit, said I had torn something inside of her.”

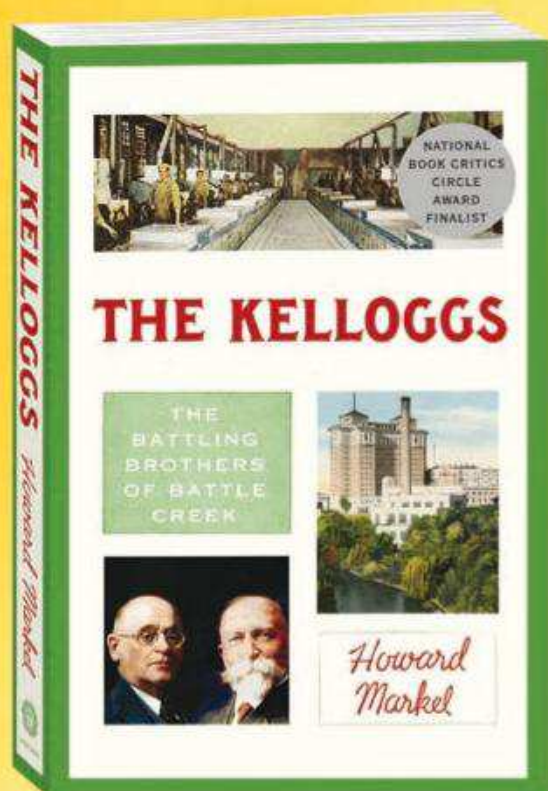
You can rail against *Lolita* forever. You can maintain, as Weinman does, that “the abuse that Sally Horner, and other girls like her, endured should not be subsumed by dazzling prose, no matter how brilliant.” But these reasonable impulses will get you nowhere. *Lolita* does not ask us: Are you a feminist, a crusader, an upholder of morals, a defender of girls? *Lolita* asks us only one question: Are you a reader?

Those early pages—with the clean sand and the delicate Annabel—those are the enchantment, the incantation. Those are the words that suck us in. The book, as funny as much of it is, never pardons us for the sin of participating in it. On its most powerful level, it implicates us deeply in the project: “Imagine me,” Humbert says. “I shall not exist if you do not imagine me.” Like tiny Humberts, we are availing ourselves of morally troubling pleasure.

Nor can we say it's just a work of fiction, unconnected from the lives and actions of real people. Surely among its more than 60 million readers are those who read it not in spite of the descriptions of sex with a 12-year-old child but because of them. Perhaps the most frightening passage in *The Real Lolita* is the note that Nabokov's European agent sent him about a publisher's response to the manuscript: “He finds the book not only admirable from the literary point of view, but he thinks that it might lead to a change in social attitudes toward the kind of love described in *Lolita*, provided of course that it has this authenticity, this burning and irrepressible ardor.”

Only in rare cases—in Hollywood's prolonged insistence on viewing the child-rapist Roman Polanski as a martyr, for example—has such a change come to pass, and even in that seat of perversity some sense has finally come calling. That's good for the girls of the world, and it's good for the novel, too, because *Lolita* depends on the combination of revulsion and ecstasy that it engenders in its readers. The revulsion is why it endures—long past *Story of O* or *Tropic of Cancer*, or any other forbidden text of the past—as a book that shakes its readers, no matter how modern. *Lolita* will always be both ravishing and shocking, a fire opal dissolving in a ripple-ringed pool. **A**

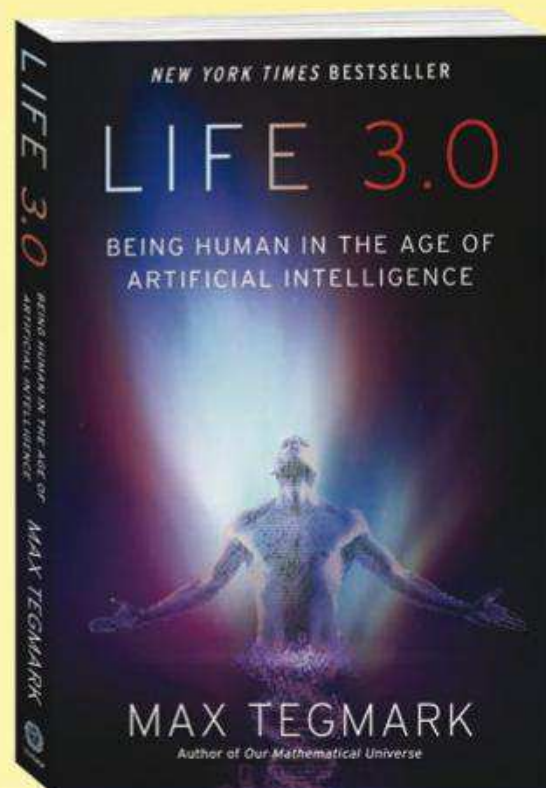
Caitlin Flanagan is a contributing editor at The Atlantic.



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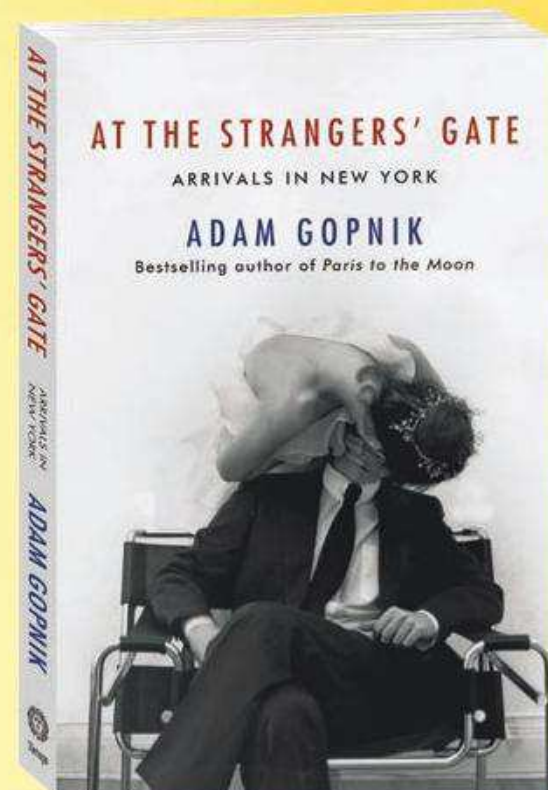
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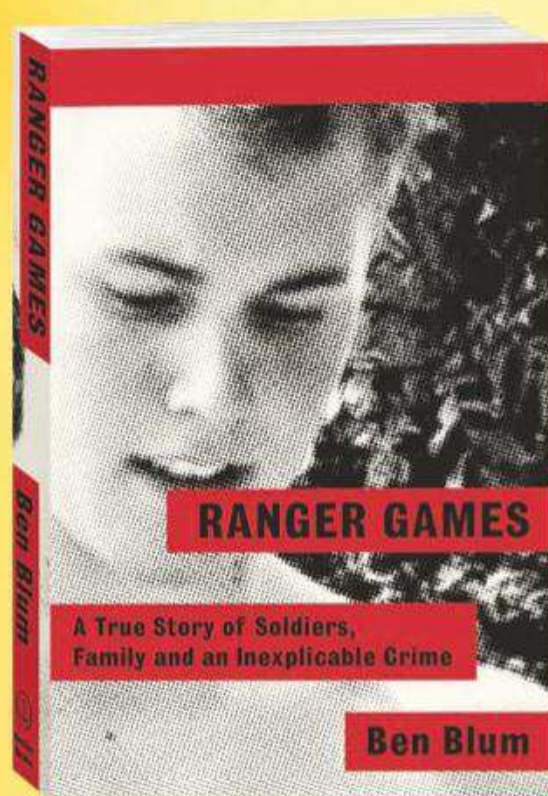
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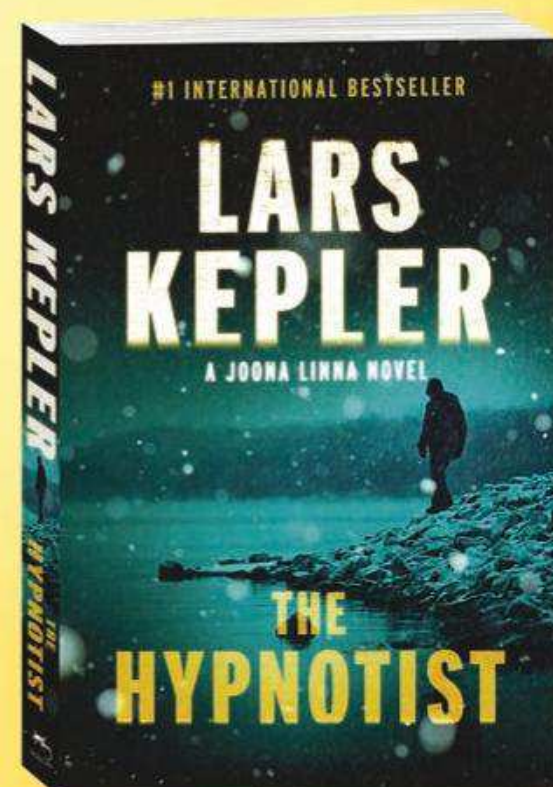


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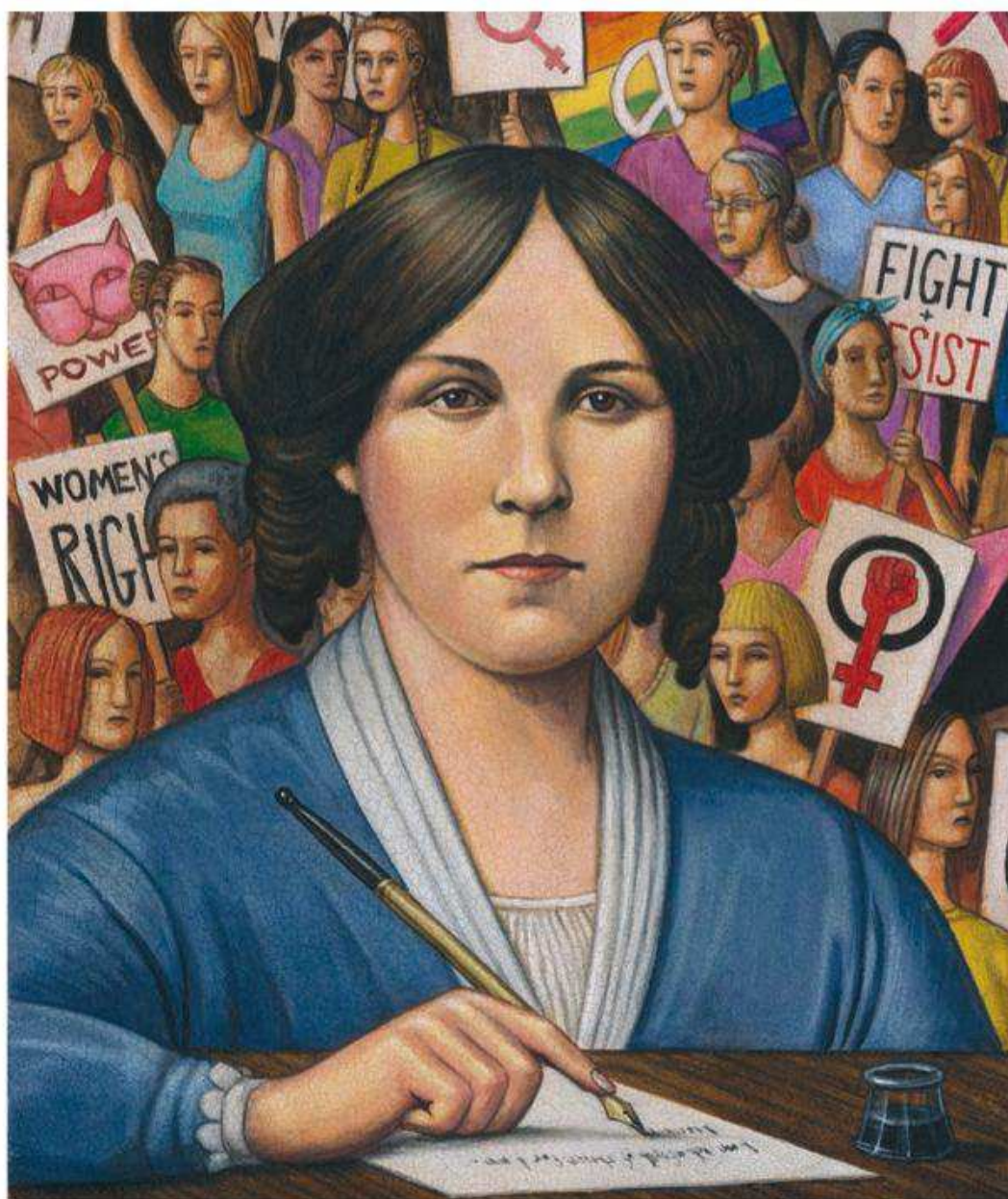
The Lie of *Little Women*

Subversive secrets lurk in the gap between Louisa May Alcott's real life and the story she tells.

BY SOPHIE GILBERT

EARLY IN THE RECENT BBC/PBS miniseries *Little Women*, the first significant adaptation of Louisa May Alcott's novel in 24 years, Laurie (played by Jonah Hauer-King) tells Jo (Maya Hawke)—the first March sister he falls in love with—how much he enjoys watching her family from his nearby window. “It always looks so idyllic, when I look down and see you through the parlor window in the evenings,” he says. “It’s like the window is a frame and you’re all part of a perfect picture.”

“You must cherish your illusions if they make you happy,” Jo replies.



The scene nods to an awkward truth: *Little Women* is the window tableau and we, its readers, are Laurie, peering in and savoring its sham perfection, or at any rate its virtuous uplift. During the 150 years since the novel's publication, fans have worshipped Alcott's story of the four March sisters and their indomitable mother, Marmee, who navigate genteel poverty with valiant acceptance and who strive—always—to be better. Detractors (notably fewer in number) have generally fastened on some version of that saga of gritty goodness too, irritated rather than awed.

But Alcott herself took a more skeptical view of her enterprise. She was reluctant to try her hand at a book for girls, a kind of writing she described later in life as “moral pap for the young.” Working on it meant exploring the minds and desires of youthful females, a dismal prospect. (“Never liked girls or knew many,” she wrote in her diary, “except my sisters.”) While writing *Little Women*, Alcott gave the fictional Marches the same nickname she used for her own tribe: “the Pathetic Family.” By the final chapter of *Jo's Boys*, the second of two novels that followed *Little Women*, Alcott didn't try to hide her fatigue with her characters, and with her readers' insatiable curiosity about them. In a blunt authorial intrusion, she declared that she was tempted to conclude with an earthquake that would engulf Jo's school “and its environs so deeply in the bowels of the earth that no [archaeologist] could ever find a vestige of it.”

The lie of *Little Women* is a multifaceted one. The book, a treasured American classic and peerless coming-of-age story for girls, is loosely inspired by Alcott's own biography. Like Jo, she was the second of four sisters who grew up in Massachusetts under the watchful eye of an intelligent and forceful mother. Unlike Jo's early years—in which her father is absent because, after losing the family fortune, he is serving as a chaplain in the Civil War—Alcott's childhood was blighted by the failure of her religious-fanatic father, Bronson Alcott, to provide for his family. Stark deprivation, rather than the patchy poverty of the book, was a daily reality.

The four sisters, frequently cared for by friends and relatives, were itinerant and often obliged to live apart. Alcott's sister Lizzie contracted scarlet fever while visiting a poor immigrant family nearby, much as Beth does in the novel. But Lizzie's death at 22, unlike Beth's around the same age, followed a protracted, painful decline that some modern biographers attribute to anxiety or anorexia. And while Jo was mandated by convention (and Alcott's publisher) to pick marriage and children over artistic greatness, Alcott chose the opposite, relishing her newfound wealth and her success as a “literary spinster.”

For the first 80 or so years after *Little Women* was published, conflict scarcely arose over how to interpret it. Readers adored the book and its two

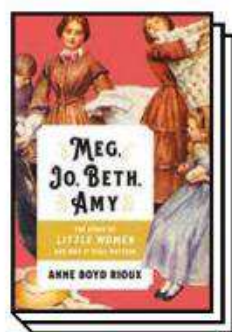
sequels without probing for Alcott's own feelings about them (curious though her fans were about her life). Not until 1950 did a comprehensive biography appear: Madeleine B. Stern dug into her subject's fraught family history, and outed the grande dame of girls' lit as the author (under a pen name) of sensationalist stories about murder and opium addiction. Then, from the 1970s onward, feminist critics began examining *Little Women* from a new perspective, alert to the inherent discord between text and subtext. As the literary scholar Judith Fetterley argued in her 1979 essay "'Little Women': Alcott's Civil War," the novel is about navigating adolescence to become a graceful little woman, but the story itself pushes back against that frame. The character who continually resists conforming to traditional expectations of demure femininity and domesticity (Jo) is the true heroine, and the character who unfailingly acquiesces (Beth) dies shortly after reaching adulthood.

The blossoming of feminist criticism finally gave *Little Women* the thoughtful, rigorous analysis it deserved. Exploring the internal tug-of-war between the novel's progressive instincts and the era's prevailing constraints revealed a book that was far from pap. And yet *Little Women* continues to be sidelined in the American canon. Its reputation as fictional fare for and about girls and women prevents it, even now, from achieving the status of, say, *Huckleberry Finn*. Many male readers feel, as G. K. Chesterton put it, like "an intruder in that club of girls." At the same time, the domestic setting and sermonizing that irked Alcott herself can strike contemporary female readers as bland and restrictive: The book's popularity shows signs of waning among a younger audience. But the fascination with *Little Women* endures among writers and filmmakers, as a current surge of adaptations attests. Inspired by the challenge of bridging the gap between Alcott's life and Alcott's writing, efforts to renew and expand its power help illuminate complexities in a novel whose literary stature is ripe for reevaluation.

THE WEALTH OF ADAPTATIONS of *Little Women* over the past century is proof of its durability, and also its malleability. As Anne Boyd Rioux writes in *Meg, Jo, Beth, Amy: The Story of Little Women and Why It Still Matters*, stage and screen versions of the novel have reflected the eras they were made in. Early ones offered morally and socially wholesome entertainment in the presumed spirit of the original text. During the Great Depression, when audiences were consoled by the idea of simpler times, theatrical performances of *Little Women* were popular across America. By 1949, when Mervyn LeRoy directed the fourth film adaptation, this one with an all-star cast (Janet Leigh as Meg, June Allyson as Jo, Margaret O'Brien as Beth, and Elizabeth



"Never liked girls or knew many," Alcott wrote in her diary.



MEG, JO, BETH, AMY:
THE STORY OF LITTLE
WOMEN AND WHY IT
STILL MATTERS
ANNE BOYD RIOUX
W. W. Norton

Taylor as Amy), consumerism had become a patriotic duty. So the movie's writers invented a new scene in which the March sisters go on a Christmas spending spree with money from Aunt March.

Rioux's astute examination of the long life of *Little Women* in American culture is itself, fittingly enough, very much of its era: She draws particular attention to the problematic paternal shadow looming over Alcott's enterprise. Rioux, a professor at the University of New Orleans, delves into Alcott's background, emphasizing that the young Transcendentalist—who grew up in a circle that included Ralph Waldo Emerson and Henry David Thoreau—saw writing as a more practical and less lofty endeavor than her male peers did. As for Bronson Alcott, "the only occupations that did not compromise his principles were teaching and chopping wood," Rioux writes of the radical education reformer, whom she characterizes as flaky at best and unstable at worst. His family, forbidden to eat animal products or wear anything but linen, often starved and froze in New England's fierce winters. (At Fruitlands, a utopian community he co-founded in the 1840s, root vegetables were initially outlawed because they grew in the direction of hell.)

For Alcott, who shared her father's creativity but lacked his zealotry, writing was both a path to realizing her literary ambitions and a means of feeding her family. After publishing a couple of stories in *The Atlantic*, she met with a colder reception from the magazine's new editor, James T. Fields, who in 1862 gave her \$40 to open a school instead—which she did, although it soon failed. She returned to writing sensational stories, which she described as "blood and thunder tales," published in weeklies, some under the pseudonym A. M. Barnard, and featuring passionate, assertive female characters who scheme and adventure their way to prosperity. While she didn't want her father or Emerson to know she was stepping into the literary gutter, she seems to have enjoyed the "lurid style," and thought it suited her "natural ambition." The money she earned was also crucial. "I can't afford to starve on praise, when sensation stories are written in half the time and keep the family cozy," she wrote in her journal.

THE IRONY WAS that *Little Women*, which Alcott embarked on with reluctance and wrote with formulaic conventions in mind, turned out to be the book that made her name and her fortune. It's impossible not to wonder what she might have achieved had she been able to throw off the "chain armor of propriety," the phrase she used to describe the burden of having "Mr. Emerson for an intellectual god all one's life." The recent BBC/PBS miniseries nods briefly to nonidyllic realities, but mostly doubles down on the domesticity front: Rustic chic pervades the March home, a twee extravaganza of muslin, bouquets of baby's

THE CULTURE FILE

BOOKS



breath, and homemade jam. If each era gets the *Little Women* adaptation it deserves, this is Alcott as fall-wedding Pinterest board. But in 1994, Gillian Armstrong, directing the most successful film adaptation to date, took a bolder approach.

Robin Swicord, who wrote the screenplay, created virtually every line of dialogue from scratch, saying that she had imagined what Alcott might have written had she been “freed of the cultural restraints” of her time. The result swerves from the usual homey scene to offer a politically engaged drama in which Marmee (Susan Sarandon) and Jo (Winona Ryder) advocate for women’s suffrage and none of the Marches wears silk, because it’s produced using slavery and child labor. Males are relegated to the margins: The March household is a matriarchy, presided over by a fierce feminist and reformist crusader who emphasizes the importance of education and moral character rather than interior decoration. Swicord even names Marmee Abigail, which was Alcott’s mother’s name.

Focusing on the Marches as more than just daughters, sisters, and wives, Armstrong’s *Little Women* also foregrounds its characters’ creative talents—their plays, their newspaper, Jo’s writing, Amy’s art—without sacrificing the aspects that readers have come to love, not least the have-it-all denouement that Alcott fiercely, and by now famously, resisted delivering in its most treacherous form: Chafing at the pressure to marry Jo off, she made sure to flout readers’ desperate desire to see Jo end up with Laurie. Alcott instead paired her with the older, far less glamorous Professor Bhaer—a subversive step beyond which a late-20th-century director and audience plainly weren’t ready to go, aware though Armstrong surely was that the author herself had yearned to leave Jo single.

In the future, though, who’s to say what choices new film incarnations might make? Lea Thompson is starring as Marmee in a feature-length “modern” update of *Little Women* pegged for release this year, and the actor and Oscar-nominated director Greta Gerwig is adapting and directing a version to appear in 2019; Robin Swicord is back, this time as a producer, and the star-studded cast will include Meryl Streep. However the latest adapters proceed, they have already found—as have directors and writers before them—that the reality of Alcott’s life adds a liberating, complicating dimension to the story of *Little Women*. For her, literary success came with suppressing her creative instincts. “What would my own good father think of me if I set folks to doing the things I have a longing to see my people do?” she confided to a friend about her fictional characters. At the same time, that literary success gave her a personal freedom she couldn’t afford to give her characters—at least not those in the March family. Writing as A. M. Barnard, she empowered her adult heroines in ways her little women could only dream of.

But dream they did. Jo’s creativity, her non-conformism, and especially her anger—that energy constantly undercuts the sanctimony Alcott dreaded in a genre that she, without blood and thunder, found ways to sabotage in *Little Women*. Her ambivalence emboldened her to unsettle conventions as she explored women’s place in the home and in the world—wrestling with the claims of realism and sentimentality, the appeal of tradition and reform, the pull of nostalgia and ambition. Her restless spirit is contagious. The more Alcott’s admirers seek to update her novel, drawing on her life as context, the more they expose what her classic actually contains. **A**

Sophie Gilbert is a staff writer at The Atlantic.

PROVIDENCE

Providence seems to be one of the words
That shouldn’t be mourned as it falls from fashion.
Goodbye to the notion that whatever happens
Is meant to happen, foreseen and approved
By a thoughtful heaven. A word that’s proven
Invaluable to the privileged when they’ve cautioned
The less-than-privileged to be content
With the portion that happenstance has assigned them.
It’s the work of providence that you were born
To a sharecropping family on a hardscrabble farm,
Not to the family that owns the land.

Goodbye to the word, and yet its disappearance
Might make it harder for the sharecropper’s daughter
To explain to her husband’s wealthy parents
Her reluctance to take a pill guaranteed
To make the baby boy she’s soon to bear
More handsome and clever than he would be otherwise.
Providential, meaning the baby for her
Is a gift meant to be welcomed as is, not a kit
To be assembled at home in the latest style.

A gift whether or not he later looks back
On his birth as providential or as a simple
Piece of good luck, providing him with a mother
Who would urge him to do the work
That pleased him most,
Work she believed he was meant to do.

— Carl Dennis

Carl Dennis’s most recent collection, *Night School*, was published earlier this year.



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BOOKS

The Whale, Surveilled

What high-tech tracking of the huge creatures reveals about them—and us

BY REBECCA GIGGS

HAD YOU BEEN ALIVE in the early 19th century and in want of a sea monster, you might have summoned one via the apparatus of a dead whale. Take a colossal rib, a narwhal's spiral tusk, a gray whale's eyeballs, bristles of baleen stripped from a humpback's jaw or armfuls of its spooling tongue—how disquieting these discards from the whaling industry must have appeared to those who had never seen a whale whole, in the flesh. Scraps retrieved from the decks of harpoon ships, or sold by savvy beachcombers, could be credible props to mobilize a mythical beast. The rest relied on a story. Swindlers in dim backstreets and taverns

learned to articulate whale leftovers as parts of stranger animals yet: Here were bits of mermaid, ocean centipede, sea swine, saltwater salamander, and serpent; remnants of turtles as large as houses and of aquatic owls once believed to have ambushed boats in the Northern Hemisphere. Before a spellbound audience, a sperm whale's penis (as pale and hefty as daikon, but dexterous) readily transformed into a segment of a kraken's mortifying tentacle.

We may now be a modern and scientific people, but standing beneath a whale skeleton in a city museum, who isn't still drawn into a reverie of wonder and speculation? How whopping were those tail flukes, long since decomposed? How might it feel to be alive on that scale—to experience the world in such stupendous dimensions of sensation and action? What dark, red secrets lie in the cubicles of a whale's heart? Nick Pyenson, a paleobiologist and the curator of fossil marine mammals at the Smithsonian, knows well the tug of whale remains on the imagination. In his debut book, *Spying on Whales: The Past, Present, and Future of Earth's Most Awesome Creatures*, Pyenson sets out to place whales within a natural history of ancient environments, and to predict how whale species will respond to burgeoning ecological pressures. The author's examination of the anatomy of present-day cetaceans (whales, dolphins, and porpoises) takes us back to the evolutionary origins of these ocean-borne mammals.

THE CULTURE FILE

BOOKS



What roamed then proves to be an astounding array of real chimera, as evocative as any marine monster of myth or fiction.

Start, say, with this revelation: Once upon a time—in the Eocene epoch—whales were quadrupeds. They walked on land. One primitive cetacean ancestor, *Pakicetus*, is thought to have been a canine-size, shore-living creature with a doggy tail and clawed paws. It probably had fur (hair typically fails to fossilize, so on this point there is debate). With its tiny, wide-set eyes, *Pakicetus* displays a sheepish expression in many artists' depictions—as if ashamed at having gone extinct.

Pyenson describes another protowhale that appears to have stalled mid-phase between a prodigious crocodile and a leopard seal: *Basilosaurus* had a bite force that, pound for pound, exceeded that of any other known creature. It retained the diminutive hind limbs its forebears had deployed to kick off from their terrestrial habitat and rummage in shallow reefs, though *Basilosaurus* occupied open waters, where it is believed to have hunted other prehistoric whales. (A few years ago, a *Basilosaurus* skeleton with a second whale inside it was exhumed from the floor of an Egyptian valley, a kind of ossified cetacean turducken.) *Basilosaurus* bones can still be found in the southern United States. (*Basilosaurus* is the official state fossil of Alabama.) Paleontologists have sometimes discovered their vertebrae, not lodged in sedimentary rock or tumbling from eroded riverbanks but repurposed as andirons in fireplaces, foundation stones in buildings, or parts of furniture. *Basilosaurus* is a sea monster we've unknowingly domesticated.

Forty million years ago lived whales that looked rather like today's iguanas, albeit larger. Others appeared more fishy. Some resembled an elongated hippo whose body tapered into the snickering head of an oversize ferret. By the time of *Odobenocetops*, the walrus-faced cetacean of the Miocene epoch, the course of evolution had streamlined whales' bodies and dispensed with the back legs. *Odobenocetops* had two asymmetrical tusks protruding downward from its squashy muzzle. The right tusk grew twice as long as the left for reasons unknown (perhaps it had to do with its diet of mollusks, or with courtship displays the males performed). To the 21st-century viewer, these tusks give *Odobenocetops* the lopsided charm of an oracular character in a Hayao Miyazaki film.

As far as researchers are aware, more than 80 species of cetacean inhabit modern-day oceans and estuaries. But the seas are deep and resist surveillance. It is possible that yet more whales swim below, awaiting discovery. Genetic analysis is recategorizing misidentified remains: Hitherto unknown cetaceans are being discovered in bone and tissue samples. The geologic record that Pyenson sets out to explore documents some

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600 prehistoric whale species that no longer exist, and reveals evidence of bygone eras during which whale ancestors occupied a wide range of ecological niches worldwide. Many of the bones that prove pivotal to verifying cetacean evolution are as small as tokens from a board game.

Beneath the lower spine of some modern rorqual whales remain the vestigial knobbles of two back legs, folded up like an airplane's landing gear. These defunct hindquarters are fleetingly visible on the exterior of the animal in the womb (when, for a time, a whale fetus looks a lot like a huddled piglet). This is the magic of whales: They contain forms both familiar and stupefying. Dissecting the innards of a minke in Iceland, Pyenson discovers at least one organ whose specific function remains mysterious—a gelatinous sphere the size of a volleyball, capsuled in the tip of the whale's chin. Cellular bundles in the organ turn out to be pressure sensors. Figuring out what this large structure might indicate about how whales perceive their ocean habitat, and how their senses developed over eons, is the ongoing labor of Pyenson and his peers. However far into the flesh of whales they plunge, they find only more questions to wonder at.

OH, BUT IT'S ALL TOO EASY to get caught up in the spectacular oddity of prehistoric cetaceans, when what *Spying on Whales* is about, at its core, is technology. Pyenson may have embarked on an investigation into how whale physiology and evolution divulge ephemeral aspects of marine environments lost to time, but as the book progresses it is the shorter history of human innovation that comes to the fore. The sublime dimensions of the whales themselves are superseded by the scope, and astonishing acuity, of the instruments used to surveil them.

Fossilized cetaceans contained in the elemental hardscape of the Atacama Desert, in South America, are laser-scanned—permitting paleontologists to view, on their screens, the orientation of overlapping skeletons and small facets of fragile structures. Meticulous data-point renderings of whale bones in museum collections, and of bones that prove too brittle to transport from sites of discovery, are relayed across the globe to 3-D printers. Great white whales surge from machines via processes that compress the biggest animal bodies ever to populate the planet into STL files. During the 19th century, our profoundly visceral relationship with whales spawned dreams of sea monsters. Now cetaceans give rise to specters that are digital.

Whales have become signals not just in cyberspace but in real space, too. Electronic tags once recorded only the slenderest facts of animal migration, verifying the miles traveled, and over what durations. Today, biologging tags (some satellite-linked) have advanced to the point that

scientists are capable of observing the physical oscillations of an individual creature in a single act of feeding. Whales can now be outfitted with video recorders, GPS devices, and accelerometers. Pyenson envisages a future in which gray whales, creatures of the Pacific for centuries now, return to the Atlantic accompanied by drones.

The monitoring technologies Pyenson describes provide ever more fine-grained access to subsea worlds, pulling us alongside whales and into environments rarely accessed by humans. These instruments are designed to be temporary. Biologging devices fall off without causing significant harm after a set amount of time. Drones zip through the vaporous columns of whale exhalations, taking samples of breath for microbial analysis, and retrievable darts are used to collect tissue. (Is the buzz of drones more or less perturbing to a whale than the pain of a dart? The sensory lives of whales—how whales experience and cogitate about their surroundings—remain inaccessible.)

However well these technologies enable the voyeuristic fantasy of spying on pristine, animalian wilderness, they also deliver evidence of our presence in the sea. Surveillance of whales becomes surveillance of us when, in tandem with technology, the animals reveal how the oceans are altered by human activity. We may not physically go to the places whales do, but the trace of our industrial and manufacturing past has found its way there. In his latter chapters, Pyenson considers whale bodies from a different angle: how they register pernicious dissipations of pollutants, and may bear the isotopic imprint of fossil-fuel burning and the nuclear age.

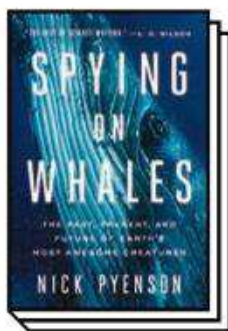
Parts of whales, it turns out, are monitoring devices of a different nature. Cetacean blubber, and the fibrous baleens that some whales use to strain their prey from seawater, can be assayed to chronicle agrochemical use, carbon emissions, and atmospheric-weapons tests. Stashed in museum archives around the world are old pieces of baleen, detached from their hosts in the decades when whale blubber was a source of oil for lighting and machine lubrication. These shaggy baleens, some as long as surfboards, have acquired an unanticipated significance. They capture “environmental signals from a world before the widespread release of carbon dioxide from industrial fossil fuels,” Pyenson writes. The specimens are, in other words, a valuable data set for ecological scientists charting the extent to which our oceans are changing.

How apt that these baleens—a reminder of the whaling business that predated the global petroleum market—should help testify to the ongoing impact of the energy and extractive industries. When Pyenson is called on to exhume a phenomenal set of whale skeletons in Chile, the work of understanding one prehistoric ecology bumps up

THE CULTURE FILE

BOOKS

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SPYING ON WHALES:
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NICK PYENSON
Viking

against human endeavors more directly. These primeval whales tell an important story about oceanographic dynamics, corroborating periodic flare-ups of ancient toxic algae and the offshore churning of nutrient-laden waters that, over time, evolved into what is now recognized as the modern Humboldt Current. (One of Earth's most productive cold currents, the Humboldt supports some of the planet's densest concentrations of marine fish.) The site—called Cerro Ballena, or “Whale Hill”—provides a snapshot of how oceanic biodiversity responds to shifts in climate. While Pyenson is engaged in scrutinizing these fossils, helping to hindcast prehistoric marine conditions, the fossils' preservation, documentation, and removal become an urgent issue: The Pan-American Highway is being widened to allow for the passage of large mining machines, a development soon to disturb the site. The project of mapping out a long-disappeared ecosystem is crosscut by the enterprise of making space for a new, industrialized landscape to come.

THOUGH PYENSON IS A BIOLOGIST, the language he uses to describe whales is often mechanistic. Whales appear variously as “time machines” and “spaceships.” Gray whales are “ecosystem engineers,” and other large whales are biological “pumps” transporting nutrients up from the lightless layers of the sea, by feeding at depth and excreting their waste nearer the surface. These are not the monstrous whales that once loomed on the margins of seafarers' maps, whales that indicated what might exist beyond the borders of the knowable. Pyenson's terminology is telling. The whales in his purview—in a metaphorical, if not a physical, sense—are constructed by humankind.

This is an important cue to the central message of *Spying on Whales*. Humans are reconfiguring their relationships with whales of both the prehistoric past and the present. We will continue to shape the ecosystems whales exist in, determining, however inadvertently, which whale species flourish and which decline. Evidence we collect from these wild animals illuminates not only the mysteries of their vast and wondrous lives, but the marvel of our own technological prowess. The data now also attest to the extent of our impact on the bodies, habits, and habitats of other species, even creatures that roam in distant seas. Pyenson, as an explorer of ancient environments unseen by any human eye, reaches back into prehistory to bring into focus our responsibility for the far future of the natural world. **A**

Rebecca Giggs, a writer from Sydney, is currently based at the Rachel Carson Center for Environment and Society, in Munich.

BOOKS

Who Gets to Claim Kafka?

A court battle between German and Israeli archives over his manuscripts raised literary, not just legal, questions.

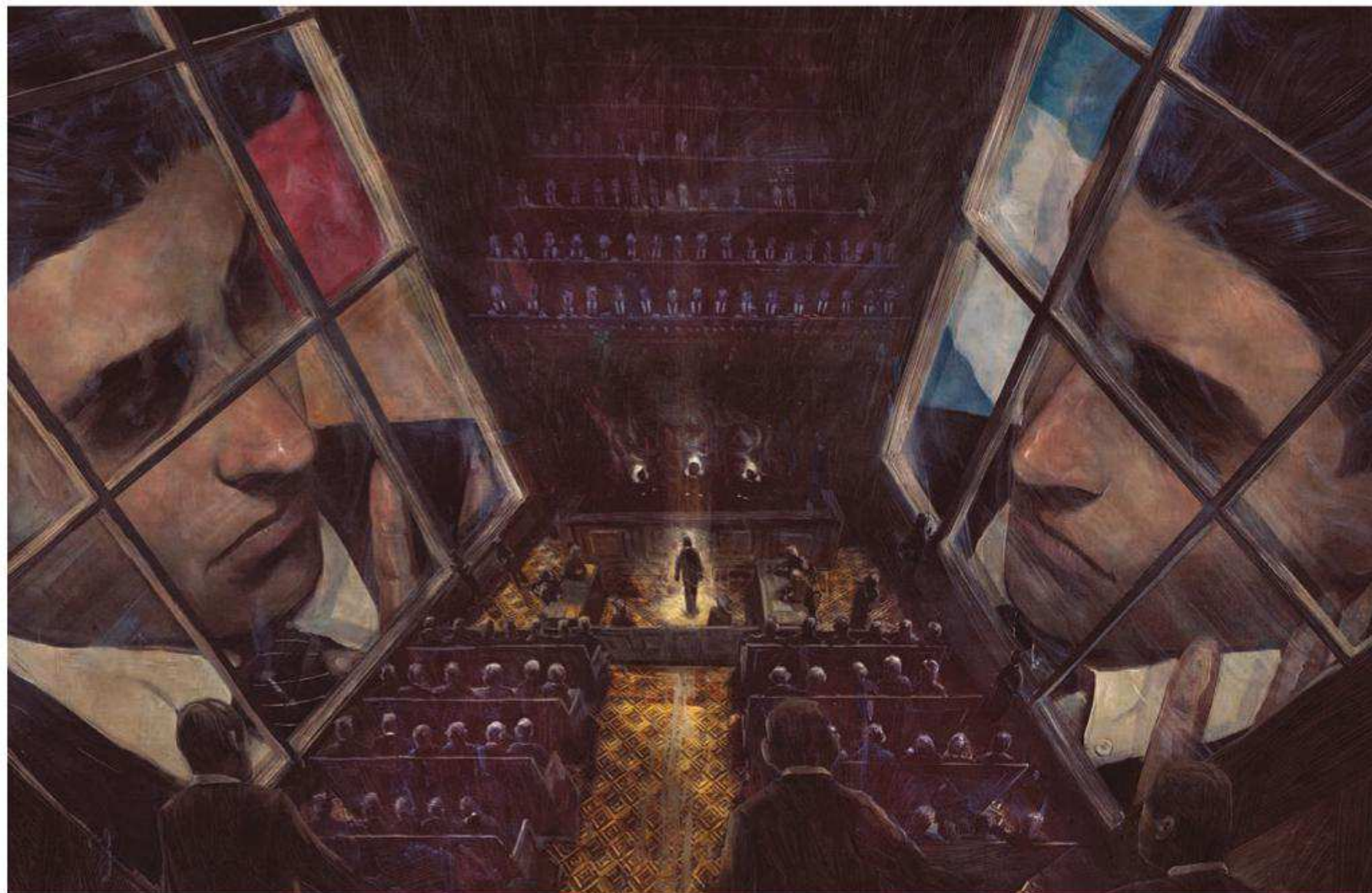
BY ADAM KIRSCH

AN ADMIRER OF FRANZ KAFKA'S once presented him with a specially bound volume of three of his stories. Kafka's reaction was vehement: "My scribbling ... is nothing more than my own materialization of horror," he replied. "It shouldn't be printed at all. It should be burnt." At the same time, Kafka believed that he had no purpose in life other than writing: "I am made of literature," he said, "and cannot be anything else." Clearly, Kafka's ambivalence about his work was an expression

of deep uncertainty about himself. Did he have the right to inflict his dreadful imaginative visions on the world? "If one can give no help one should remain silent," he mused. "No one should let his own hopelessness cause the patient's condition to deteriorate."

Ironically, the hopelessness of Kafka's work was precisely what ensured its place at the center of 20th-century literature. Gregor Samsa, who wakes up one morning to discover that he has been transformed into an insect, and Joseph K., who is put on trial by an unofficial court for a crime no one will explain to him, have become archetypal modern figures. W. H. Auden proposed that Kafka was to the alienated, absurd 20th century what Dante or Shakespeare had been to their times—the writer who captured the essence of the age.

If Kafka could read *Kafka's Last Trial*, Benjamin Balint's dramatic and illuminating new book about the fate of his work, he would surely be astonished to learn that his "scribbling" turned out to be incredibly valuable—not just in literary terms, but financially and even geopolitically. At the heart of Balint's book is a court case that dragged through the Israeli judicial system for years, concerning the ownership of some surviving manuscripts of Kafka's that had ended up in private hands in Tel Aviv. Because the case was widely reported on at the time, it's not a spoiler



to say that in 2016 control of the manuscripts was taken from Eva Hoffe, the elderly woman who possessed them, and awarded to the National Library of Israel.

In Balint's account, however, the case involves much more than the minutiae of wills and laws. It raises momentous questions about nationality, religion, literature, and even the Holocaust—in which Kafka's three sisters died, and which he escaped only by dying young, of tuberculosis. Hoffe inherited the manuscripts from her mother, Esther, who had been given them by Max Brod, Kafka's best friend and literary executor. She planned to sell them to the German Literature Archive, in Marbach, where they would join the works of other masters of German literature. This would have been a cultural coup for Germany, and an implied endorsement of the idea that Kafka is properly considered a German writer though he was never a German citizen, but a Jew who was born and lived in Prague. The National Library of Israel argued that Kafka's writing forms part of the cultural heritage of the Jewish people, and so his manuscripts belong in the Jewish state.

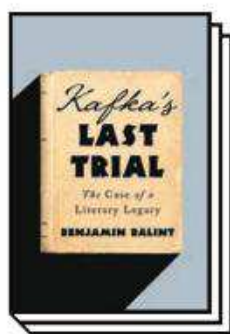
AT THE TIME OF HIS DEATH, in 1924, at the age of 40, Kafka hardly seemed like a candidate for world fame. He had a minor reputation in German literary circles, but he had never been a professional writer. He spent his days working as a lawyer for an insurance company, a job he hated though he was good at it. He published a few stories in magazines and as slim volumes, but while these included masterpieces such as *The Metamorphosis*, "In the Penal Colony," and "A Hunger Artist," they received little attention. Kafka's major novels, *The Trial* and *The Castle*, remained in manuscript form, unfinished and unknown to the world.

Famously, he had tried to keep it that way. Before he died, Kafka had written a letter to Brod, who found it when he went to clear out Kafka's desk. In this "last will," Kafka instructed Brod to burn all his manuscripts, including his letters and diaries. But Brod, who admired Kafka to the point of idolatry, refused to carry out his friend's wishes. Instead, he devoted the rest of his life to editing, publishing, and promoting Kafka's work—even writing a novel about him, in which Kafka was thinly disguised as a character named Richard Garta. In this way, Brod ensured not only Kafka's immortality, but his own. Though Brod himself was a successful and prolific writer, today he is remembered almost exclusively for his role in Kafka's story.

The question of whether Brod acted ethically in disregarding Kafka's dying wishes is one of the great debates of literary history, and it lies at the core of Balint's book. As he notes, "Brod was



"I am made of literature," Kafka said, "and cannot be anything else."



KAFKA'S LAST TRIAL:
THE CASE OF A
LITERARY LEGACY
BENJAMIN BALINT
W. W. Norton

neither the first nor the last to confront such a dilemma." Virgil wanted the *Aeneid* to be burned after his death, a wish that was also denied. Preserving an author's work against his or her will implies that art belongs more to its audience than to its creator. And in strictly utilitarian terms, Brod undoubtedly made the right choice. Publishing Kafka's work has brought pleasure and enlightenment to countless readers (and employment to hundreds of Kafka experts); destroying it would have benefited only a dead man.

But did Kafka, the man made of literature, really want his writing to disappear? The truth is that, if you read Kafka's will closely, it is just as ambiguous, just as susceptible to multiple interpretations, as everything else he wrote. Not least, the will distinguished between his unpublished work and some of his published stories, which he described as "valid." "I don't mean that I want them reprinted," he added, but "I'm not preventing anyone from keeping them if he wants to." Kafka seemed to have a lingering hope that his work would find readers. And in choosing Brod as his executor, he picked the one person who was certain not to carry out his instructions. It was as if Kafka wanted to transmit his writing to posterity, but didn't want the responsibility for doing so. "Even in self-renunciation Kafka was beset by indecision," Balint writes.

Brod, for his part, had no doubts about the importance of his friend's writing. He succeeded in finding publishers for *The Trial* and *The Castle* in the 1920s, but only in the '30s did Kafka's work slowly begin to find a real audience. The rise of Nazism convinced readers that they were indeed living in Kafka's world of counterfeit laws and meaningless violence—even as Nazi anti-Semitism made it impossible to publish his books in Germany.

Brod fled Czechoslovakia on the very night the Nazis annexed the country, in March 1939, carrying Kafka's manuscripts with him. He had been a committed Zionist for many years, and he made his way to Tel Aviv, where he lived until his death, in 1968. Balint shows that, like many immigrants from Germany, Brod had a difficult time remaking his life in Palestine. To his distress, he was slighted by the local literary world, which was interested only in Hebrew writing. Indeed, Balint points out that Kafka's work has never been as popular in Israel as it is in Europe and the United States.

DURING THE TRIAL, German scholars argued that Kafka's manuscripts should go to Germany, where they would be studied intensively, rather than be neglected in Jerusalem. One obvious counterargument was that it would be obscene for Kafka's relics to end up in the country that had annihilated his family. Balint quotes

an Israeli scholar who cuttingly observed, “The Germans don’t have a very good history of taking care of Kafka’s things. They didn’t take good care of his sisters.” But the case for keeping Kafka in Israel went deeper, and involved a literary as well as a legal judgment. Balint writes that in awarding Kafka’s papers to the National Library of Israel, the judges “affirmed that Kafka was an essentially Jewish writer.” And this is the real question at the center of *Kafka’s Last Trial*: Is he a Jewish writer? What do we gain, or lose, by reading his work through a Jewish lens?


Biographically, Kafka’s Jewishness is obvious. He was born to a Jewish family and lived in a Jewish community beset by serious, sometimes violent anti-Semitism. Though he was raised with little knowledge of Judaism, Kafka developed a profound interest in Jewish culture. Yiddish theater and Hasidic folktales were important influences on his work, and in the last years of his life he dreamed of moving to Palestine, even studying Hebrew to prepare. (Kafka’s Hebrew workbook was among the items Eva Hoffe inherited.)

But if you didn’t know Kafka was Jewish, you could read his books without ever discovering that fact. The word *Jew* never appears in his fiction, and his characters have the universality of figures in a parable: Joseph K. could be anyone living in a modern urban society. And yet many Jewish readers—including critics from Walter Benjamin to Harold Bloom—have always understood Kafka’s work as growing out of, and commenting on, the Central-European Jewish experience. Kafka belonged to a Jewish generation that was cut off from the traditional Yiddish-speaking life of Eastern Europe, but that was also unable to assimilate fully into German culture, which treated Jews with disdain or hostility. In a letter to Brod, Kafka memorably wrote that the German Jewish writer

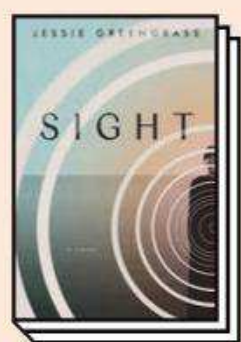
The word *Jew* never appears in Kafka’s fiction, and his characters have the universality of figures in a parable.

was “stuck by his little hind legs in his forefathers’ faith, and with his front legs groping for, but never finding, new ground.”

Once you start looking for such figures in Kafka’s fiction, they are everywhere. The captive ape in “A Report to an Academy,” who has painfully learned how to join the world of human beings; the protagonist of “Josephine the Singer, or the Mouse Folk,” whose squeaky art helps sustain her persecuted people; Joseph K. in *The Trial*, who is judged by alien rules he doesn’t understand—each is a legible comment on Kafka’s Jewish predicament. Above all, Kafka’s obsession with the idea of law, and his bafflement before legal systems whose workings seem incomprehensible, is practically theological, a product of his sense that Jewish law had been irretrievably lost.

Yet Kafka’s genius was to see that these Jewish experiences—what Balint calls his “stubborn homelessness and non-belonging”—were also archetypally modern experiences. In the 20th century, the condition of being cut off from tradition, manipulated by unfriendly institutions, and subjected to sudden violence became almost universal. For Bertolt Brecht, Kafka’s work constituted a kind of premonition, describing “the future concentration camps, the future instability of the law ... the paralyzed, inadequately motivated, floundering lives of many individual people.” A writer whose name goes on to become an adjective functions as a kind of prophet, giving a name to experiences that are in store for everyone. That is why, in the end, it hardly matters whether Kafka’s relics reside in Germany or Israel. What counts is that we are all living in Kafka’s world. 

Adam Kirsch is the author of several books, including The Global Novel: Writing the World in the 21st Century.



COVER TO COVER

Sight

JESSIE GREENGRASS
HOGARTH

SOME MIGHT SAY pregnancy—that miraculous and tedious experience—dulls the brain. But not Jessie Greengrass, a British writer whose debut

novel is a highly unusual contribution to the recent flurry of books about motherhood. *Sight*’s meditative narrator, an unnamed “I” who is expecting

her second child, ponders big themes: the body’s mysteries, maternal responsibility, life’s unpredictability, her still-precarious sense of identity—“the underlying, animating shape of things, the way my own cogs bit and turned.”

She yearns for clarity and certainty. Or does she? Deep ambivalence is the spirit Greengrass conveys in a hybrid of introspective

prose and historical research. Her narrator probes personal confusions, parsing painful transitions in her past—her mother’s death, visits with her grandmother, debates with her partner about having a child. But she also seeks relief in the library. She delves into the lives of scientists dedicated to the pursuit of transparency (Wilhelm Röntgen, who discovered X-rays; Freud; an

18th-century anatomist named John Hunter).

Existential mulling interwoven with biographical digging: The blend may sound a little heavy. It is. Yet *Sight*—with its cascading sentences and startling insights—is hard to put down. For a novel that evokes a consciousness immured in a pregnant body, what more apt goal than to exert a weighty pull?

— Ann Hulbert

IMMEDIATE CAUSE
(Final disease or condition
resulting in death)



a. _____

DUE TO (OR AS A CONSEQUENCE OF)



ILLUSTRATIONS BY DENISE NESTOR



WHAT REALLY KILLED THE DINOSAURS?

A Princeton geologist has endured decades of ridicule for arguing that the fifth extinction was caused not by an asteroid but by a series of colossal volcanic eruptions. Her fight with the asteroid camp may be the nastiest feud in all of science—but she's reopened a debate that had been considered closed.



1.

GERTA KELLER WAS

waiting for me at the Mumbai airport so we could catch a flight to Hyderabad and go hunt rocks. “You won’t die,” she told me cheerfully as soon as I’d said hello. “I’ll bring you back.”

Death was not something I’d considered as a possible consequence of traveling with Keller, a 73-year-old paleontology and geology professor at Princeton University. She looked harmless enough: thin, with a blunt bob, wearing gray nylon pants and hiking boots, and carrying an insulated ShopRite supermarket bag by way of a purse.

I quickly learned that Keller felt such reassurances were necessary because, appropriately for someone who studies mass extinctions, she has a tendency to attract disaster. Long before our 90-minute flight touched down, she’d told me about having narrowly escaped death four times—once while attempting suicide, once from hepatitis contracted during an Algerian coup, once from getting shot in a robbery gone wrong, and once from food poisoning in India—and this was by no means an exhaustive list. She has crisscrossed dozens of countries doing field research and can claim near-death experiences in many of them: with a tiger in Belize, an anaconda in Madagascar, a mob in Haiti, an uprising in Mexico.

Keller had vowed not to return to India after the food-poisoning debacle. But, never one to avoid calamity, she’d traveled to Mumbai—and gotten sick before her plane had even landed; an in-flight meal had left her retching. Keller was in India to research a catastrophe that has consumed her for the past 30 years: the annihilation of three-quarters of the Earth’s species—including, famously, the dinosaurs—during our planet’s most recent mass extinction, about 66 million years ago. She would be joined in Hyderabad by three collaborators: the geologists Thierry Adatte, from the University of Lausanne; Syed Khadri, from Sant Gadge Baba Amravati University, in central India; and Mike Eddy, also from Princeton. They picked us up at the airport in a seat-belt-less van manned by a driver who looked barely out of his teens, and we began the five-hour drive to our hotel in a town so remote, I hadn’t confidently located it on a map.

Where I looked out our van’s window at a landscape of skeletal cows and chartreuse rice paddies, Keller saw a prehistoric crime scene. She was searching for fresh evidence that would help prove

her hypothesis about what killed the dinosaurs—and invalidate the asteroid-impact theory that many of us learned in school as uncontested fact. According to this well-established fire-and-brimstone scenario, the dinosaurs were exterminated when a six-mile-wide asteroid, larger than Mount Everest is tall, slammed into our planet with the force of 10 billion atomic bombs. The impact unleashed giant fireballs, crushing tsunamis, continent-shaking earthquakes, and suffocating darkness that transformed the Earth into what one poetic scientist

described as “an Old Testament version of hell.”

Before the asteroid hypothesis took hold, researchers had proposed other, similarly bizarre explanations for the dinosaurs’ demise: gluttony, protracted food poisoning, terminal chastity, acute stupidity, even *Paleo-weltschmerz*—death by boredom. These theories fell by the wayside when, in 1980, the Nobel Prize-winning physicist Luis Alvarez and three colleagues from UC Berkeley announced a discovery in the journal *Science*. They had found iridium—a hard, silver-gray element that lurks in the bowels of planets, including ours—deposited all over the world at approximately the same time that, according to the fossil record, creatures were dying en masse. Mystery solved: An asteroid had crashed into the Earth, spewing iridium and pulverized rock dust around the globe and wiping out most life forms.

Their hypothesis quickly gained traction, as visions of killer space rocks sparked even the dullest imaginations. NASA initiated Project Spacewatch to track—and possibly bomb—any asteroid that might dare to approach. Carl Sagan warned world leaders that hydrogen bombs could trigger a catastrophic “nuclear winter” like the one caused by the asteroid’s dust cloud. Science reporters cheered having a story that united dinosaurs *and* extraterrestrials *and* Cold War fever dreams—it needed only “some sex and the involvement of the Royal Family and the whole world would be paying attention,” one journalist wrote. News articles described scientists rallying around Alvarez’s theory in record time, especially after the so-called impactor camp delivered, in 1991, the geologic equivalent of DNA evidence: the “Crater of Doom,” a 111-mile-wide cavity near the Mexican town of Chicxulub, on the Yucatán Peninsula. Researchers identified it as the spot where the fatal asteroid had punched the Earth. Textbooks and natural-history museums raced to add updates identifying the asteroid as the killer.

The impact theory provided an elegant solution to a prehistoric puzzle, and its steady march from hypothesis to fact offered a heartwarming story about the integrity of the scientific method. “This is nearly as close to a certainty as one can get in science,” a planetary-science professor told *Time* magazine in an article on the crater’s discovery. In the years since, impacters say they have come even closer to total certainty. “I would argue that the hypothesis has reached the level of the evolution hypothesis,” says Sean Gulick, a research professor at the University of Texas at Austin who studies the Chicxulub crater. “We have it nailed down, the case is closed,” Buck Sharpton, a geologist and scientist emeritus at the Lunar and Planetary Institute, has said.

But Keller doesn’t buy any of it. “It’s like a fairy tale: ‘Big rock from sky hits the dinosaurs, and boom they go.’ And it has all the aspects of a really nice story,” she said. “It’s just not true.”

While the majority of her peers embraced the Chicxulub asteroid as the cause of the extinction, Keller remained a maligned and, until recently, lonely voice contesting it. She argues that the mass extinction was caused not by a wrong-place-wrong-time asteroid collision but by a series of colossal volcanic eruptions in a part of western India known as the Deccan Traps—a

theory that was first proposed in 1978 and then abandoned by all but a small number of scientists. Her research, undertaken with specialists around the world and featured in leading scientific journals, has forced other scientists to take a second look at their data. "Gerta uncovered many things through the years that just don't sit with the nice, simple impact story that Alvarez put together," Andrew Kerr, a geochemist at Cardiff University, told me. "She's made people think about a previously near-uniformly accepted model."

Keller's resistance has put her at the core of one of the most rancorous and longest-running controversies in science. "It's like the Thirty Years' War," says Kirk Johnson, the director of the Smithsonian's National Museum of Natural History. Impacters' case-closed confidence belies decades of vicious infighting, with the two sides trading accusations of slander, sabotage, threats, discrimination, spurious data, and attempts to torpedo careers. "I've never come across anything that's been so acrimonious," Kerr says. "I'm almost speechless because of it." Keller keeps a running list of insults that other scientists have hurled at her, either behind her back or to her face. She says she's been called a "bitch" and "the most dangerous woman in the world," who "should be stoned and burned at the stake."

Understanding the cause of the mass extinction is not an esoteric academic endeavor. Dinosaurs are what paleontologists call "charismatic megafauna": sexy, sympathetic beasts whose obliteration transfixes pretty much anyone with a pulse. The nature of their downfall, after 135 million years of good living, might offer clues for how we can prevent, or at least delay, our own end. "Without meaning to sound pessimistic," the geophysicist Vincent Courtillot writes in his book *Evolutionary Catastrophes*, "I believe the ancient catastrophes whose traces geologists are now exhuming are worthy of our attention, not just for the sake of our culture or our understanding of the zig-zaggy path that led to the emergence of our own species, but quite practically to understand how to keep from becoming extinct ourselves."

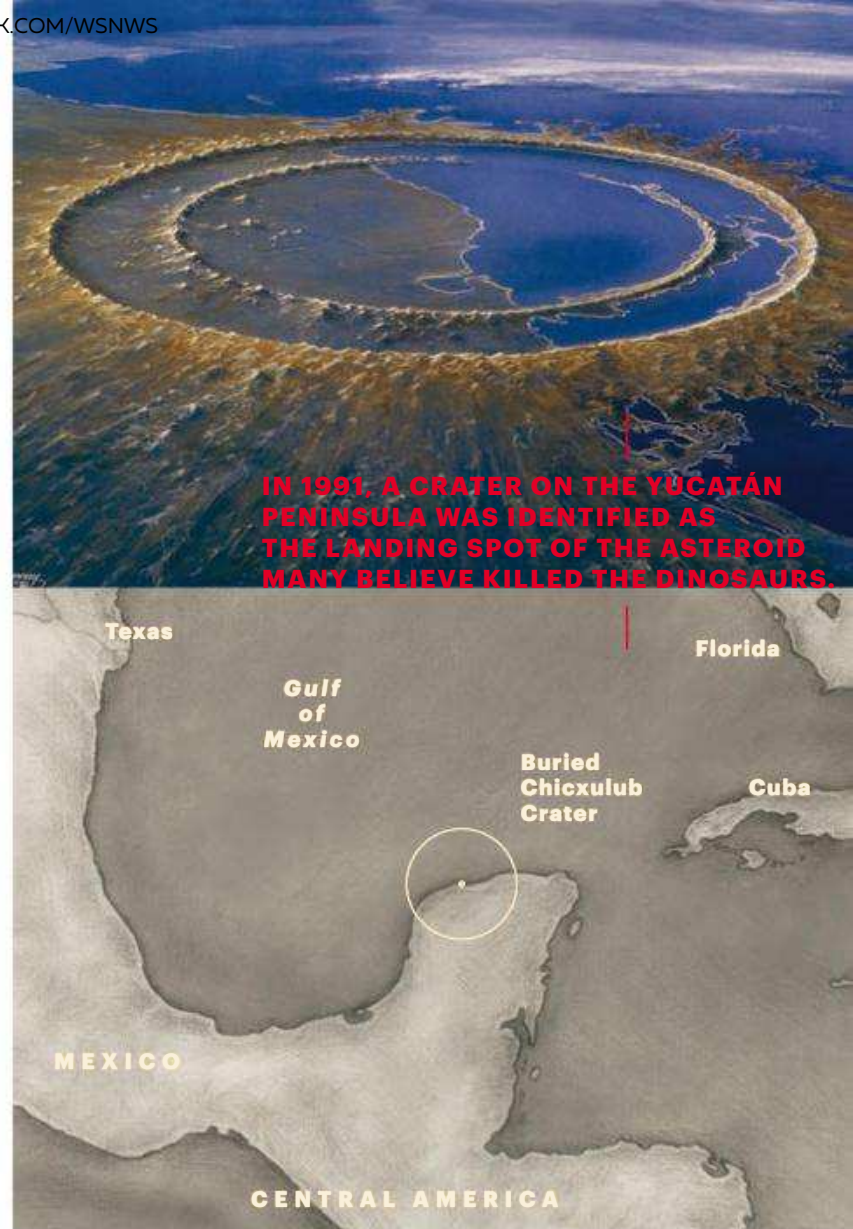
This dispute illuminates the messy way that science progresses, and how this idealized process, ostensibly guided by objective reason and the search for truth, is shaped by ego, power, and politics. Keller has had to endure decades of ridicule to make scientists reconsider an idea they had confidently rejected. "Gerta had to fight very much to get into the position that she is in right now," says Wolfgang Stinnesbeck, a collaborator of Keller's from Heidelberg University. "It's thanks to her that the case is not closed."

OVER THE COURSE

2.

of its 4.5-billion-year existence, the Earth has occasionally lashed out against its inhabitants. At five different times, mass extinctions ensued.

Seven hundred million years ago, the oceans' single-cell organisms started linking together to form multicellular creatures. Four hundred and forty-four million years ago, nearly all of those animals were wiped out by the planet's first global annihilation. The Earth recovered—fish appeared in the seas, four-legged amphibians crawled onto land—and then, 372 million years ago, another catastrophe destroyed three-quarters of all life. For more than 100 million years after *that*, creatures thrived. The planet hosted the first reptiles, the first shelled eggs, the first plants with seeds. Forests swarmed with giant dragonflies whose wings stretched two feet across, and crawled with millipedes nearly the length of a car. Then, 252 million years ago, the "Great Dying" began. When it finished, 96 percent of all species had vanished. The survivors went forth and multiplied—until, 201 million years ago, another mass extinction knocked out half of them.



The age of the dinosaurs opened with continents on the move. Landmasses that had spent millions of years knotted together into the supercontinent of Pangaea began to drift apart, and oceans—teeming with sponges, sharks, snails, corals, and crocodiles—flooded into the space between them. It was swimsuit weather most places on land: Even as far north as the 45th parallel, which today roughly marks the U.S.-Canada border, the climate had a humid, subtropical feel. The North Pole, too warm for ice, grew lush with pines, ferns, and palm-type plants. The stegosaurs roamed, then died, and tyrannosaurs took their place. (More time separates stegosaurs from tyrannosaurs—about 67 million years—than tyrannosaurs from humans, which have about 66 million years between them.) It was an era of evolutionary innovation that yielded the first flowering plants, the earliest placental mammals, and the largest land animals that ever lived. Life was good—right up until it wasn't.

That's according to the Alvarez theory, which mass-extinction devotees, with their typical gallows humor, refer to as the "bad weekend" scenario: The dinosaurs didn't see the end coming, didn't stand a chance, and by Monday it was all, abruptly, over. *Big rock from sky hits the dinosaurs, and boom they go.* (Some of the species that avoided the dinosaurs' fate are still around today in a form nearly identical to their ancestors, including ginkgo trees, magnolias, roaches, crocodiles, and tortoises, which Keller keeps as pets.)

Alvarez's theory was a boon for the catastrophist school of thought, which maintains that the Earth

is shaped by sudden, violent events—and can turn on its occupants in a heartbeat. The impacters contend that the fossils of both marine- and land-dwelling organisms show an abrupt and instantaneous die-off at virtually the same moment, geologically speaking, that the asteroid hit. “If you look at the extinction rate up to the event and you look at the recovery after, this is the most sudden of all the known extinctions,” Sean Gulick says. “This one is like a knife-sharp boundary in the geologic record”—consistent with the kind of destruction an asteroid could cause.

Alvarez’s theory initially faced strong opposition from the gradualists, who argue that enormous planetary changes tend to result from slower, less adrenaline-pumping forces. Among those who disagreed with him was Keller.

Her first interaction with the community investigating the dinosaurs’ disappearance took place at a 1988 conference on global catastrophes. She presented results from her three-year analysis of a rock section in El Kef, Tunisia, that has long been considered one of the most accurate records of the extinction. Keller specializes in studying the fossils of single-celled marine organisms called foraminifera—“forams,” once you’re on a nickname basis, as Keller is. (She considers these creatures, which include many species of plankton, “old friends.”) Because their fossils are plentiful and well preserved, paleontologists can trace their extinction patterns with considerable accuracy, and thus frequently rely on them as a proxy for other creatures’ well-being.

When Keller examined the El Kef samples, she did not see a “bad weekend,” but a bad era: Three hundred thousand years before Alvarez’s asteroid struck, some foram populations had already started to decline. Keller found that they had become less and less robust until, very rapidly, about a third of them vanished. “My takeaway was that you could not have a single instantaneous event causing this pattern,” she told me. “That was my message at that meeting, and it caused an enormous turmoil.” Keller said she barely got through her introduction before members of the audience tore into her: “Stupid.” “You don’t know what you’re doing.” “Totally wrong.” “Nonsense.”

Ad hominem attacks had by then long characterized the mass-extinction controversy, which came to be known as the “dinosaur wars.” Alvarez had set the tone. His numerous scientific exploits—winning the Nobel Prize in Physics, flying alongside the crew that bombed Hiroshima, “X-raying” Egypt’s pyramids in search of secret chambers—had earned him renown far beyond academia, and he had wielded his star power to mock, malign, and discredit opponents who dared to contradict him. In *The New York Times*, Alvarez branded one skeptic “not a very good scientist,” chided dissenters for “publishing scientific nonsense,” suggested ignoring another scientist’s work because of his “general incompetence,” and wrote off the entire discipline of paleontology when specialists protested that the fossil record contradicted his theory. “I don’t like to say bad things about paleontologists, but they’re really not very good scientists,” Alvarez told *The Times*. “They’re more like stamp collectors.”

Scientists who dissented from the asteroid hypothesis feared for their careers. Dewey McLean, a geologist at Virginia Tech credited with first

proposing the theory of Deccan volcanism, accused Alvarez of trying to block his promotion to full professor by bad-mouthing him to university officials. Alvarez denied doing so—while effectively bad-mouthing McLean to university officials. “If the president of the college had asked me what I thought about Dewey McLean, I’d say he’s a weak sister,” Alvarez told *The Times*. “I thought he’d been knocked out of the ball game and had just disappeared, because nobody invites him to conferences anymore.” Chuck Officer, another volcanism proponent, whom Alvarez dismissed as a laughingstock, charged that *Science*, a top academic journal, had become biased. The journal reportedly published 45 pieces favorable to the impact theory during a 12-year period—but only four on other hypotheses. (The editor denied any favoritism.)

That the dinosaur wars drew in scientists from multiple disciplines only added to the bad blood. Paleontologists resented arriviste physicists, like Alvarez, for ignoring their data; physicists figured the stamp collectors were just bitter because they hadn’t cracked the mystery themselves. Differing methods and standards of proof failed to translate across fields. Where the physicists trusted models, for example, geologists demanded observations from fieldwork.

Yet even specialists from complementary disciplines like geology and paleontology butted heads over crucial interpretations: They consistently reached opposing conclusions as to whether the disappearance of the species was fast (consistent with an asteroid’s sudden devastation) or slow (reflecting a more gradual cause). In 1997, hoping to reconcile disagreement over the speed of extinction, scientists organized a blind test in which they distributed fossil samples from the same site to six researchers. The researchers came back exactly split.

Keller and others accuse the impacters of trying to squash deliberation before alternate ideas can get a fair hearing. Though geologists had bickered for 60 years before reaching a consensus on continental drift, Alvarez declared the extinction debate over and done within two years. “That the asteroid hit, and that the impact triggered the extinction of much of the life of the sea ... are no longer debatable points,” he said in a 1982 lecture. “Nearly everybody now believes them.” After Alvarez’s death, in 1988, his acolytes took up the fight—most notably his son and collaborator, Walter, and a Dutch geologist named Jan Smit, whom Keller calls a “crazy SOB.”

Ground down by acrimony, many critics of the asteroid hypothesis withdrew—including Officer and McLean, two of the most outspoken opponents. Lamenting the rancor as “embarrassing to geology,” Officer announced in 1994 that he would quit mass-extinction research. Though he did ultimately get promoted, McLean later wrote on his faculty website

Keller barely got through her introduction before the audience tore into her: “Stupid.” “You don’t know what you’re doing.” “Totally wrong.” “Nonsense.”



"IT HAS ALL THE ASPECTS OF A REALLY NICE STORY," KELLER SAYS OF THE ASTEROID THEORY. "IT'S JUST NOT TRUE."

that Alvarez's "vicious politics" had caused him to develop serious health problems and that, for fear of a relapse, he couldn't research Deccan volcanism without "the greatest of difficulty." "I never recovered physically or psychologically from that ordeal," he added. Younger scientists avoided the topic, fearing that they might jeopardize their careers. The impact theory solidified, and volcanism was largely abandoned.

But not by everyone. "Normally, when people get attacked and given a hard time, they leave the field," Keller told me. "For me, it's just the opposite. The more people attack me, the more I want to find out what's the real story behind it."



As Keller has steadily accumulated evidence to undermine the asteroid hypothesis, the animosity between her and the impacters has only intensified. Her critics have no qualms about attacking her in the press: Various scientists told me, on the record, that they consider her “fringe,” “unethical,” “particularly dishonest,” and “a gadfly.” Keller, not to be outdone, called one impacter a “crybaby,” another a “bully,” and a third “the Trump of science.” Put them in a room together, and “it may be World War III,” Andrew Kerr says.

As the five-hour drive to our hotel in rural India turned into 12 after a stop to gather rock samples, Keller aired a long list of grievances. She said impacters had warned some of her collaborators not to work with her, even contacting their supervisors in order to pressure them to sever ties. (Thierry Adatte and Wolfgang Stinnesbeck, who have worked with Keller for years, confirmed this.) Keller listed numerous research papers whose early drafts had been rejected, she felt, because pro-impact peer reviewers “just come out and regurgitate their hatred.” She suspected repeated attempts to deny her access to valuable samples extracted from the Chicxulub crater, such as in 2002, when the journal *Nature* reported on accusations that Jan Smit had seized control of a crucial piece of rock—drilled at great expense—and purposefully delayed its distribution to other scientists, a claim Smit called “ridiculous.” (Keller told me the sample went missing and was eventually found in Smit’s duffel bag; Smit says this is “pure fantasy.”) Several of Keller’s stories—about a past adviser, for example, or a former postdoc—ended with variations of the same punch line: “He became my lifelong enemy.”

3.

KELLER PLANNED TO

spend a week gathering rocks in two different regions of India, beginning with the area around Basar, a dusty village of 5,800 in the center of the country. Our days in the field settled into a predictable routine. From about 7:30 every morning until as late as midnight, we fanned out from the hotel. Our six- or seven-hour drives to distant quarries revealed the rhythms of rural neighborhoods, where women still fetched water from communal pumps and shepherds scrolled on smartphones while grazing their flocks.

The geologists were searching for outcrops—areas where erosion, construction, or tectonic activity had exposed the inner layers of rock formations, from which the scientists could decode the history of the landscape. Most mornings, Thierry Adatte set our course by studying satellite images for signs of quarries (big beige

rectangles) or switchback roads (pale zigzags). Keller and her colleagues saw the landscape in greater relief than most: When explaining how volcanoes extrude magma from the planet’s inner mantle, Mike Eddy characterized the surface of the Earth—the foundation of our homes, cities, civilizations—as “this little tiny scum,” as puny as the skin of milk that gathered on our tea each morning.

For someone accustomed to thinking about time in multimillion-year increments, Keller grew surprisingly impatient over wasted minutes. “Why so slow?” she muttered next to me in the back seat, craning her neck to see the speedometer as we plowed into oncoming traffic and past slower cars. “Should I go and push?” She discouraged us from stopping at roadside stands for tea and, over meals, needled her colleagues about their halting progress on several co-authored manuscripts.

Keller’s publication list runs to more than 250 articles, about half of which attempt to poke holes in the impact theory. After her 1988 paper on forams in Tunisia, she decided to see whether the slow and steady extinction pattern she’d observed at El Kef held true elsewhere, and she analyzed foram populations pre- and post-Chicxulub at nearly 300 sites around the world. Over and over, Keller saw “no evidence of a sudden mass killing.” Instead, she found more proof that the Earth’s fauna grew progressively more distressed starting 300,000 years before the extinction. The forams, for example, gradually shrank, declined in number, and showed less diversity, until only a handful of species remained—results consistent with what many paleontologists have observed for animals on land during the same time.

More problematic still, Chicxulub did not appear to Keller to have been particularly deadly. Samples she gathered in El Peñón, Mexico, west of the crater, revealed healthy populations of forams even after the asteroid struck. Photosynthetic creatures, which should have been doomed by the dust cloud’s shroud of darkness, also managed to survive.

And then there was the issue of the four previous mass extinctions. None appeared to have been triggered by an impact, although numerous other asteroids have pummeled our planet over the millennia. (Pro-impact scientists counter that not only was the Chicxulub asteroid gigantic, it also landed in the deadliest possible site: in shallow waters, where it kicked up climate-altering vaporized rock.)

Keller found the asteroid’s timing suspect, too. The impacters had long pegged Chicxulub’s age to the date of the extinction, which is widely agreed to have occurred approximately 66 million years ago. They reasoned that the two must be synchronous, because the destruction caused by the asteroid would have been near-instantaneous. This looked like circular logic to Keller, who in 2002 set out to investigate whether the two really were concurrent. Analyzing samples drilled from deep within the Chicxulub crater, Keller uncovered 20 inches of limestone and other sediment between the fallout from the asteroid and the forams’ most pronounced die-off. This was evidence that thousands of years had elapsed in between, she argued. (Smit’s findings from the same samples were diametrically opposed; he countered that a tsunami, triggered by the asteroid, had deposited the sediment essentially overnight.) Based on similar results from Haiti, Texas, and elsewhere in Mexico, Keller concluded that the asteroid had hit 200,000 years before the extinction—far too early to have caused it.

So what *did* cause it? Keller began searching for other possible culprits. She was looking for a menace that had become gradually



more deadly over hundreds of thousands of years, such that it would have caused increasing stress followed by a final, dramatic obliteration.

She had a promising lead: The Earth's four prior mass extinctions are each associated with enormous volcanic eruptions that lasted about 1 million years apiece. The fifth extinction, the one that doomed the dinosaurs, occurred just as one of the largest volcanoes in history seethed in the Deccan Traps.

Yet it is not only a volcano's absolute size that makes it catastrophic, but also the pace of its eruptions. The Earth can recover from large environmental disturbances—unless those disruptions come too quickly, compounding the injury until they overwhelm the planet's ability to equilibrate.

Until the mid-1980s, geologists believed that Deccan's network of volcanoes had erupted over millions of years, simmering so gently as to be mostly harmless. A 1986 paper concluded that the bulk of its eruptions had occurred within 1 million years, but scientists still couldn't connect those explosions to the mass dying. Keller's first paper on Deccan volcanism, in 2008, provided unprecedented evidence that suggested there could be a link: She documented huge lava flows just preceding the extinction, which was demarcated in the rock record by the fossils of creatures that had evolved only after

the mass dying. Using new dating techniques, Keller and her Princeton colleagues further condensed Deccan's activity to about 750,000 years. Now, on this trip, she was drafting a new paper showing that the biggest Deccan eruptions—accounting for nearly half of the volcanoes' explosive output—had been squeezed into the last 60,000 years before the mass extinction. During that time, so much gas, ash, and lava were pumped into the ecosystem that the Earth hit "the point of no return," she said.

On this excursion, Keller hoped to gather samples that would allow her to create a detailed timeline of Deccan activity in the 100,000 years leading up to the extinction. The goal: to see whether its biggest belches correlated with environmental stress and mass dying around the world. Basar was 300 miles east of some of the highest points in the Deccan Traps, an area near the epicenter of the eruptions. Keller had chosen Basar because she suspected that the long, low stretches of basalt around us had been formed by some of the largest lava flows—ejected during major eruptions immediately preceding the extinction. To prove that, however, Keller needed to have the rock dated.

We were snaking down a sinewy road one afternoon when Adatte hollered, the van screeched to a stop, and everyone scrambled out to inspect a steep hill in the elbow of a hairpin turn. It didn't look like much to me. Rising up from the asphalt were several yards of pebbly, khaki-colored rock, then a thin band of seafoam-green rock, followed by a pinkish layer, and then round, brown rocks interspersed with white roots.

Adatte sank to his knees and burrowed into the pebbles. Eddy licked a rock, to determine whether it was clay. Keller sprinted up the incline until she was eye level with the greenish layer.

"Keep digging!" Keller told Adatte. "This is a real bonanza for us!"

She translated the outcrop for me as though it were text in a foreign language. Rocks record the passage of time vertically: The distance between where Adatte sat covered in gravel and where Keller perched at the top of the hill potentially represented the progression of several hundred thousand years. "Think of it as walking up through time," Keller said. She passed me a chunk of the seafoam-colored rock and pointed to a tiny white fossil protruding like a baby tooth: evidence of tempestites, broken shells carried in by a storm. The area near Keller's head had evidently once been a prehistoric lake or seaway. The pinkish soil above *that* had been buried under lava—the brown rocks covered with tangled roots. Since the pinkish layer and the shells predated the flows, they could help pinpoint that particular eruption.

Geology is a field of delayed gratification, and there was little else the scientists could say definitively before getting the samples into a lab. While Syed Khadri fielded questions from puzzled locals who wanted to know why the foreigners were playing in the dirt, Keller, Adatte, and Eddy filled clear-plastic bags with fistfuls of rock to ship home.

Back in the van, Adatte told me about a recent conference where several researchers had debated

GERTA KELLER

**KELLER DOING FIELDWORK
IN ALABAMA IN 1982**



the validity of Deccan volcanism versus the impact theory in front of an audience of their peers, who had then voted, by a show of hands, on which they thought had caused the extinction. Adatte said the result was 70–30 in favor of volcanism. I heard later from the paleontologist Paul Wignall, who'd argued for the impact side, that Chicxulub had won 60–40, though he conceded that the scientists were essentially split—clearly, the question was far from resolved. When I asked Wignall who had rescued Deccan volcanism and helped popularize it, he said, "If you were to name one person, you would name Gerta."

OUR LONG STRETCHES

in the car provided Keller ample time to continue inventorying her own numerous brushes with extinction.

Her childhood could pass for the opening of a Brothers Grimm fairy tale. Keller's mother was the eldest of 12 children in a wealthy Lichtenstein family. According to stories Keller heard as a kid, their fortune from hotels and real estate kept the children wearing Parisian couture and summering in Austria. But the old-money clan grew distant from Keller's mother after she married Keller's father, one of 18 children born to Swiss woodworkers, whose dreams of becoming a farmer clashed with the bride's privileged upbringing. The young couple took out loans to buy a farm, where they raised cows, sheep, ducks, rabbits, vegetables, and their 12 children, the sixth of whom was Keller.

Keller grew up among rocks, in the alpine crevices of a Swiss village where the neighbors still believed in witches. Although Keller's father enlisted his brood to tend the land—working them so hard that a neighbor once reported him—the family constantly teetered on the brink of bankruptcy. To put meat on the table, Keller's mother once stewed up one of the cats the family kept on the farm. Another time, she gave an older daughter some fresh "mutton" as a gift—in actuality, Keller's butchered pet dog.

Keller attended a local public school where one teacher oversaw four grades, an arrangement Keller enjoyed because it allowed her to tackle the older students' more difficult assignments. Then, much as now, she considered herself in a league apart from her peers. "I didn't socialize much with the other kids, because I thought they were too dumb," Keller told me. ("In school, well, how should I put this? I was very good at whatever I did," she said another time.) She devoured books, completed her siblings' homework in exchange for them doing her

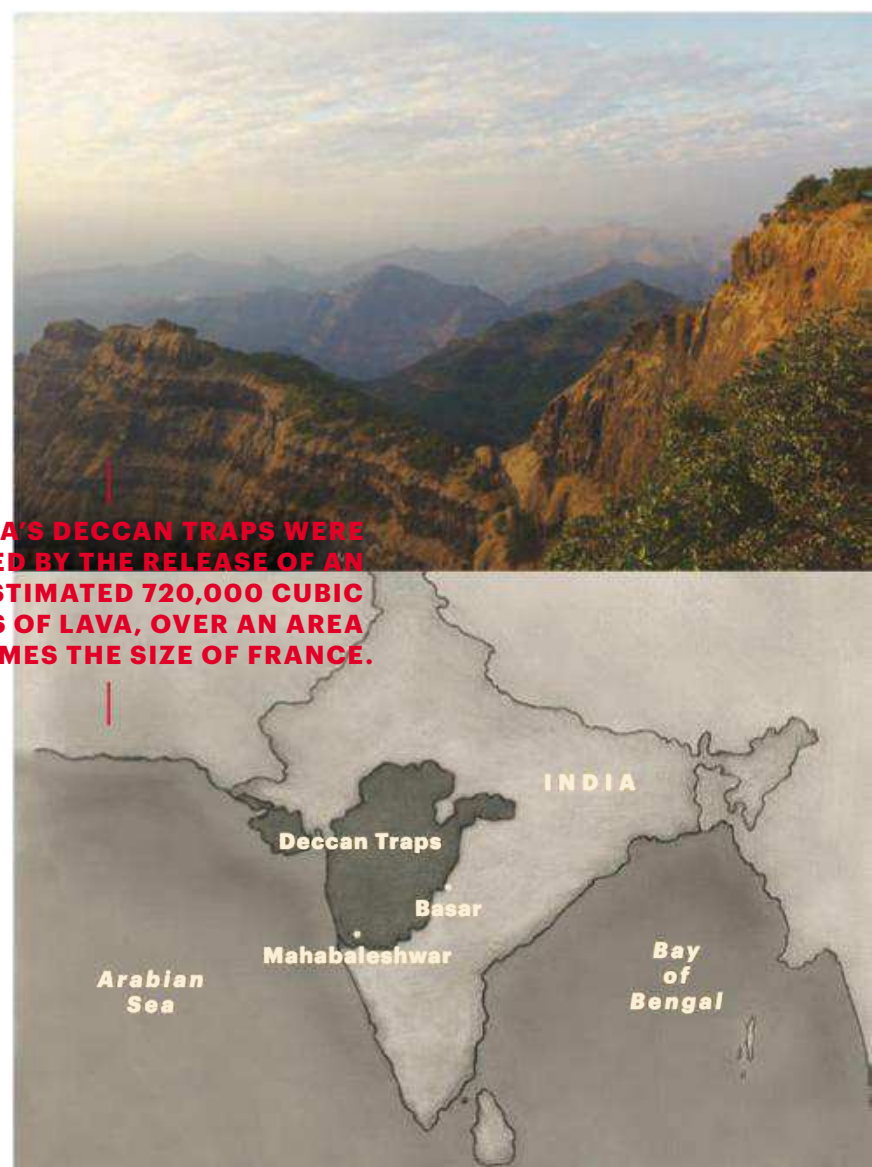
chores, and fumed that girls had to cook and clean while boys got to study science and math.

At age 12, Keller wanted to become a doctor. Her teacher, concerned by these delusions of grandeur, called in a Jungian psychologist to administer a Rorschach test and remind Keller that the daughter of such a poor family should aspire to less. Shortly afterward, Keller received a visit from a priest: Keller's mother wanted him to take her to a nunnery, but Keller refused to go. Two years later, Keller—given the choice of becoming a maid, a salesgirl, or a seamstress—apprenticed with a dressmaker. Her mother hoped that she would help clothe her siblings. Keller eventually worked for Christian Dior's fashion house, sewing gowns for 25 cents an hour.

In her teens, Keller resolved to die before she turned 23. She was suicidal for reasons she declined to explain to me in detail, but attributed generally to frustration with Swiss society—her sense that "options were limited for a kid from a poor family," plus "the sexual harassment" and "the way women were treated." "You were just a piece of meat at any time," she told me. She tried to kill herself by taking sleeping pills, failed, then figured she would live as dangerously as possible and die in the process. "I just never got killed," she said. "Not completely, anyway."

In 1964, at age 19, Keller quit her job in Zurich and hitchhiked through Spain and North Africa for six months. She was detained at the Algeria-Tunisia border amid a coup that deposed Algeria's president, but says she eventually charmed an army commander into letting her pass and even providing her with an escort—a drug trafficker who happened to be heading the same way. She continued her trek around the globe: Greece, Israel, Czechoslovakia, and Austria, where her plan to continue on to Russia

INDIA'S DECCAN TRAPS WERE FORMED BY THE RELEASE OF AN ESTIMATED 720,000 CUBIC MILES OF LAVA, OVER AN AREA THREE TIMES THE SIZE OF FRANCE.



was interrupted when her health failed. It was hepatitis, which she had contracted at the Algerian border. "At the hospital, they didn't think that I would live," she said.

After a year of recovery, Keller set sail from Genoa to Australia, which she planned to use as a jumping-off point for travel throughout Asia. Keller recalls that during the three-week journey, her ship collided with its sister vessel, hit a typhoon in the Indian Ocean, and was found to be infested with mafiosi smuggling weapons. When Keller disembarked, an Australian official tried to steer her to a sweatshop crammed with immigrants at sewing machines, attempting to negotiate a cut of Keller's pay, in perpetuity. But Keller spoke better English than the official realized. She discovered the plan, threatened to report the official, and worked instead as a nurse's aide, then a waitress.

She was returning from a picnic near Sydney's Suicide Cliffs one day when a bank robber, fleeing the scene of the crime, shot her, puncturing her lungs, shattering her ribs, and landing her in intensive care. "Woman Shot 'for No Reason,'" announced a headline in *The Sydney Morning Herald*. ("She looked dead," a witness told the paper.) A priest came to administer last rites and, as Keller hovered in and out of consciousness, commanded her to confess her sins. Twice, she refused. "I credit that priest with my survival, because he made me so mad," Keller told me. The experience also cured her of her death wish.

Keller eventually made her way to Asia, then arrived in California with plans to continue to South America. Instead, she settled in San Francisco and, at age 24, returned to school. She enrolled in community college, telling the registrar that her academic records had been destroyed in a fire, and later transferred to San Francisco State University, where she majored in anthropology, the most scientific field she could enter without a background in math or science. Her passion for mass extinction began with a geology class she took during her junior year. The professor told her that if she liked rocks and enjoyed travel, she should become a geologist—"because there are rocks everywhere, and you can always dream up some project to do and someone will fund it for you," Keller recalled him saying.

She became the first member of her family to graduate from college, and then one of the first women to receive a doctoral degree in earth sciences from Stanford. In 1984, she joined the faculty at Princeton, where she is currently one of two tenured women in the geosciences department. (According to a 2017 survey by the American Geosciences Institute, 85 percent of the country's tenured geosciences professors are male.)

Although Keller is alert to situations in which women are treated differently from men, she hesitates to blame sexism for the hostility she has faced. "There is clearly sexism going on at some level, but there is no way I would be able to prove it, nor would I want to," she told me. "Because to me, it is critically important that I, as a woman, can make it in science without even referring to sexism."

But Vincent Courtillot, an early proponent of Deccan volcanism who has closely followed Keller's work, thinks that prejudice has tainted other scientists' treatment of her. "She is a forceful woman and she is a courageous woman in a world where, I don't have to tell you, for someone to rise to the top of geology as a female is much harder than for a male," he says.

Keller adores her work. Never before have I encountered someone so gleeful about catastrophe. When we discussed the risk that the Yellowstone supervolcano might blow at any time, Keller's eyes twinkled. "It's a fun idea," she said. To her, mass extinctions are not depressing. Rather, they illuminate life's fundamental questions. "Ask yourself, 'Where did you come from?' 'Why are we here?'" Keller told me. "If you extract all the religious bullshit away from it, you have to go to nature. And the only way to find out is really to study the history."

Though Keller's critics accuse her of being ego-driven and publicity-hungry, in the time I spent with her she showed little concern for her legacy. Instead, she expressed a dim view of what 44,000 years of human civilization will leave behind, much less her own few decades on the planet. "Just think, if we wipe ourselves out in the next couple of thousand years, there will be no record left," she said, studying the eroded remains of 66-million-year-old basalt as we drove back to the Hyderabad airport, from which we would travel to the heart of the Deccan Traps. "I mean, it's a second. A nanosecond in history. Who will find our remains?"

5.

ON JUNE 8, 1783,



Iceland's Laki volcano began to smoke. The ground wrenched open "like an animal tearing apart its prey" and out spilled a "flood of fire," according to an eyewitness's diary. Laki let loose clouds of sulfur, fluorine, and hydrofluoric acid, blanketing Europe with the stench of rotten eggs. The sun disappeared behind a haze so thick that at noon it was too dark to read. (Unlike the cone-shaped stratovolcanoes from third-grade science class, both Deccan and Laki were fissure eruptions, which fracture the Earth's crust, spewing lava as the ground pulls apart.)

Destruction was immediate. Acid rain burned through leaves, blistered unprotected skin, and poisoned plants. People and animals developed deformed joints, softened bones, cracked gums, and strange growths on their bodies—all symptoms of fluorine poisoning. Mass death began eight days after the eruption. More than 60 percent of Iceland's livestock died within a year, along with more than 20 percent of its human population. And the misery spread. Benjamin Franklin reported a "constant fog" over "a great part of North America." Severe droughts plagued India, China, and Egypt. Cold temperatures in Japan ushered in what is remembered as the "year without a summer," and the nation suffered the worst famine in its history. Throughout Europe, crops turned white and withered, and in June, desiccated leaves covered the ground as though it were October. Europe's famine lasted three years; historians have blamed Laki for the start of the French Revolution.

"But that's just a short-term event from a relatively minor eruption, compared with Deccan," Keller told me. A single Deccan eruption was "thousands of times larger" than Laki, she said. "And then you repeat that over and over again. For basically 350,000 years before the massive die-off."

Laki released 3.3 cubic miles of lava; Deccan unleashed an estimated 720,000 cubic miles, eventually covering an area three times the size of France. It took us five hours of driving, an hour-and-a-half flight from Hyderabad to Pune, and another three hours in the car to trace the lava flows from some of their farthest, flattest reaches back to some of their highest points, in Mahabaleshwar, a vertiginous town crowded with honeymooners. Mountains of basalt 2.1 miles high—nearly twice as tall as the Grand Canyon is deep—extended as far as I could see. Even the geologists, who had visited the Deccan Traps multiple times before, gaped at the landscape.

"It's mind-blowing," Eddy said. "Every time."

Keller, whose food poisoning had gone from bad to worse, made the van pull over so we could revisit an outcrop she'd sampled twice before, on previous trips. At the base of an undulating wall of black basalt, Keller ran her hand over a blood-colored layer of rock, bumpy and inflamed as a scab. Where we now stood was virtually within a blink of an eye of the mass extinction, she explained: Keller's collaborators had dated this red layer and found that it was deposited tens of thousands of years before the extinction, just before Deccan's largest and most lethal eruptions began.

"Shit hits the fan for the last 40,000 years," Keller said. "The eruptions *really* took off. Huge. Absolutely huge. That's when we have the longest lava flows on Earth, into the Bay of Bengal"—more than 600 miles away, practically the length of California.

A drawing that hangs over Keller's desk at Princeton depicts her vision of this apocalypse, which was heavily informed by accounts of how Laki poisoned Iceland's livestock. "I told [the artist], 'Yellow foaming at the mouth!'" Keller recounted, delighted. In the illustration, dinosaurs, gurgling lime-green vomit, writhe on a hill spotted with flames and charred tree stumps; just behind them, a diagonal gash in the ground blazes with lava and spews dark, swirling clouds. According to Keller's research, while Deccan's lava flows would have devastated the Indian subcontinent, its release of ash, toxic elements (mercury, lead), and gases (sulfur, methane, fluorine, chlorine, carbon dioxide) would also have blown around the world, wreaking havoc globally.

As she sees it, the ash, mercury, and lead would have settled over habitats, poisoning creatures and their food supply. The belches of sulfur would have initially cooled the climate, then they would have drenched the Earth in acid rain, ravaging the oceans and destroying vegetation that land animals needed to survive. The combination of carbon dioxide and methane would have eventually raised temperatures on land by as much as 46 degrees Fahrenheit, further acidifying oceans and making them inhospitable to plankton and other forams. Once these microscopic creatures disappear from the base of the food chain, larger marine animals follow. "At that point, extinction is inevitable," Keller said.

Rocks elsewhere in the world support the sequence of events Keller has discerned in the Deccan Traps. She and her collaborators have found evidence of climate change and skyrocketing mercury levels following the largest eruptions, and other researchers have documented elevated concentrations of sulfur and chlorine consistent with severe pollution by volcanic gases. Keller posits that even the iridium layers could be linked to Deccan's eruptions, given that volcanic dust can carry high concentrations of the element.

She also sees Deccan's fingerprints in the fossil record. The gradual decline of the forams—followed by their sudden, dramatic downfall—aligns with Deccan's pattern of eruptions: Over several hundred thousand years, its volcanic activity stressed the environment, until its largest emissions dealt a final, devastating blow. The Earth's flora and fauna did not show signs of recovery for more than 500,000 years afterward—a time period that coincides with Deccan's ongoing belches. The volcano simmered long after most species had vanished, keeping the planet nearly uninhabitable.

6.

"HER CONCLUSIONS ARE

way off," Jan Smit, the Dutch scientist, told me. After nearly 40 years of arguing, the two sides still cannot agree on fundamental facts. Smit and other impacters counter Keller's scenario with a long list of rebuttals: The planet's species went extinct "almost overnight," Smit insists, too quickly to be caused by Deccan volcanism. India's volcanoes hiccuped for hundreds of thousands of years, too weakly and for too long to be deadly, Keller's critics contend. They argue that there is no evidence that species suffered while Deccan simmered, and that the biggest volcanic eruptions occurred after the extinction, too late to have been the catalyst. Besides, they add, new dating places the asteroid's impact within 32,000 years of the annihilation—as close as a "gnat's eyebrow," says the geochronologist Paul Renne, who led the study.

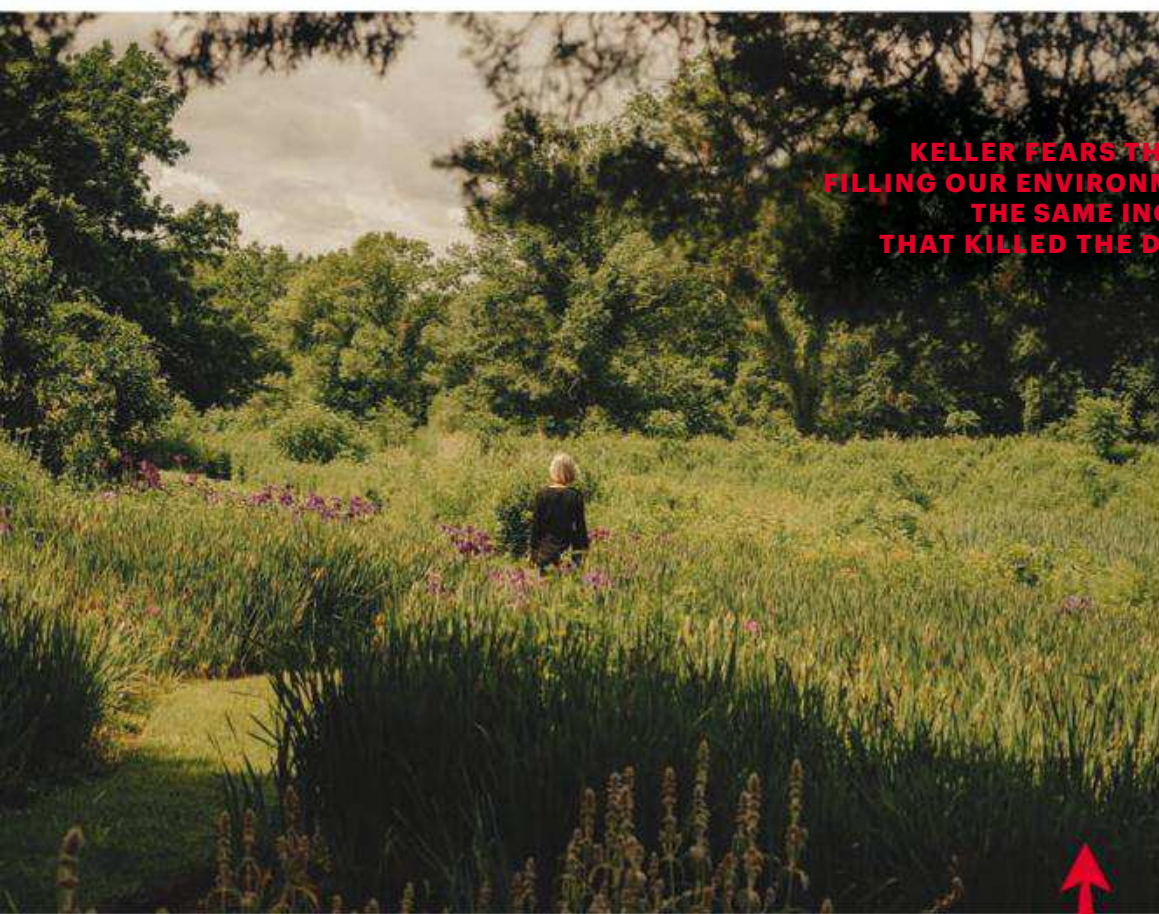
Some scientists have attempted to find a middle ground between the two camps. A team at UC Berkeley, headed by Renne, has recently incorporated volcanism into the asteroid theory, proposing that Chicxulub's collision unleashed earthquakes that in turn triggered Deccan's most destructive pulses. But Keller rejects this hypothesis. "It's impossible," she told me. "They are trying to save the impact theory by modifying it."

The greatest area of consensus between the volcanists and the impacters seems to be on what insults to sling. Both sides accuse the other of ignoring data. Keller says that her pro-impact colleagues "will not listen or discuss evidence that is contrary to what they believe"; Alan Hildebrand, a prominent impacter, says Keller "doesn't look at all the evidence." Each side dismisses the other as unscientific: "It's not science. It sometimes seems to border on religious fervor, basically," says Keller, whose work Smit calls "barely scientific." Both sides contend that the other is so stubborn, the debate will be resolved only when the opposition croaks. "You don't convince the old people about a new idea. You wait for them to die," jokes Courtillot, the volcanism advocate, paraphrasing Max Planck. Smit agrees: "You just have to let them get extinct."

All the squabbling raises a question: How will the public know when scientists have determined which scenario is right? It is tempting, but unreliable, to trust what appears to be the majority opinion. Forty-one co-authors signed on to a 2010 *Science* paper asserting that Chicxulub was, after all the evidence had been evaluated, conclusively to blame for the dinosaurs' death. Case closed, *again*. Although some might consider this proof of consensus, dozens of

geologists, paleontologists, and biologists wrote in to the journal contesting the paper's methods and conclusions. Science is not done by vote.

Ultimately, consensus may be the wrong goal. Adrian Currie, a philosopher of science at Cambridge University, worries that the feverish competition in academia coupled with the need to curry favor with colleagues—in order to get published, get tenure, or get grant money—rewards timid research at the expense of maverick undertakings. He and others argue that controversy produces progress, pushing experts to take on more sophisticated questions. Some of Keller's most outspoken critics told me that her naysaying has motivated their research. "She keeps us sharp, definitely," Smit said. Though trading insults is not the mark of dispassionate scientific research, perhaps detached investigation is not ideal, either. It is passion, after all, that drives scientists to dig deeper, defy the majority, and hunt rocks in rural India for 12 hours at a stretch while suffering acute gastrointestinal distress.



**KELLER FEARS THAT WE ARE
FILLING OUR ENVIRONMENT WITH
THE SAME INGREDIENTS
THAT KILLED THE DINOSAURS.**

7.

KELLER'S ATTENTIVENESS TO

the stories that rocks tell enables her to live concurrently in the past, present, and future. She was here, driving through Pune's smog-filled mountains. The sight of their jagged outlines simultaneously transported her back in time 66 million years, to when the Indian subcontinent split apart, spewing gas, ash, and fire. That, in turn, evoked the eventual demise of the human species, which Keller argues will be triggered by forces similar to Deccan volcanism.

Keller fears that we are filling our environment with the same ingredients—sulfur, carbon dioxide, mercury, and more—that killed the dinosaurs and that, left unchecked, will catalyze another mass extinction, this one of our own devising. "You just replace Deccan volcanism's effect with today's fossil-fuel burning," she told me. "It's exactly the same."

Keller sees a bleak future when she looks at our present. Oceans are acidifying. The climate is warming. Mercury levels are rising. Countless species are endangered and staring down extinction—much like the gradual, then

rapid, downfall of the forams. Whether or not Deccan ultimately caused the mass extinction, its eruptions illuminate how our current environment may react to man-made pollutants. If Deccan *was* responsible, however, Keller's theory casts our current actions in a terrifying light. (Not to be outdone, impacters recently highlighted the Chicxulub asteroid's relevance to the present day in a paper for *Science*, arguing that the asteroid injected enough carbon dioxide into the atmosphere to cause 100,000 years of global warming.)

The asteroid theory has ingrained in the public's imagination the idea that mass extinction will be quick and sensational—that we will go out in a great, momentous ball of fire. *Big rock from sky hits the humans, and boom they go.* But Keller's vision of the sixth extinction, given what she sees as its parallels with Deccan volcanism, suggests that the end will be drawn out and difficult to recognize as such within humans' brief conception of time. "We are living in the middle of a mass extinction today," Keller told me. "But none of us feel that urgency, or that it really is so."

Death felt especially present the afternoon we visited a quarry that stretched 15 miles through the countryside. The landscape was eviscerated. A mountain in the distance had been cut away, leaving a rectangular, unnatural pit. Hills streaked with orange, purple, red, and yellow dirt rose around us, their peaks active with trucks dumping more rainbows of dirt. It was spoil, Eddy explained, the unwanted earth that the strip miners had to dig through to reach the Jurassic seam—the coal that, 145 million years ago, was a swamp.

The scene got Keller thinking about mass extinctions still to come and the geologists of the future ("They'll probably be cockroaches"), who, while studying this landscape, will be hopelessly confused by all these rock layers jostled on top of one another, out of order.

"There'll be someone going around the Earth trying to figure out what happened to us," Eddy said. "There'll be big debates about it."

"Well, we were stupid and killed ourselves. On a grand scale," Keller said. "You rule the world, and then you die."

We all chuckled at this prediction—mass extinction, by this point, having become something of a macabre inside joke. Just past the spoil, we reached the end of the road, which was lined with piles of white dirt too tall to see over. Clambering over them in search of outcrops, we were confronted by a strange view on the other side: an enormous field of coal, pockmarked with holes. The black earth had been dug at regular intervals to create thousands of pits, all the size and depth of shallow graves. Each one had its own mound of white earth beside it, as if waiting to be filled. No one could explain what they were. **A**

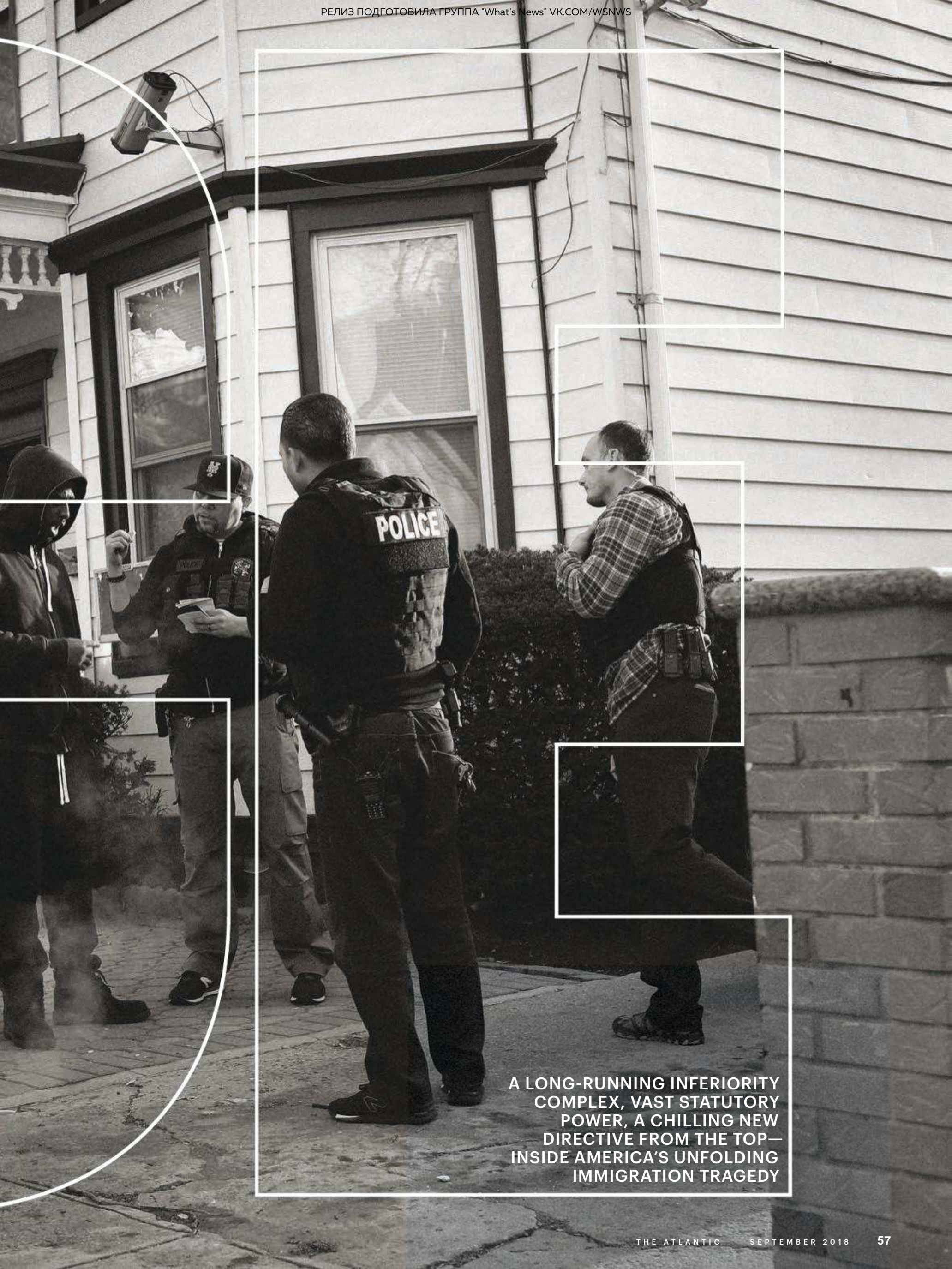
Bianca Bosker is the author of Cork Dork and Original Copies. She is a contributing editor at The Atlantic.



HOW ICE WENT ROGUE

BY
FRANKLIN
FOER

PHOTOGRAPH BY JOHN MOORE/GETTY



A LONG-RUNNING INFERIORITY
COMPLEX, VAST STATUTORY
POWER, A CHILLING NEW
DIRECTIVE FROM THE TOP—
INSIDE AMERICA'S UNFOLDING
IMMIGRATION TRAGEDY

SETTLING INTO A SENSE OF SAFETY IS HARD

when your life's catalog of memories teaches you the opposite lesson. Imagine: You fled from a government militia intent on murdering you; swam across a river with the uncertain hope of sanctuary on the far bank; had the dawning realization that you could never return to your village, because it had been torched; and heard pervasive rumors of former neighbors being raped and enslaved. Imagine that, following all this, you then found yourself in New York City, with travel documents that were unreliable at best.

This is the shared narrative of thousands of emigrants from the West African nation of Mauritania. The country is ruled by Arabs, but these refugees were members of a black subpopulation that speaks its own languages. In 1989, in a fit of nationalism, the Mauritanian government came to consider these differences capital offenses. It arrested, tortured, and violently expelled many black citizens.

The country forcibly displaced more than 70,000 of them and rescinded their citizenship. Those who remained behind fared no better. Approximately 43,000 black Mauritians are now enslaved—by percentage, one of the largest enslaved populations in the world.

After years of rootless wandering—through makeshift camps, through the villages and cities of Senegal—some of the Mauritanian emigrants slowly began arriving in the United States in the late 1990s. They were not yet adept in English, and were unworldly in almost every respect. But serendipity—and the prospect of jobs—soon transplanted their community of roughly 3,000 to Columbus, Ohio, where they clustered mostly in neighborhoods near a long boulevard that bore a fateful name: Refugee Road. It commemorated a moment at the start of the 19th century, when Ohio had extended its arms to accept another

influx of strangers, providing tracts of land to Canadians who had expressed sympathy for the American Revolution.

Refugee Road wasn't paved with gold, but in the early years of this century, it fulfilled the promise of its name. The Mauritians converted an old grocery store into a cavernous, blue-carpeted mosque. They opened restaurants that served familiar fish and rice dishes, and stores that sold CDs and sodas imported from across Africa.

Over time, as the new arrivals gave birth to American citizens and became fans of the Ohio State Buckeyes and the Cleveland Cavaliers, they mentally buried the fact that their presence in America had never been fully sanctioned. When they had arrived in New York, many of them had paid an English-speaking compatriot to fill out their application for asylum. But instead of recording their individual stories in specific detail, the man simply cut and pasted together generic narratives. (It is not uncommon for new arrivals to the United States, desperate and naive, to fall prey to such scams.) A year or two after the refugees arrived in the country, judges reviewed their cases and, noticing the suspicious repetitions, accused a number of them of fraud and ordered them deported.

But those deportation orders never amounted to more than paper pronouncements. Where would Immigration and Customs Enforcement even send them? The Mauritanian government had erased the refugees from its databases and refused to issue them travel documents. It had no interest in taking back the villagers it had so violently removed. So ICE let their cases slide. They were required to regularly report to the agency's local office and to maintain a record of letter-perfect compliance with the law. But as the years passed, the threat of deportation seemed ever less ominous.

Then came the election of Donald Trump. Suddenly, in the warehouses where many of the Mauritians worked, white colleagues took them aside and warned them that their lives were likely to get worse. The early days of the administration gave substance to these cautions. The first thing to change was the frequency of their summonses to ICE. During the Obama administration, many of the Mauritians had been required to "check in" about once a year. Abruptly, ICE instructed them to appear more often, some of them every month. ICE officers began visiting their homes on occasion.

Like the cable company, they would provide a six-hour window during which to expect a visit—a requirement that meant days off from work and disrupted life routines. The Mauritians say that when they met with ICE, they were told the U.S. had finally persuaded their government to readmit them—a small part of a global push by the State Department to remove any diplomatic obstacles to deportation.

Fear is a contagion that spreads quickly. One ICE officer warned some Mauritians sympathetically, “It’s not a matter of if you’ll be deported, but when.” Another flatly said, “My job is to get you to leave this country.” At meetings, officers would insist that the immigrants go to the Mauritanian consulate and apply for passports to return to the very country whose government had attempted to murder them.

One afternoon this spring, I sat in the bare conference room of the Columbus mosque after Friday prayer, an occasion for which men dress in traditional garb: brightly colored robes and scarves wrapped around their heads. The imam asked those who were comfortable to share their stories with me. Congregants lined up outside the door.

One by one, the Mauritians described to me the preparations they had made for a quick exit. Some said that they had already sold their homes; others had liquidated their 401(k)s. Everyone I spoke with could name at least one friend who had taken a bus to the Canadian border and applied for asylum there, rather than risk further appointments with ICE.

A lithe, haggard man named Thierno told me that his brother had been detained by ICE, awaiting deportation, for several months now. The Mauritians considered it a terrible portent that the agency had chosen to focus its attention on Thierno’s brother—a businessman and philanthropically minded benefactor of the mosque. If he was vulnerable, then nobody was safe. Eyes watering, Thierno showed me a video on his iPhone of the fate he feared for his brother: a tight shot of a black Mauritanian left behind in the old country. His face was swollen from a beating, and he was begging for mercy. “I’m going to sleep with your wife!” a voice shouts at him, before a hand appears on-screen and slaps him over and over.

In 21st-century America, it is difficult to conjure the possibility of the federal government taking an eraser to the map and scrubbing away an entire ethnic group. I had arrived in Columbus at the suggestion of a Cleveland-based lawyer named

David Leopold, a former president of the American Immigration Lawyers Association. Leopold has kept in touch with an old client who attends the Mauritanian mosque. When he mentioned the community’s plight to me, he called it “ethnic cleansing”—which initially sounded like wild hyperbole. But on each of my trips back to Columbus, I heard new stories of departures to Canada—and about others who had left for New York, where hiding from ICE is easier in the shadows of the big city. The refugees were fleeing Refugee Road.

S

Since taking office, Donald Trump has regularly thundered against the “deep state.” With the term, he means to evoke a cabal of bureaucrats burrowed within law enforcement, the intelligence community, and regulatory agencies, a nebulous elite that will stop at nothing to countermand his will—and, by extension, that of the people.

But one segment of the deep state stepped forward early and openly to profess its enthusiasm for Trump. Through their union, employees of ICE endorsed Trump’s candidacy in September 2016, the first time the organization had ever lent its support to a presidential contender. When Trump prevailed in the election, the soon-to-be-named head of ICE triumphantly declared that it would finally have the backing of a president who would let the agency do its job. He’s “taking the handcuffs off,” said Thomas Homan, who served as ICE’s acting director under Trump until his retirement in June, using a phrase that has become a common trope within the agency. “When Trump won, [some officers] thumped their chest as if they had just won the Super Bowl,” a former ICE official told me.

Whatever else Trump has accomplished for ICE, he has ended its relative anonymity. His administration’s “zero tolerance” immigration regime has triggered a noisy debate about the organizations he has deployed to enforce his policies. For weeks this spring, the nation watched as officers took children from their parents

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after they had crossed the U.S.–Mexico border in search of asylum. Although ICE played only a supporting role in the family-separation debacle—the task was performed principally by U.S. Customs and Border Protection—the agency has emerged as a shorthand for what critics say is wrong with Trump’s immigration agenda. Virtually every Democratic politician hoping to flash his or her progressive bona fides has called for ICE’s abolition.

The history of the agency is still a brief one. When terrorists struck the World Trade Center on September 11, 2001, ICE didn’t exist. In the Justice Department, there was the old Immigration and Naturalization Service. But while the mission of INS had always included the deportation of undocumented immigrants—and it occasionally staged significant workplace raids—it never had a large force that would enable their systematic removal from the nation’s interior.

But following the shock of 9/11, ICE was created as part of the Department of Homeland Security, into which Congress awkwardly stuffed a slew of previously unrelated executive-branch agencies: the Secret Service, the Transportation Security Administration, the Coast Guard. Upon its creation, DHS became the third-largest of all Cabinet departments, and its assembly could be generously described as higgledy-piggledy. ICE is perhaps the clearest example of where such muddled, heavily politicized policy making can lead.

Since its official designation, in 2003, as a successor to INS, ICE has grown at a remarkable clip for a peacetime bureaucracy. By the beginning of Barack Obama’s second term, immigration had become one of the highest priorities of federal law enforcement: Half of all federal prosecutions were for immigration-related crimes. In 2012, Congress appropriated \$18 billion for immigration enforcement. It spent \$14 billion for all the other major criminal law-enforcement agencies *combined*: the FBI; the Drug Enforcement Administration; the Secret Service; the Bureau of Alcohol, Tobacco, Firearms, and Explosives; and the U.S. Marshals Service.

ICE quickly built a sprawling, logistically intricate infrastructure comprising detention facilities, an international-transit arm, and monitoring technology. This apparatus relies heavily on private contractors. Created at the height of the federal government’s outsourcing mania, DHS employs more outside contractors than actual federal employees. Last year, these companies—which include the Geo Group

and CoreCivic—spent at least \$3 million on lobbying and influence peddling. To take one small example: Owners of ICE’s private detention facilities were generous donors to Trump’s inauguration, contributing \$500,000 for the occasion.

An organization devoted to enforcing immigration laws will always be reflexively and perhaps unfairly cast as a villain. But borders are a fundamental prerogative of the nation-state: The policing of them is a matter of national security, and a functioning polity maintains orderly processes for admitting some immigrants and turning others away. By definition, elements of this mission are exclusionary and hard-hearted. The liberal immigration policies practiced within the European Union have shown how what seems like a simple generosity of spirit can also be deeply destabilizing. A balance needs to be found.

Still, ICE, as currently conceived, represents a profound deviation in the long history of American immigration. On many occasions, America has closed its doors to both desperate refugees and eager strivers. But once immigrants have reached our shores, settled in, raised families, and started businesses, all without breaking any laws, the government has almost never chased them away in meaningful numbers. In 1954, Dwight Eisenhower’s Operation Wetback—this was its official designation—removed more than 1 million Mexican immigrants. It is remembered precisely because it was so dissonant with America’s self-styled identity as a nation of immigrants.

ICE, however, is assigned the task of removing undocumented immigrants from the country’s interior, and it has approached this mission with cold, bureaucratic efficiency. Until recently, the agency had a congressional mandate to maintain up to 34,000 beds in detention centers on any given day with which to detain undocumented immigrants. Once an immigrant enters the system, she is known by her case number. Her ill intentions are frequently presumed, and she will find it exceedingly difficult to plead her case, or even to know what rights she has.

Approximately 11 million undocumented immigrants currently live in this country, a number larger than the population of Sweden. Two-thirds of them have resided in the U.S. for a decade or longer. The laws on the books endow ICE with the technical authority to deport almost every single one of them. Trump’s predecessors, Barack Obama and George W. Bush,

allowed for a measure of compassion, permitting prosecutors and judges to stay the removals of some defendants in immigration court, and encouraging a rigorous focus on serious criminals. Congress, for its part, has for nearly two decades offered broad, bipartisan support for the grand bargain known as comprehensive immigration reform. The point of such legislation is to balance tough enforcement of the law with a path to amnesty for undocumented immigrants and the ultimate possibility of citizenship.

Yet no politician has ever quite summoned the will to overcome the systematic obstacles that block reform. Democrats didn’t make it a top priority when they briefly controlled Congress during Obama’s first term, and Republican reformers have again and again been stymied by anti-immigration hard-liners in the House. A comprehensive reform bill passed the Senate in 2013 by a resounding 68–32 margin, but then-Speaker John Boehner refused to allow it a vote in the House. The 2016 GOP presidential hopeful Marco Rubio went from staking his political identity on immigration reform to suggesting that he’d never truly supported the reforms in the first place.

Under the current administration, many of the formal restraints on ICE have been removed. In the first eight months of the Trump presidency, ICE increased arrests by 42 percent. Immigration enforcement has been handed over to a small clique of militant anti-immigration wonks. This group has carefully studied the apparatus it now controls. It knows that the best strategy for accomplishing its goal of driving out undocumented immigrants is quite simply the cultivation of fear. And it knows that the latent power of ICE, amassed with the tacit assent of both parties, has yet to be fully realized.

O

On a last-minute trip to Columbus, I booked a room in a boutique hotel on the upper floors of a newly refurbished Art Deco skyscraper. I had arranged to meet a 20-something African immigrant, whom I will call Ismael, and his lawyer at the



WHEN DONALD TRUMP WAS ELECTED, THOMAS HOMAN, THE ACTING DIRECTOR OF ICE UNTIL HIS RETIREMENT IN JUNE, SAID THAT THE NEW PRESIDENT WAS "TAKING THE HANDCUFFS OFF" THE AGENCY.

Starbucks in the lobby the next morning; I would accompany them to Ismael's regularly scheduled appointment with ICE.

Short, gaunt, and taciturn, Ismael came from Africa last year by way of a smuggling route through Mexico—a circuitous trek that culminated in his capture while crossing into California and several months in ICE detention. When I met Ismael, he rolled up a snug-fitting leg of his black jeans to show me the monitoring bracelet strapped around his bony ankle—a condition of his release. He had also received permission to relocate to his cousin's apartment in Columbus. Because ICE prohibited him from working while he awaited authorization papers, Ismael had improved his English by watching copious television. It was good enough for him to tell me, "I came to America to be free. This is not freedom." As we made our way to ICE, I was startled to discover that we would not be leaving the premises. ICE had office space on the third floor of the building my hotel occupied. It was a small but jolting illustration of the ubiquity of the relatively new agency.

Unsurprisingly, the waiting room at ICE was not part of the skyscraper's upscale refurbishment. It was like a dentist's office stripped of magazines, posters that imparted flossing, and pretty much any other splash of color. A small, older woman from Central America wandered through the perfectly quiet room with a piece of paper stapled to a manila envelope: "I don't speak English. Please help me."

A heavy, locked door separates the waiting room from ICE's main office, where officers interview immigrants and sometimes detain them. When a functionary in a flannel shirt opened the door and summoned Ismael, his lawyer rose to accompany him. But the officer waived a forefinger in her direction. "Sorry, lawyers aren't allowed back," he told her. A look of confusion compressed her face. "But I've been allowed back in the past. I think I'm allowed back," she told him. "Can I talk to a supervisor?"

Two minutes later, an officer with a shaved head, a black Under Armour hoodie, and a gun on his belt leaned his body through the door to stare intently

at Ismael. "Why have you been working?" he asked. "We know you've been working." It appeared to be an annoyed response to the lawyer's resistance, hurled without evidence, perhaps in the hopes of provoking a self-incriminating response. It seemed of a piece with the fraught atmosphere in the waiting room. Earlier, there had been an announcement that a car was parked illegally outside and needed to be moved. Ismael's lawyer had leaned over to tell me that this would be widely presumed to be another trick: Many immigrants under ICE scrutiny are not allowed to drive.

When immigration lawyers in Columbus deal with ICE, they are tentative, fretful that anything that might reek of complaint could provoke ICE into seeking retribution against their clients. So Ismael's lawyer struck a stance of studied conciliation. As she gently explained herself, Ismael disappeared behind the door for his appointment and another manager emerged. He said that the man handling Ismael's "intensive supervision" worked for a private contractor hired by ICE, and that the company's contract with the federal

government prohibited lawyers from attending its sessions with immigrants. "Just out of curiosity," the lawyer asked, "can I see a copy of the rules?" The supervisor returned with a sheet of paper. He pointed to the crucial passage in a section enumerating "participant rights." It described "the right to confidentiality with the exception of information requested by ICE." The lawyer flashed me a furtive smirk as she refrained from commenting on the bravura display of doublespeak: Ismael had been denied his right to an attorney in order to protect his confidentiality. But the manager, a Latino man with an untucked shirt and glasses, earnestly attempted to explain himself. He said that he wanted to help, and he mentioned the possibility of Ismael getting a work permit soon. "Look," he said, "I'm very sympathetic to him."

When Ismael returned to the waiting room, he supplied one-word answers to the lawyer's questions about the meeting. It had ultimately amounted to little more than a rote brush with the system. Still, it left the lingering sense that a terrible outcome had merely been postponed—which was perhaps the whole point.

N

No one, as a child, dreams about growing up to deport undocumented immigrants. Some 6,000 officers work in the Enforcement and Removal Operations (ERO) wing of ICE, but this is not always a first-choice career option. "Many in ICE applied to other agencies that rank higher in law-enforcement prestige," says David Martin, a scholar of immigration law who served in the Clinton and Obama administrations. The ranks of ICE are drawn in large part from retired members of the military and from former Border Patrol agents, who prefer the metropolitan locations of ICE offices to the remote outposts dotting the nation's southern border. The job is a solid option for high-school graduates, who are not eligible to apply to federal agencies that require a college education. It makes for an accessible entry point into federal law enforcement, a trajectory that comes with job security and decent pay,

and perhaps the hope of someday storming buildings or standing in the backdrop of press conferences, beside tables brimming with seized contraband. Such reveries are easy enough to entertain, until the first day on the job.

ICE consistently ranks among the worst workplaces in the federal government. In 2016, the organization ranked 299th on a list of 305 federal agencies in a survey of employee satisfaction. Even as Trump smothered the organization with praise and endowed it with broader responsibilities, ICE still placed 288th last year.

The culture of ICE is defined by a bureaucratic caste system—the sort of hierarchical distinctions that seem arcane and petty from the outside, but are essential to those on the inside. When ICE was created, 15 years ago, two distinct and disparate workforces merged into one. The *Immigration* part of the agency's name refers mostly to deportation officers who came over from the freshly dismantled Immigration and Naturalization Service. The *Customs* part of the name refers to investigators imported

from the Treasury Department. This was a shotgun marriage, filled with bickering and enmity from the start. The customs investigators had adored their old institutional home and the built-in respect it accorded them. They were given little warning before being moved to a new headquarters, with new supervisors, a nebulous mission, and colleagues they considered their professional inferiors. When I interviewed one of the customs investigators, who later had a top job at ICE, he still referred to the "unfortunate events of March 1, 2003"—the day ICE came into official existence.

After several false starts, the customs investigators were eventually restyled into a unit called Homeland Security Investigations. HSI managed to consistently find its way to glamorous cases that involved transnational crime—software piracy, child pornography, the bust of the Mexican kingpin Joaquín "El Chapo" Guzmán Loera, the investigation of terrorist bombings in Paris. But for all their efforts, HSI agents still found themselves dogged by their ties to ERO and the emotionally charged issue of immigration.

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They were shunned by police in big cities that refused to cooperate with ICE, not allowing for the fact that HSI functioned as its own distinct entity. Indeed, this summer 19 HSI agents signed a letter to Homeland Security Secretary Kirstjen Nielsen, asking her to officially separate their division from ICE. The agents wrote: "HSI's investigations have been perceived as targeting undocumented aliens, instead of the transnational criminal organizations." They explained that they felt HSI was paying a reputational price for its connection to ERO.

There is arguably a certain institutional hauteur to HSI. "They think of themselves as aristocrats," one former homeland-security official told me. Among other benefits, working for HSI brings the rank of "special agent"—what's known in federal guidelines as 1811 status—which sets officers on the same level as FBI agents. Meanwhile, ERO officers carry an 1801 classification. This position typically comes with a less favorable pay scale and limited powers. For instance, these officers are not allowed to execute search warrants.

An ERO officer's day-to-day existence is at a distant remove from the televised image of federal law enforcement. It often consists of paper-pushing and processing immigrants through the various stations of deportation. In many instances, when ERO officers are assigned to detain criminals who are at large, they brush up against bureaucratic limitations. "You go bang on a door and they're not there," John Sandweg, a former acting director of ICE, told me. Even if the person is home, he has the right to refrain from letting officers inside. If that happens, officers have no recourse other than to sit outside and wait.

"Regular cops get frustrated when a plea agreement is too soft," says Sandweg. "With ERO, about 50 percent of the people you arrest will still be in the country a year later." This is one of the many consequences of a system that—whatever one's political views on immigration—has obvious elements of dysfunction. ICE's capacity to detain immigrants long ago outstripped the capacity of courts to process them. Immigration courts currently have a backlog of 700,000 cases, which means that someone might wait several years before ever seeing a judge. A sense of futility, therefore, has become a prevailing ethos for much of the ICE rank and file. One former agent recalls learning a maxim on his first day on the job: "It's not over until the alien wins."

Even as some ICE officers suffer from a sense of their own impotence, the outside world often depicts them as heartless jackboots. Thomas Homan has described how, as acting director of the agency, he would wake up every morning and read the latest complaints and negative coverage from the American Civil Liberties Union and mainstream media. And those aren't the only sources of criticism. Most ICE agents work in cities. Many of them are themselves Latino or have married an immigrant. As John Amaya, a former deputy chief of staff of ICE, told me, "Their kids go to school and hear things; they go to the grocery store and hear shit. They are not immune."

When I asked how ICE responds to complaints and criticism, I was repeatedly told that officers can have genuine qualms about their work. Like any large organization, ICE has its share of bad apples. But officials from the Obama administration vociferously countered any notion that ICE is teeming with racists. Carlos Guevara, who served as an adviser to the homeland-security

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JOHN MOORE/GETTY



leadership, told me, "There are a lot of good officers ... And I don't think a lot of them feel great about picking up *abuelita*"—someone's grandmother—"or somebody who's been here for 20 years, much less being part of a policy separating kids from parents."

To navigate this moral thicket, ICE officers tell themselves comforting stories. The agency was founded, after all, in the aftermath of 9/11, when the government had failed to prevent evildoers from infiltrating the homeland and killing thousands. As one former ICE official told me, "You numb yourself by saying everything we do has a national-security focus. *By God, if we let this one slip by, it's the tip of the iceberg.* We never know when we're confronted with the real threat." The likelihood of that genuine threat, of course, is very much open to debate. Statistically speaking, an immigrant who has lived in the United States for decades, has an immaculate criminal record, and comes from Central America (like many ICE targets) poses so negligible a national-security threat that it is virtually nonexistent. No immigrant from the region has ever committed a terrorist attack on U.S. soil, which is something that cannot be said of native-born Americans.

This fragile institutional psyche was on full display in ICE's obstreperous response to Obama. During the first term of his presidency, Obama pursued an aggressive policy of immigration enforcement. As late as 2013, he expelled 438,000 undocumented immigrants, a far higher number than any other recent administration did. This extreme crack-down was intended as a down payment on comprehensive immigration reform. Republicans had clamored for proof of Obama's sincere commitment to enforcement, and he supplied it. Alas, that down payment would never be recouped. Immigration reform collapsed thanks to the guerrilla tactics of the GOP hardliners in the House. And so, in the face of congressional inaction, Obama set about steering ICE toward a more compassionate strategy. He wanted to give the agency a set of explicit and rigid priorities for whom it would detain and deport. Previously, almost any undocumented immigrant had been fair game. Now Obama set about focusing ICE's efforts on serious criminals and recent arrivals. By the middle of his second term, the administration had figured out how to translate its priorities into bureaucratic reality. It supplied ICE with clear procedures—with

checklists and paperwork—to ensure that the organization hewed closely to the new goals.

In the parlance of certain factions of ICE, these Obama-era priorities were the "handcuffs" that prevented officers from doing their job. At various moments during these years, a broad swath of ICE officers behaved as a rogue unit within the federal government. In 2012, after Obama proposed his enforcement priorities, the union representing ICE officers initially didn't allow its members to attend training sessions that inculcated the new approach. When Obama issued his plans for Deferred Action for Childhood Arrivals (DACA) that same year, the head of the union, Chris Crane, sued top administration officials to block the move. Crane became a favorite witness of then-Senator Jeff Sessions, who called Crane "an American hero."

Upon entering the political scene, Donald Trump promoted himself as ICE's salvation. By flaying Obama's immigration policy with uncharacteristic consistency and specificity, he spoke to the deep resentments of many ERO officers. Lavishing them with praise—"We respect and cherish our ICE officers"—he constantly asserted their importance to public safety. When the ICE union assembled to endorse a presidential candidate, Trump received 95 percent of the vote. And he returned the favor: During a speech exactly five days after his inauguration, the president pointed to Crane and declared, "You guys are about to be very, very busy doing your jobs."

W

We know all the common knocks against government: how it overcomplicates tasks, how it resists change, how it has a remarkable capacity for inventing inefficiencies. But ICE has quickly created a system of incredible scale, an industrialized process for removing human beings from the United States.

Take the example of ICE Air. Twelve years ago, ICE set about creating an internal mechanism for transporting deportees back to their native lands by

establishing its own airline. ICE Air has access to 10 planes, most of them Boeing 737s, each capable of carrying 135 deportees, dispatched from airports in five hub cities: Mesa, Arizona; San Antonio and Brownsville, Texas; Alexandria, Louisiana; and Miami. Maps like the ones found in seat-back pockets show the arcing trajectories of ICE Air's most common routes, extending out across the hemisphere. (In 2016, ICE Air flew 317 trips to Guatemala, its top destination.) Like most airlines, ICE Air has a baggage limit: no more than 40 pounds. Unlike most airlines, ICE Air forbids passengers from wearing belts and shoelaces, for fear they might use them to commit suicide. If nothing goes amiss, stewards serve granola bars and water, or on longer flights a full meal. Sometimes they unlock the handcuffs of the deportees who have been shackled.

Yet provisions on ICE Air have been a source of controversy. Last winter, a flight carrying 92 Somalians made a pit stop in Dakar, Senegal. During the layover, the plane waited for a fresh crew, which was delayed due to issues at its hotel. So the plane reportedly sat on the runway for almost 24 hours, the passengers never disembarking. ICE has disputed accounts of the long delay, but some of the Somalians say that the agency failed to supply them with sufficient food and drink, and that because of faulty air-conditioning, they found breathing difficult. According to one account, they weren't allowed to walk the aisles to the lavatory, so they relied on empty water bottles—and when their urine outpaced the supply of water bottles, they were forced to wet themselves.

To coordinate ICE Air requires a certain logistical genius, especially given the organization's aim—familiar to anyone who relies on commercial air travel—of filling as many seats as possible on each of its flights. (To execute such deportations, ICE Air prefers to charter its own flights; the agency tries to avoid placing deportees on commercial flights, because airlines won't board a passenger who actively refuses to fly.) One former ICE official recalls a conversation in which a colleague boasted of an especially complex deportation to Gaza, which required traversing the Sinai Peninsula. He said the agency has felt intense congressional pressure to demonstrate that no nationality, no matter how small its presence in the United States, is beyond its deportation capacity.

ICE has numeric goals, and it goes to great lengths to achieve them. Among the most important of these goals is the drive to constantly run its detention facilities at maximum capacity. In 2004, Congress directed ICE to add 8,000 new beds a year. (In 1994, the government maintained a daily average of 6,785 detainees; this year, the expected average is 40,520.) This required a massive investment in detention, which Congress wanted to ensure didn't go to waste. In 2009, Robert Byrd, the late Democratic senator from West Virginia, quietly added a provision to an appropriations bill mandating that ICE "maintain a level of not less than 33,400 detention beds." The provision was never debated and left room for competing interpretations. But for large stretches of the Obama years, Byrd's amendment was regarded as an obligatory quota. (Last year Congress finally removed the Byrd quota, but Trump's goals for detention far outstrip anything Congress has ever mandated.)

It's one thing for a city to require cops to issue a minimum number of parking tickets; it's another for the federal government to proscribe a daily goal for the number of human beings it will deprive of liberty. But the system that Byrd helped enshrine encourages precisely that. Jeremy Jong, an attorney with the Southern Poverty Law Center, described to me a conversation he had with an ICE official at a Louisiana detention facility. The official bragged that "he always did his best to fulfill his contractual obligation to keep the center's beds full of inventory."

The description of immigrants as "inventory" is a logical extension of how ICE has outsourced detention to private firms, for which each confinement represents additional profit. Detention is a boom industry, backed by such megafunds as Vanguard and BlackRock, and it has experienced a decade of steroidal growth. In the months following Trump's election, the stock prices of the biggest detention companies, the Geo Group and CoreCivic, rose by more than 100 percent. (Those prices have leveled out since then.) Last year, the bipartisan army of lobbyists employed by the Geo Group and its primary competitors included power firms Akin Gump and the Gephardt Group, founded by former House Majority Leader Richard Gephardt. That fall, the Geo Group celebrated its good fortune by holding its annual leadership conference at the Trump National Doral resort, in Miami.

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Both CoreCivic and the Geo Group maintain that they do not lobby for or promote specific legislation shaping immigration policy. But according to NPR, the detention industry donated money to 30 of the 36 co-sponsors of the infamous S.B. 1070, a broad and harsh crackdown on undocumented immigrants, which then-Arizona Governor Jan Brewer signed into law in 2010. Additionally, two of Brewer's top advisers were former lobbyists for CoreCivic. (The bill was eventually shredded by the courts on constitutional grounds.)

There are, of course, genuine public-policy rationales for ICE's contracting with private companies for detention facilities. The principal alternative is to rely on county jails, where ICE reportedly rents beds for \$130 a night. The detention system is supposedly encoded in civil law, but jails are inherently rooted in the criminal system. Many of the immigrants detained in jails wear brightly colored jumpsuits and live surrounded by bars and wires. Many of these jails, unlike the private facilities, have no capacity for handling non-English speakers.

Still, the private facilities are run with the explicit goal of profit—a motive that can come at the cost of the well-being of detainees. Several are in remote, rural areas, where land and labor come especially cheap. One of the primary private facilities in the South is in Lumpkin, Georgia, on the Alabama border, 140 miles from Atlanta. Civil detention is explicitly not meant to be punitive—merely a necessary step in the administrative process of deportation—but the distance to some facilities makes regular visits from relatives extremely difficult. Immigration lawyers told me that they tend not to take cases in such facilities, because access would be so difficult. Marty Rosenbluth, a lawyer from North Carolina, relocated to Lumpkin. "I'm currently the only attorney doing defense against removal cases, that I know of, between Lumpkin and Atlanta," he told me. "I actually opened up a one-room B&B in my house to try and lure attorneys down here, since part of their excuse for not taking cases here is that the nearest hotels are an hour drive." Even with his presence, a 2015 *University of Pennsylvania Law Review* study found that only 6 percent of detainees in the facility have a lawyer. Nationwide, the figure isn't much better: 14 percent. And without a lawyer, their chances of victory in immigration court slump from slim (21 percent) to nearly hopeless (2 percent).

Private detention companies' contracts with ICE stipulate that they uphold a set of rigorous standards, but they of course seek to tamp down costs, which means that they may skimp on basic care for detainees. Take the CoreCivic facility in Elizabeth, New Jersey, which a group of lawyers and health professionals assembled by Human Rights First toured last year. What they discovered on their visits were reports of maggots in the showers and raw food served in the cafeteria, not to mention drinking water described as "pure bleach." Several detainees said they avoid asking for dental care because the dentist at the facility only performs extractions, even when a filling would do. Mental-health treatment commonly includes "bibliotherapy"—the assignment of self-help books—despite the obvious fact that prolonged detention can bring stress and depression. CoreCivic maintains that Human Rights First's report contained "numerous false and misleading allegations." But these aren't merely the stray observations of an activist group. In December, John V. Kelly, the acting inspector general of the Department of Homeland Security, issued a comprehensive report based on a series of surprise visits to detention facilities. His findings read: "We identified problems that undermine the protection of detainees' rights, their humane treatment, and the provision of a safe and healthy environment."

Like many bureaucracies, ICE strains for growth. When the agency was created, it employed just over 2,700 deportation officers, roughly the same number of employees as the San Diego police department. That workforce has since doubled, and the organization's ambitions have ballooned. Beyond its own budget and its network of private contractors, ICE has availed itself of a provision in an immigration law signed by Bill Clinton in 1996. That provision empowered the federal government to partner with state and local police. In effect, this means ICE can deputize police to enforce federal immigration laws. Not every jurisdiction has wanted to align itself with ICE—indeed, most major cities have strenuously resisted, especially in the Trump era. But plenty of local police forces, many of them in suburban counties, have gladly taken up ICE's offer to collaborate.

Gwinnett County, in northern Georgia, once epitomized the old rural South, sparsely populated and largely white. But over the past few decades, its population has exploded in both size and

racial diversity. Demographers say the county's white majority is on track to be displaced by 2040. When Trump signed an executive order allowing ICE to detain essentially any undocumented immigrants it encounters, the Gwinnett County police responded enthusiastically. The number of undocumented immigrants transferred to ICE from local jails jumped by 248 percent during the first four months of Trump's presidency, relative to the prior year. Gwinnett police weren't rounding up dangerous gang members: When the Migration Policy Institute studied the new pattern of enforcement, it found that police were primarily arresting immigrants for traffic violations before handing them over to ICE.

T

The early Trump era has witnessed wave after wave of seismic policy making related to immigration—the Muslim ban initially undertaken in his very first week in office, the rescission of DACA, the separation of families at the border. Amid the frantic attention these shifts have generated, it's easy to lose track of the smaller changes that have been taking place. But with them, the administration has devised a scheme intended to unnerve undocumented immigrants by creating an overall tone of inhospitality and menace.

Where immigration is concerned, Trump has installed a group of committed ideologues with a deep understanding of the extensive law-enforcement machinery they now control. One especially skilled participant is L. Francis Cissna, the head of the Office of U.S. Citizenship and Immigration Services. Cissna is a longtime bureaucrat at the Department of Homeland Security who styled himself a dissident during the Obama years. In 2015, he temporarily left the department to work "on detail" for Republican Senator Chuck Grassley. An MIT graduate and the son of a Peruvian immigrant, Cissna began his career as a Foreign Service officer in Haiti and then Sweden. Over time, he became a policy

savant; even his ideological opponents confess that he is more fluent in the immigration system's intricacies than they are.

From his perch in the Trump administration, Cissna has repeatedly broadcast the agency's new attitude toward immigration. In February, he rewrote its mission statement, erasing a phrase that described the United States as a "nation of immigrants." He explained the change by stating that he wanted to emphasize the "commitment we have to the American people"—as if there were intellectual tension between the two sentiments. Then, in June, he announced the opening of an office that would review the files of naturalized citizens, reexamining fingerprints and hunting for hints of fraud that might enable the revocation of citizenship.

Cissna is part of a close-knit coterie of former Capitol Hill staffers whom Trump has placed in charge of the immigration



EDMUND D. FOUNTAIN/REDUX



IN 2006, ICE ESTABLISHED ITS OWN AIRLINE, ICE AIR, TO TRANSPORT DEPORTEES BACK TO THEIR NATIVE COUNTRIES. IN 2016, ICE AIR FLEW 317 TRIPS TO GUATEMALA, ITS TOP DESTINATION.

system. Before Trump took office, the group clustered in the offices of the conservative politicians most committed to restrictive immigration policy, especially Senators Grassley and Sessions. Even in a time when GOP policy on immigration had swung far to the right, these staffers—Stephen Miller, now a White House senior adviser, is the most famous of the bunch—existed far outside the party’s mainstream. According to former colleagues, the offices of senators such as John McCain and Marco Rubio would lose patience with them because of their eagerness to detonate any viable version of immigration reform. “They are a little cabal,” one Republican staffer who dealt closely with them told me. They specialized in churning out missives to DHS that requested information about individual immigrants so detailed, they sometimes seemed intent purely on overwhelming the system. One

letter signed by Grassley, Sessions, and their Senate colleague Michael Lee asked DHS to respond “in precise detail” to queries about 250,000 immigrants.

Aside from Miller, perhaps the most important architect of Trump’s immigration policy is another young Sessions acolyte, Gene Hamilton. In 2008, while he was a law student at Washington and Lee University, Hamilton took an internship at an ICE detention facility in Miami. In 2012, he scored a job as an ICE lawyer in the Atlanta field office. (Back then, Atlanta was known as one of the most aggressive cities when it came to immigration enforcement: The court there granted asylum to just 2 percent of the seekers whose cases it heard. The national average is about 50 percent.)

At the beginning of the Trump presidency, Hamilton joined DHS as a senior counselor to then-Secretary John Kelly.

Last year, he left DHS to serve as a top adviser to Attorney General Jeff Sessions. The logic of the job switch was made apparent to me by one former ICE official, who described Sessions as the “de facto secretary of homeland security,” given his comprehensive influence over immigration policy. Together, Sessions and Hamilton have instituted a highly insular, fast-moving enforcement operation.

The work undertaken by Sessions, Hamilton, Miller, and their ilk is based to some degree on a theory first developed by Kris Kobach, the Kansas secretary of state. Over the past year, Kobach has emerged as a prime *bête noire* of the left because of his ferocious, ultimately doomed attempts to stamp out a phantom epidemic of voter fraud. But for many years, he served as a lawyer for an offshoot of the Federation for American Immigration Reform—the loudest and most effective of the groups pressing for restrictive immigration laws. In that position, he helped write many of the most draconian pieces of state-level immigration legislation to wend their way into law, including Arizona’s S.B. 1070.

Kobach set out to remake immigration law to conform to a doctrine he called self-deportation or, more clinically, attrition through enforcement—a policy that experienced a vogue in 2012, when Mitt Romney, campaigning for president, briefly claimed the position as his own. The doctrine holds that the government doesn’t have the resources to round up and remove the 11 million undocumented immigrants in the nation, but it can create circumstances unpleasant enough to encourage them to exit on their own. As Kobach once wrote, “Illegal aliens are rational decision makers. If the risks of detention or involuntary removal go up, and the probability of being able to obtain unauthorized employment goes down, then at some point, the only rational decision is to return home.” Through deprivation and fear, the government can essentially drive undocumented immigrants out of the country.

Once you understand that self-deportation is the administration’s guiding theory, you can see why immigration hawks might take satisfaction in supposed policy defeats. Even if putative fiascos such as the initial Muslim ban and family separations at the border fail in court or are ultimately reversed, they succeed in fomenting an atmosphere of fear and worry among immigrants. The theatrics are, in effect, the policy.

The Trump administration made explicit its policy that every undocumented immigrant is unsafe with the executive order that Trump signed during his first month as president, repealing Obama's policy of prioritizing the deportation of immigrants who had committed serious crimes. As Thomas Homan testified before Congress last year, "If you're in this country illegally and you committed a crime by entering this country, you should be uncomfortable ... You should look over your shoulder, and you need to be worried."

The administration has attempted to encode the spirit of that warning across the spectrum of immigration enforcement. For years, such enforcement has abided by a policy intended to give undocumented immigrants a sense of safety in "sensitive locations." ICE has, for instance, refrained from apprehending immigrants at schools, places of worship, and hospitals. The theory is that even if an immigrant might be at risk for deportation, she shouldn't think twice about, say, visiting a doctor. But anecdotal evidence suggests that ICE has been operating more often in the vicinity of sensitive locations: Agents arrested a father after he dropped off his daughter at school, and detained a group soon after it left a church shelter. ICE has also attempted to undermine so-called sanctuary cities, which decline to hand over undocumented immigrants whom their police happen to arrest. ICE has loudly trumpeted its escalation of raids in those cities, sending the message that any notion of sanctuary is pure illusion.

To date, there is little evidence that self-deportation is occurring in any meaningful numbers. Ample data, however, show that increased fear has caused immigrant families to alter their life routines. One study by the Kaiser Family Foundation found that undocumented immigrants tried to limit their driving in order to lower the chance of an inadvertent interaction with the police. Many immigrant parents now keep their kids indoors as much as they can. One woman told Kaiser she noticed that once-vibrant playgrounds in her neighborhood were suddenly vacant.

Likewise, police departments around the country have noted a sharp decrease among Latinos reporting domestic violence and abuse. (In Los Angeles, for instance, reports by Latinos of sexual assault dropped by 25 percent in the first four months of 2017 compared with the same period in 2016.) Women

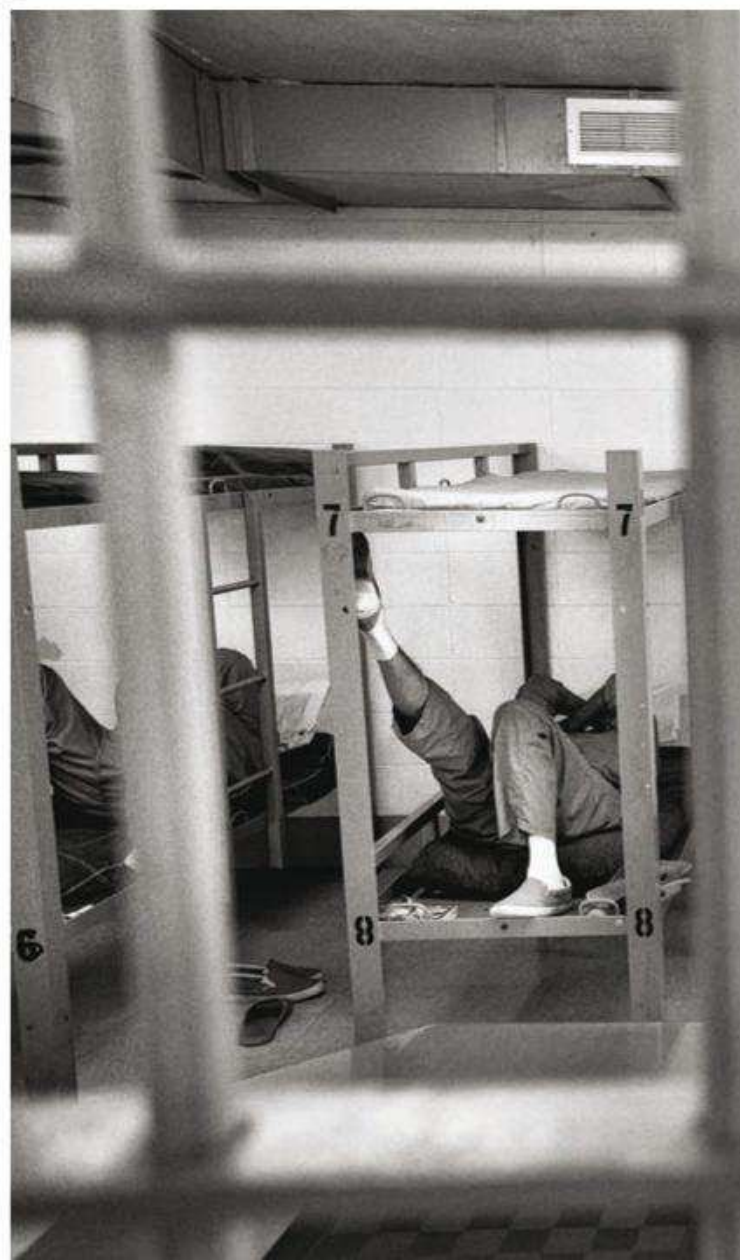
WHERE IMMIGRATION IS CONCERNED, TRUMP HAS INSTALLED IDEOLOGUES WITH A DEEP UNDERSTANDING OF THE LAW-ENFORCEMENT MACHINERY THEY NOW CONTROL.

would apparently rather tolerate battery than expose their partner to the risk of deportation—or risk deportation themselves. According to the *Houston Chronicle*, waiting rooms at many health clinics serving undocumented immigrants in South Texas are half as full now as they were before Trump took office. And schools in suburban Atlanta report that immigrant parents are reluctant to sign their kids up for reduced-price lunch programs.

Researchers from UCLA interviewed teachers and counselors at schools across 12 states to gauge the impact of zero-tolerance immigration policies in the classroom. They found that children of undocumented immigrants consistently expressed fear at the prospect of returning home from school only to find their parents and siblings gone. An art teacher reported that "many students drew and colored images of their parents and themselves being separated, or about people stalking/hunting their family."

Fears of ICE can be exaggerated by word of mouth or compounded by hyperbolic news reports, especially in the Spanish-language media. But the activists who

KADIR VAN LOHUIZEN/NOOR/REDUX



interact most frequently with ICE, who pay daily visits to detention centers and immigration courts, share immigrants' sense of trepidation. This spring, an immigration lawyer from Santa Fe named Allegra Love went to Mexico to visit a caravan of Central Americans headed to the California border. By the time she arrived, the procession, organized by the activist group Pueblo Sin Fronteras, or "People Without Borders," had swollen to hundreds of asylum seekers and attracted the attention of the media, especially Fox News. President Trump described the caravan as a "disgrace." Although Love has made a career of advocating on behalf of immigrants, she had come to Mexico with an explicit message of discouragement. "I wanted to keep these people safe and needed to explain to them how willing our government is to make them suffer," she told me. She conducted a workshop in a makeshift refugee camp in the city of Puebla. As hundreds of migrants gathered, she addressed them with a microphone: "The system has become so appalling. You need to be afraid. You need to take that into account." For the first time in her

life, she was actively attempting to deter people from seeking refuge in the United States. This is the terrible irony of Trump's policy: It turns even devoted activists into unwitting servants of its goals.

D

Donald Trump talks a lot about the crisis at the border. But over the past generation, the U.S. has spent tens of billions of dollars sealing the frontier with Mexico. It has invested vast sums in surveillance, fencing, drones, agents. A generation ago, politicians bemoaned the influx of Mexicans into the country. Ten years ago, Mark Krikorian, one of the most prominent conservative theorists on the subject, wrote a highly touted book warning about Mexican plans for a *reconquista*: Through mass

migration, he argued, Mexico would attempt to erode American sovereignty and exert influence over the United States. Yet just as he promulgated that argument, the problem he diagnosed was disappearing. The nation's rigid security has made casually traversing the border much harder. In recent years, there has often been more migration *to* Mexico than *from* Mexico. The Pew Research Center has estimated that there were 1.3 million fewer undocumented Mexican immigrants in the United States in 2016 than in 2007. Even with the recent surge of Central Americans fleeing violence in Honduras, El Salvador, and Guatemala, illegal border crossings are a fraction of what they were in the 1980s and '90s. In 2000, the U.S. apprehended 1.7 million people crossing the southwest border; last year, it nabbed just over 300,000. Contrary to widespread belief—and the president's frequent complaints—very few borders have the dense, protective security layers present on America's border with Mexico.

But even as the nation solves one problem, politicians and bureaucracies concoct new ones. Border Patrol has started aggressively taking advantage of an old regulation, long ignored, that permits an expansive definition of *border*, encompassing all terrain within 100 miles of the physical frontier. It has leveraged this flexible interpretation to set up checkpoints along I-95 in Maine and to board buses in Florida to ask passengers about their immigration status. Border Patrol has become a regular presence in cities such as Las Vegas and San Antonio—and its officers can be seen cruising highways in northern Ohio.

A similar mission creep afflicts ICE. It's hard to argue with the need for a bureau that can deport criminals who reside in the country illegally. But there are only so many of them. Study after study has shown that immigrants commit crimes at much lower rates than the native-born population. ICE simply doesn't have enough criminal targets to justify its enormous budget. That's why, when Obama provided ICE with strict priorities, its number of detentions quickly plummeted.

"Abolish ICE" is a slogan, now fashionable among Democrats, that has a radical edge. Prudent policy, however, requires not smashing the system, but returning it to a not-so-distant past. Only five years ago, the political center deemed the legalization of the country's 11 million undocumented immigrants a sensible element of a broad compromise.

IN 1994, THE GOVERNMENT DETAINED AN AVERAGE OF 6,785 UNDOCUMENTED IMMIGRANTS ON ANY GIVEN DAY. THIS YEAR, THE EXPECTED DAILY AVERAGE IS 40,520.



Only 15 years ago, before the birth of ICE, America had a bureaucracy that didn't treat them as a policing problem. Immigration enforcement was housed in an agency devoted to both deportation *and* naturalization. There's no reason to wax nostalgic for INS, which had plenty of problems of its own. But the U.S. can now borrow from its positive example and design an institutional structure that restores a sense of proportion to the limited dangers posed by the immigrants embedded in American communities.

L

Lacking a large number of worthy targets, ICE will train more of its attention on the likes of Jack, an undocumented immigrant from Mauritania whom I met this spring. (Jack is not his real name, but he does go by an Americanized nickname.) As Jack drove me around Columbus in his aging but meticulously maintained sedan, I came to think of him as an evangelist. With his round face, shaved pate, and impressive mustache, he exuded an optimism so cheery that it can only be described as faithful. I found myself disappearing into his homilies, as he set out to convert me to his version of the American dream.

As we meandered past Refugee Road toward his neighborhood, he wanted me to know that he had had the vision to buy a model home at a good price long before the developer had filled out his street. When we arrived at his place, he asked me to gaze out upon his little village of cookie-cutter houses and winding asphalt. The morning's drizzle had turned to mist, and Jack closed his eyes and theatrically inhaled, an expression of self-satisfaction like one might see in a TV commercial.

He took me inside through his garage, past a shelving unit filled with four tiers of sneakers. Jack, a farmer's son, takes huge—and very American—pleasure in abundance. Nearly every room in his house seemed to have a television set tuned to CNN. I saw pictures of his young son—born in Columbus, and a U.S. citizen—as well as an image of the former Ohio

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State University football coach Jim Tressel, whom Jack once met at a parade. I followed him to his basement, which he is in the early phases of transforming into a shrine to the team. The walls will be painted in the school's colors, scarlet and gray. "It will be my man cave," he told me.

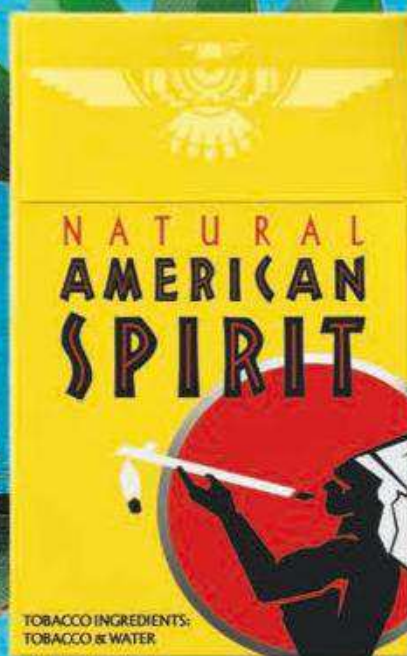
Jack then led me up to his office, which has his favorite view in the house. It looks down on his deck and grill, across a grassy expanse of yard. Jack, who is in his mid-40s but looks older, is a professional mover. He works for a big company that specializes in long-distance relocations. At the beginning of the Trump administration, Jack even packed up the home of a soon-to-be senior Cabinet member and hauled his belongings to Washington. On the shelf opposite his desk, he keeps the awards he's collected from his company for the excellence of his work.

"I refuse to give all this up," he said. An officer at ICE, whom he considers especially kind, has told him that it's only a matter of time before he is detained and deported. But Jack, ever the American optimist, believes there's no problem that can't be solved. "I will tell them that I know I did the wrong thing. I came here without papers. But look at me. I've never broken a law. Fine, deport the guys who have committed a crime. I will say, 'Look. It's me, Jack.' I will joke with them and let them know I'm not a threat. When I talk to them reasonably, they will relax." Even with the threat of deportation hanging over him, he has disciplined himself to keep on believing. A few days earlier, he had bought a truck to start his own hauling company. "I want to employ people, to give them opportunities like I had."

As we went through his office, he became wistful. He opened his closet and showed me the suit he had worn on his flight to America as a young man, almost 20 years ago. He had me run my hands along its frayed lapel. Then he grabbed a leather-bound notebook sitting on his printer and opened it. "Here are things that my girlfriend will need to know." He had written instructions on how to access his bank accounts, open his safe, sell his house, reach his son. As he showed this to me, he finally broke from his customarily cheery character and said nothing. He closed the book and traced the cover with his finger one last time. Then he looked at me and said, "When the day comes." **A**

Franklin Foer is a national correspondent for The Atlantic and the author, most recently, of World Without Mind.

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**ARE WE
HARDWIRED
TO DELUDE
OURSELVES?
THOSE
WHO STUDY
COGNITIVE
BIAS SEEM
TO THINK
SO. THEY
DISAGREE ON
WHETHER
WE CAN
DO MUCH
ABOUT IT.
BY BEN
YAGODA**



giving it to a stranger years from now.” The paper described an attempt by Hershfield and several colleagues to modify that state of mind in their students. They had the students observe, for a minute or so, virtual-reality avatars showing what they would look like at age 70. Then they asked the students what they would do if they unexpectedly came into \$1,000. The students who had looked their older self in the eye said they would put an average of \$172 into a retirement account. That’s more than double the amount that would have been invested by members of the control group, who were willing to sock away an average of only \$80.

I am already old—in my early 60s, if you must know—so Hershfield furnished me not only with an image of myself in my 80s (complete with age spots, an exorbitantly asymmetrical face, and wrinkles as deep as a Manhattan pothole) but also with an image of my daughter as she’ll look decades from now. What this did, he explained, was make me ask myself, *How will I feel toward the end of my life if my offspring are not taken care of?*



When people hear the word *bias*, many if not most will think of either racial prejudice or news organizations that slant their coverage to favor one political position over another. Present bias, by contrast, is an example of cognitive bias—the collection of faulty ways of thinking that is apparently hardwired into the human brain. The collection is large. Wikipedia’s “List of cognitive biases” contains 185 entries, from actor-observer bias (“the tendency for explanations of other individuals’ behaviors to overemphasize the influence of their personality and underemphasize the influence of their situation ... and for explanations of one’s own behaviors to do the opposite”) to the Zeigarnik effect (“uncompleted or interrupted tasks are remembered better than completed ones”).

Some of the 185 are dubious or trivial. The IKEA effect, for instance, is defined as “the tendency for people to place a disproportionately high value on objects that they partially assembled themselves.” And others closely resemble one another to the point of redundancy. But a solid group of 100 or so biases has been repeatedly shown to exist, and can make a hash of our lives.

The gambler’s fallacy makes us absolutely certain that, if a coin has landed heads up five times in a row, it’s more likely to land tails up the sixth time. In fact, the odds are still 50-50. Optimism bias leads us to consistently underestimate the costs and the duration of basically every project we undertake. Availability bias makes us think that, say, traveling by plane is more dangerous than traveling by car. (Images of plane crashes are more vivid and dramatic in our memory and imagination, and hence more available to our consciousness.)

The anchoring effect is our tendency to rely too heavily on the first piece of information offered, particularly if that information is presented in numeric form, when making decisions, estimates, or predictions. This is the reason negotiators start with a number that is deliberately too low or too high: They know that number will “anchor” the subsequent dealings. A striking illustration of anchoring is an experiment in which participants observed a

I am staring at a photograph of myself that shows me 20 years older than I am now. I have not stepped into the twilight zone. Rather, I am trying to rid myself of some measure of my present bias, which is the tendency people have, when considering a trade-off between two future moments, to more heavily weight the one closer to the present. A great many academic studies have shown this bias—also known as hyperbolic discounting—to be robust and persistent.

Most of them have focused on money. When asked whether they would prefer to have, say, \$150 today or \$180 in one month, people tend to choose the \$150. Giving up a 20 percent return on investment is a bad move—which is easy to recognize when the question is thrust away from the present. Asked whether they would take \$150 a year from now or \$180 in 13 months, people are overwhelmingly willing to wait an extra month for the extra \$30.

Present bias shows up not just in experiments, of course, but in the real world. Especially in the United States, people egregiously undersave for retirement—even when they make enough money to not spend their whole paycheck on expenses, and even when they work for a company that will kick in additional funds to retirement plans when they contribute.

That state of affairs led a scholar named Hal Hershfield to play around with photographs. Hershfield is a marketing professor at UCLA whose research starts from the idea that people are “estranged” from their future self. As a result, he explained in a 2011 paper, “saving is like a choice between spending money today or

roulette-style wheel that stopped on either 10 or 65, then were asked to guess what percentage of United Nations countries is African. The ones who saw the wheel stop on 10 guessed 25 percent, on average; the ones who saw the wheel stop on 65 guessed 45 percent. (The correct percentage at the time of the experiment was about 28 percent.)

The effects of biases do not play out just on an individual level. Last year, President Donald Trump decided to send more troops to Afghanistan, and thereby walked right into the sunk-cost fallacy. He said, "Our nation must seek an honorable and enduring outcome worthy of the tremendous sacrifices that have been made, especially the sacrifices of lives." Sunk-cost thinking tells us to stick with a bad investment because of the money we have already lost on it; to finish an unappetizing restaurant meal because, after all, we're paying for it; to prosecute an unwinnable war because of the investment of blood and treasure. In all cases, this way of thinking is rubbish.

If I had to single out a particular bias as the most pervasive and damaging, it would probably be confirmation bias. That's the effect that leads us to look for evidence confirming what we already think or suspect, to view facts and ideas we encounter as further confirmation, and to discount or ignore any piece of evidence that seems to support an alternate view. Confirmation bias shows up most blatantly in our current political divide, where each side seems unable to allow that the other side is right about anything.

Confirmation bias plays out in lots of other circumstances, sometimes with terrible consequences. To quote the 2005 report to the president on the lead-up to the Iraq War: "When confronted with evidence that indicated Iraq did not have [weapons of mass destruction], analysts tended to discount such information. Rather than weighing the evidence independently, analysts accepted information that fit the prevailing theory and rejected information that contradicted it."

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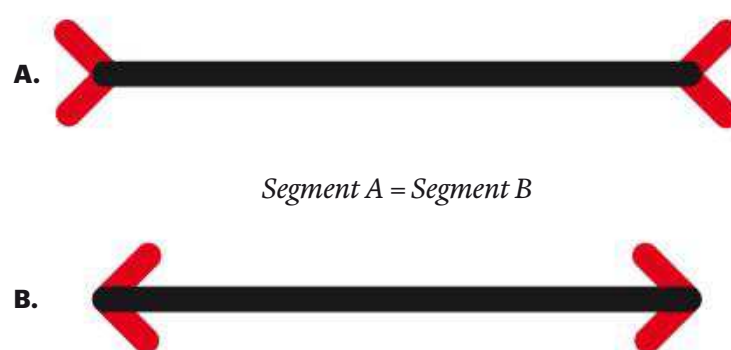
The whole idea of cognitive biases and faulty heuristics—the shortcuts and rules of thumb by which we make judgments and predictions—was more or less invented in the 1970s by Amos Tversky and Daniel Kahneman, social scientists who started their careers in Israel and eventually moved to the United States. They were the researchers who conducted the African-countries-in-the-UN experiment. Tversky died in 1996. Kahneman won the 2002 Nobel Prize in Economics for the work the two men did together, which he summarized in his 2011 best seller, *Thinking, Fast and Slow*. Another best seller, last year's *The Undoing Project*, by Michael Lewis, tells the story of the

sometimes contentious collaboration between Tversky and Kahneman. Lewis's earlier book *Moneyball* was really about how his hero, the baseball executive Billy Beane, countered the cognitive biases of old-school scouts—notably fundamental attribution error, whereby, when assessing someone's behavior, we put too much weight on his or her personal attributes and too little on external factors, many of which can be measured with statistics.

Another key figure in the field is the University of Chicago economist Richard Thaler. One of the biases he's most linked with is the endowment effect, which leads us to place an irrationally high value on our possessions. In an experiment conducted by Thaler, Kahneman, and Jack L. Knetsch, half the participants were given a mug and then asked how much they would sell it for. The average answer was \$5.78. The rest of the group said they would spend, on average, \$2.21 for the same mug. This flew in the face of classic economic theory, which says that at a given time and among a certain population, an item has a market value that does *not* depend on whether one owns it or not. Thaler won the 2017 Nobel Prize in Economics.

Most books and articles about cognitive bias contain a brief passage, typically toward the end, similar to this one in *Thinking, Fast and Slow*: "The question that is most often asked about cognitive illusions is whether they can be overcome. The message ... is not encouraging."

Kahneman and others draw an analogy based on an understanding of the Müller-Lyer illusion, two parallel lines with arrows at each end. One line's arrows point in; the other line's arrows point out. Because of the direction of the arrows, the latter line appears shorter than the former, but in fact the two lines are the same length. Here's the key: Even after we have measured the lines and found them to be equal, and have had the neurological basis of the illusion explained to us, we still perceive one line to be shorter than the other.



At least with the optical illusion, our slow-thinking, analytic mind—what Kahneman calls System 2—will recognize a Müller-Lyer situation and convince itself not to trust the fast-twitch System 1's perception. But that's not so easy in the real world, when we're dealing with people and situations rather than lines. "Unfortunately, this sensible procedure is least likely to be applied when it is needed most," Kahneman writes. "We would all like to have a warning bell that rings loudly whenever we are about to make a serious error, but no such bell is available."

Because biases appear to be so hardwired and inalterable, most of the attention paid to countering them hasn't dealt with

the problematic thoughts, judgments, or predictions themselves. Instead, it has been devoted to changing *behavior*, in the form of incentives or “nudges.” For example, while present bias has so far proved intractable, employers have been able to nudge employees into contributing to retirement plans by making saving the default option; you have to actively take steps in order to *not* participate. That is, laziness or inertia can be more powerful than bias. Procedures can also be organized in a way that dissuades or prevents people from acting on biased thoughts. A well-known example: the checklists for doctors and nurses put forward by Atul Gawande in his book *The Checklist Manifesto*.

Is it really impossible, however, to shed or significantly mitigate one’s biases? Some studies have tentatively answered that question in the affirmative. These experiments are based on the reactions and responses of randomly chosen subjects, many of them college undergraduates: people, that is, who care about the \$20 they are being paid to participate, not about modifying or even learning about their behavior and thinking. But what if the person undergoing the de-biasing strategies was highly motivated and self-selected? In other words, what if it was me?

Naturally, I wrote to Daniel Kahneman, who at 84 still holds an appointment at the Woodrow Wilson School of Public and International Affairs, at Princeton, but spends most of his time in Manhattan. He answered swiftly and agreed to meet. “I should,” he said, “at least try to talk you out of your project.”

I met with Kahneman at a Le Pain Quotidien in Lower Manhattan. He is tall, soft-spoken, and affable, with a pronounced accent and a wry smile. Over an apple pastry and tea with milk, he told me, “Temperament has a lot to do with my position. You won’t find anyone more pessimistic than I am.”

In this context, his pessimism relates, first, to the impossibility of effecting any changes to System 1—the quick-thinking part of our brain and the one that makes mistaken judgments tantamount to the Müller-Lyer line illusion. “I see the picture as unequal lines,” he said. “The goal is not to trust what I think I see. To understand that I shouldn’t believe my lying eyes.” That’s doable with the optical illusion, he said, but extremely difficult with real-world cognitive biases.

The most effective check against them, as Kahneman says, is from the outside: Others can perceive our errors more readily than we can. And “slow-thinking organizations,” as he puts it, can institute policies that include the monitoring of individual decisions and predictions. They can also require procedures such as checklists and “premortems,” an idea and term thought up by Gary Klein, a cognitive psychologist. A premortem attempts to counter optimism bias by requiring team members to imagine that a project has gone very, very badly and write a sentence or two describing how that happened. Conducting this exercise, it turns out, helps people think ahead.

“My position is that none of these things have any effect on System 1,” Kahneman said. “You can’t improve intuition. Perhaps, with very long-term training, lots of talk, and exposure to behavioral economics, what you can do is *cue* reasoning, so you can engage System 2 to follow rules. Unfortunately, the world doesn’t provide cues. And for most people, in the heat of argument the rules go out the window.

“That’s my story. I really hope I don’t have to stick to it.”

**CONFIRMATION
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As it happened, right around the same time I was communicating and meeting with Kahneman, he was exchanging emails with Richard E. Nisbett, a social psychologist at the University of Michigan. The two men had been professionally connected for decades. Nisbett was instrumental in disseminating Kahneman and Tversky’s work, in a 1980 book called *Human Inference: Strategies and Shortcomings of Social Judgment*. And in *Thinking, Fast and Slow*, Kahneman describes an even earlier Nisbett article that showed subjects’ disinclination to believe statistical and other general evidence, basing their judgments instead on individual examples and vivid anecdotes. (This bias is known as base-rate neglect.)

But over the years, Nisbett had come to emphasize in his research and thinking the possibility of training people to overcome or avoid a number of pitfalls, including base-rate neglect, fundamental attribution error, and the sunk-cost fallacy. He had emailed Kahneman in part because he had been working on a memoir, and wanted to discuss a conversation he’d had with Kahneman and Tversky at a long-ago conference. Nisbett had the distinct impression that Kahneman and Tversky had been angry—that they’d thought what he had been saying and doing was an implicit criticism of them. Kahneman recalled the interaction, emailing back: “Yes, I remember we were (somewhat) annoyed by your work on the ease of training statistical intuitions (angry is much too strong).”

When Nisbett has to give an example of his approach, he usually brings up the baseball-phenom survey. This involved telephoning University of Michigan students on the pretense of conducting a poll about sports, and asking them why there are always several Major League batters with .450 batting averages early in a season, yet no player has ever finished a season with an average that high. When he talks with students who haven't taken Introduction to Statistics, roughly half give erroneous reasons such as "the pitchers get used to the batters," "the batters get tired as the season wears on," and so on. And about half give the right answer: the law of large numbers, which holds that outlier results are much more frequent when the sample size (at bats, in this case) is small. Over the course of the season, as the number of at bats increases, regression to the mean is inevitable. When Nisbett asks the same question of students who have completed the statistics course, about 70 percent give the right answer. He believes this result shows, pace Kahneman, that the law of large numbers can be absorbed into System 2—and maybe into System 1 as well, even when there are minimal cues.

Nisbett's second-favorite example is that economists, who have absorbed the lessons of the sunk-cost fallacy, routinely walk out of bad movies and leave bad restaurant meals uneaten.

I spoke with Nisbett by phone and asked him about his disagreement with Kahneman. He still sounded a bit uncertain. "Danny seemed to be convinced that what I was showing was trivial," he said. "To him it was clear: Training was hopeless for all kinds of judgments. But we've tested Michigan students over four years,

and they show a huge increase in ability to solve problems. Graduate students in psychology also show a huge gain."

Nisbett writes in his 2015 book, *Mindware: Tools for Smart Thinking*, "I know from my own research on teaching people how to reason statistically that just a few examples in two or three domains are sufficient to improve people's reasoning for an indefinitely large number of events."

In one of his emails to Nisbett, Kahneman had suggested that the difference between them was to a significant extent a result of temperament: pessimist versus optimist. In a response, Nisbett suggested another factor: "You and Amos specialized in hard problems for which you were drawn to the wrong answer. I began to study easy problems, which you guys would never get wrong but untutored people routinely do ... Then you can look at the effects of instruction on such easy problems, which turn out to be huge."

An example of an easy problem is the .450 hitter early in a baseball season. An example of a hard one is "the Linda problem," which was the basis of one of Kahneman and Tversky's early articles. Simplified, the experiment presented subjects with the characteristics of a fictional woman, "Linda," including her commitment to social justice, college major in philosophy, participation in antinuclear demonstrations, and so on. Then the subjects were asked which was more likely: (a) that Linda was a bank teller, or (b) that she was a bank teller and active in the feminist movement. The correct answer is (a), because it is always more likely that one condition will be satisfied in a situation than that the condition *plus* a second one will be satisfied. But because of the conjunction fallacy (the assumption that multiple specific conditions are more probable than a single general one) and the representativeness heuristic (our strong desire to apply stereotypes), more than 80 percent of undergraduates surveyed answered (b).

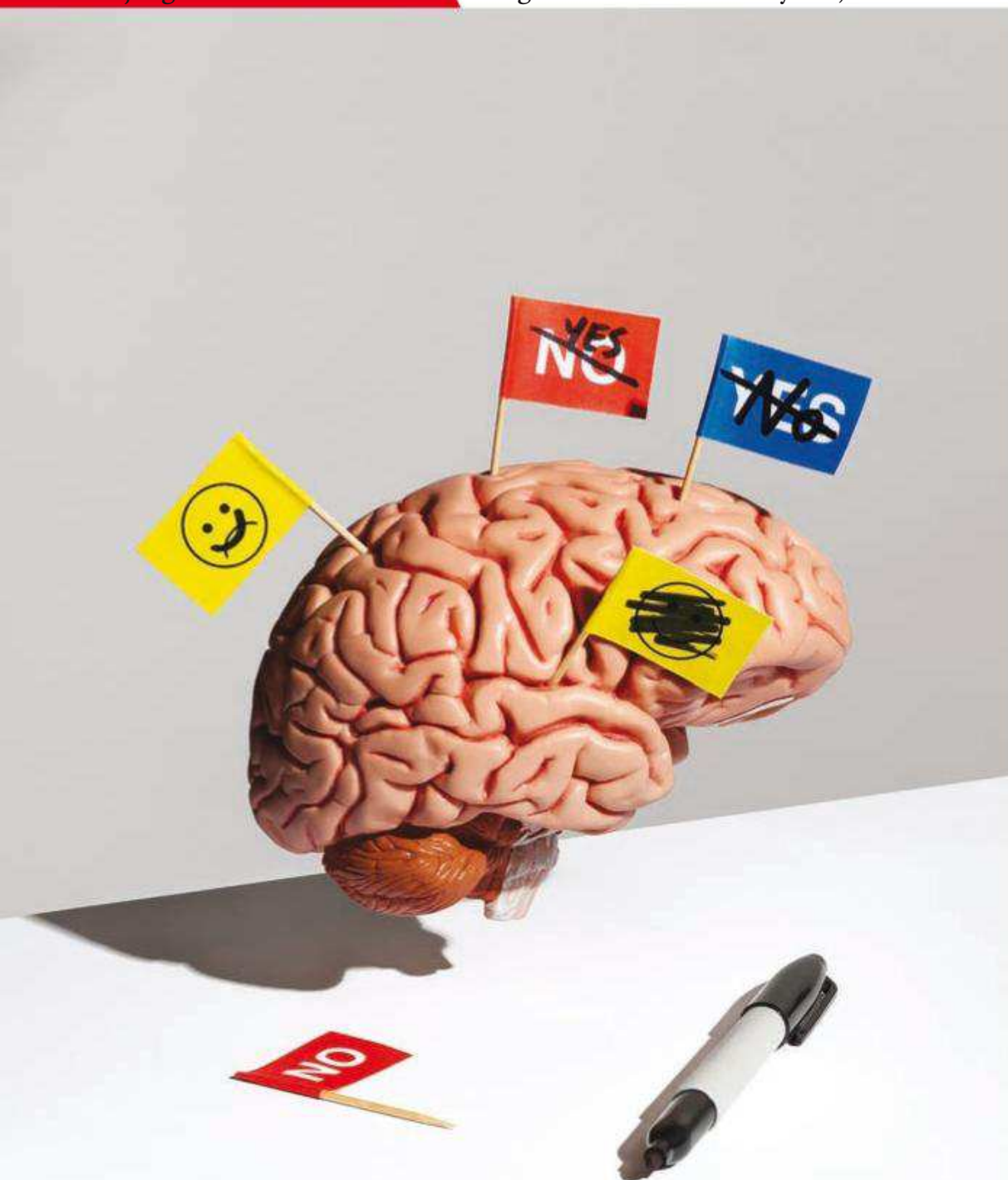
Nisbett justifiably asks how often in real life we need to make a judgment like the one called for in the Linda problem. I cannot think of any applicable scenarios in my life. It is a bit of a logical parlor trick.

Nisbett justifiably asks how often in real life we need to make a judgment like the one called for in the Linda problem. I cannot think of any applicable scenarios in my life. It is a bit of a logical parlor trick.



Nisbett suggested that I take "Mindware: Critical Thinking for the Information Age," an online Coursera course in which he goes over what he considers the most effective de-biasing skills and concepts. Then, to see how much I had learned, I would take a survey he gives to Michigan undergraduates. So I did.

The course consists of eight lessons by Nisbett—who comes across on-screen as the authoritative but approachable psych professor we all would like to have had—interspersed with some graphics and quizzes. I recommend it. He explains the availability heuristic this way: "People are surprised that suicides outnumber homicides, and drownings outnumber deaths by fire. People always think crime is increasing" even if it's not.



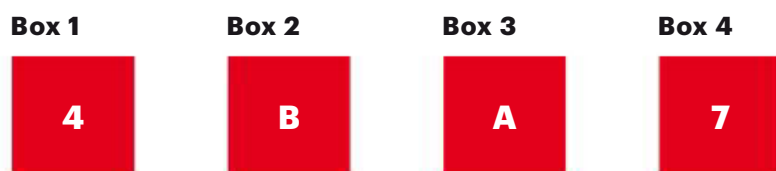
He addresses the logical fallacy of confirmation bias, explaining that people's tendency, when testing a hypothesis they're inclined to believe, is to seek examples confirming it. But Nisbett points out that no matter how many such examples we gather, we can never prove the proposition. The right thing to do is to look for cases that would disprove it.

And he approaches base-rate neglect by means of his own strategy for choosing which movies to see. His decision is never dependent on ads, or a particular review, or whether a film sounds like something he would enjoy. Instead, he says, "I live by base rates. I don't read a book or see a movie unless it's highly recommended by people I trust."

"Most people think they're not like other people. But they are."

When I finished the course, Nisbett sent me the survey he and colleagues administer to Michigan undergrads. It contains a few dozen problems meant to measure the subjects' resistance to cognitive biases. For example:

Below are four cards. They are randomly chosen from a deck of cards in which every card has a letter on one side and a number on the other side. Your task is to say which of the cards you need to turn over in order to find out whether the following rule is true or false. The rule is: "If a card has an 'A' on one side, then it has a '4' on the other side." Turn over only those cards that you need to check the rule.



- (a) Box 3 only
- (b) Boxes 1, 2, 3 and 4
- (c) Boxes 3 and 4
- (d) Boxes 1, 3 and 4
- (e) Boxes 1 and 3

Because of confirmation bias, many people who haven't been trained answer (e). But the correct answer is (c). The only thing you can hope to do in this situation is *disprove* the rule, and the only way to do that is to turn over the cards displaying the letter A (the rule is disproved if a number other than 4 is on the other side) and the number 7 (the rule is disproved if an A is on the other side).

I got it right. Indeed, when I emailed my completed test, Nisbett replied, "My guess is that very few if any UM seniors did as well as you. I'm sure at least some psych students, at least after 2 years in school, did as well. But note that you came fairly close to a perfect score."

Nevertheless, I did not feel that reading *Mindware* and taking the Coursera course had necessarily rid me of my biases. For one thing, I hadn't been tested beforehand, so I might just be a comparatively unbiased guy. For another, many of the test questions, including the one above, seemed somewhat remote from scenarios one might encounter in day-to-day life. They seemed to be "hard" problems, not unlike the one about Linda the bank teller. Further, I had been, as Kahneman would say, "cued." In contrast to the Michigan seniors, I knew exactly why I was being asked these questions, and approached them accordingly.

For his part, Nisbett insisted that the results were meaningful. "If you're doing better in a testing context," he told me, "you'll jolly well be doing better in the real world."




Nisbett's Coursera course and Hal Hershfield's close encounters with one's older self are hardly the only de-biasing methods out there. The New York-based NeuroLeadership Institute offers organizations and individuals a variety of training sessions, webinars, and conferences that promise, among other things, to use brain science to teach participants to counter bias. This year's two-day summit will be held in New York next month; for \$2,845, you could learn, for example, "why are our brains so bad at thinking about the future, and how do we do it better?"

Philip E. Tetlock, a professor at the University of Pennsylvania's Wharton School, and his wife and research partner, Barbara Mellers, have for years been studying what they call "superforecasters": people who manage to sidestep cognitive biases and predict future events with far more accuracy than the pundits and so-called experts who show up on TV. In Tetlock's book *Superforecasting: The Art and Science of Prediction* (co-written with Dan Gardner), and in the commercial venture he and Mellers co-founded, Good Judgment, they share the superforecasters' secret sauce.

One of the most important ingredients is what Tetlock calls "the outside view." The inside view is a product of fundamental attribution error, base-rate neglect, and other biases that are constantly cajoling us into resting our judgments and predictions on good or vivid stories instead of on data and statistics. Tetlock explains, "At a wedding, someone sidles up to you and says, 'How long do you give them?' If you're shocked because you've seen the devotion they show each other, you've been sucked into the inside view." Something like 40 percent of marriages end in divorce, and that statistic is far more predictive of the fate of any particular marriage than a mutually adoring gaze. Not that you want to share that insight at the reception.

The recent de-biasing interventions that scholars in the field have deemed the most promising are a handful of video games. Their genesis was in the Iraq War and the catastrophic weapons-of-mass-destruction blunder that led to it, which left the intelligence community reeling. In 2006, seeking to prevent another mistake of that magnitude, the U.S. government created the Intelligence Advanced Research Projects Activity (IARPA), an agency designed to use cutting-edge research and technology to improve intelligence-gathering and analysis. In 2011, IARPA initiated a program, Sirius, to fund the development of "serious" video games that could combat or mitigate what were deemed to be the six most damaging biases: confirmation bias, fundamental attribution error, the bias blind spot (the feeling that one is less biased than the average person), the anchoring effect, the representativeness heuristic, and projection bias (the assumption that everybody else's thinking is the same as one's own).

Six teams set out to develop such games, and two of them completed the process. The team that has gotten the most attention was led by Carey K. Morewedge, now a professor at Boston University. Together with collaborators who included staff from Creative Technologies, a company specializing in games and other simulations, and Leidos, a defense, intelligence, and health research company that does a lot of government work, Morewedge devised Missing. Some subjects played the game, which



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Welcome what's next



takes about three hours to complete, while others watched a video about cognitive bias. All were tested on bias-mitigation skills before the training, immediately afterward, and then finally after eight to 12 weeks had passed.

After taking the test, I played the game, which has the production value of a late-2000s PlayStation 3 first-person offering, with large-chested women and men, all of whom wear form-fitting clothes and navigate the landscape a bit tentatively. The player adopts the persona of a neighbor of a woman named Terry Hughes, who, in the first part of the game, has mysteriously gone missing. In the second, she has reemerged and needs your help to look into some skulduggery at her company. Along the way, you're asked to make judgments and predictions—some having to do with the story and some about unrelated issues—which are designed to call your biases into play. You're given immediate feedback on your answers.

For example, as you're searching Terry's apartment, the building superintendent knocks on the door and asks you, apropos of nothing, about Mary, another tenant, whom he describes as "not a jock." He says 70 percent of the tenants go to Rocky's Gym, 10 percent go to Entropy Fitness, and 20 percent just stay at home and watch Netflix. Which gym, he asks, do you think Mary probably goes to? A wrong answer, reached thanks to base-rate neglect (a form of the representativeness heuristic) is "None. Mary is a couch potato." The right answer—based on the data the super has helpfully provided—is Rocky's Gym. When the participants in the study were tested immediately after playing the game or watching the video and then a couple of months later, everybody improved, but the game players improved more than the video watchers.

When I spoke with Morewedge, he said he saw the results as supporting the research and insights of Richard Nisbett. "Nisbett's work was largely written off by the field, the assumption being that training can't reduce bias," he told me. "The literature on training suggests books and classes are fine entertainment but largely ineffectual. But the game has very large effects. It surprised everyone."


I took the test again soon after playing the game, with mixed results. I showed notable improvement in confirmation bias, fundamental attribution error, and the representativeness heuristic, and improved slightly in bias blind spot and anchoring bias. My lowest initial score—44.8 percent—was in projection bias. It actually dropped a bit after I played the game. (I really need to stop assuming that everybody thinks like me.) But even the positive results reminded me of something Daniel Kahneman had told me. "Pencil-and-paper doesn't convince me," he said. "A test can be given even a couple of years later. But the test cues the test-taker. It reminds him what it's all about."

I had taken Nisbett's and Morewedge's tests on a computer screen, not on paper, but the point remains. It's one thing for the effects of training to show up in the form of improved results on a test—when you're on your guard, maybe even looking for tricks—and quite another for the effects to show up in the form of real-life behavior. Morewedge told me that some tentative real-world scenarios along the lines of Missing have shown "promising results," but that it's too soon to talk about them.

I am neither as much of a pessimist as Daniel Kahneman nor as much of an optimist as Richard Nisbett. Since immersing myself in the field, I have noticed a few changes in my behavior. For example, one hot day recently, I decided to buy a bottle of water in a vending machine for \$2. The bottle didn't come out; upon inspection, I realized that the mechanism holding the bottle in place was broken. However, right next to it was another row of water bottles, and clearly the mechanism in that row was in order. My instinct was to not buy a bottle from the "good" row, because \$4 for a bottle of water is too much. But all of my training in cognitive biases told me that was faulty thinking. I would be spending \$2 for the water—a price I was willing to pay, as had already been established. So I put the money in and got the water, which I happily drank.

In the future, I will monitor my thoughts and reactions as best I can. Let's say I'm looking to hire a research assistant. Candidate A has sterling references and experience but appears tongue-tied and can't look me in the eye; Candidate B loves to talk NBA basketball—my favorite topic!—but his recommendations are mediocre at best. Will I have what it takes to overcome fundamental attribution error and hire Candidate A?

Or let's say there is an officeholder I despise for reasons of temperament, behavior, and ideology. And let's further say that under this person's administration, the national economy is performing well. Will I be able to dislodge my powerful confirmation bias and allow the possibility that the person deserves some credit?

As for the matter that Hal Hershfield brought up in the first place—estate planning—I have always been the proverbial ant, storing up my food for winter while the grasshoppers sing and play. In other words, I have always maxed out contributions to 401(k)s, Roth IRAs, Simplified Employee Pensions, 403(b)s, 457(b)s, and pretty much every alphabet-soup savings choice presented to me. But as good a saver as I am, I am that bad a procrastinator. Months ago, my financial adviser offered to evaluate, for free, my will, which was put together a couple of decades ago and surely needs revising. There's something about drawing up a will that creates a perfect storm of biases, from the ambiguity effect ("the tendency to avoid options for which missing information makes the probability seem 'unknown,'" as Wikipedia defines it) to normalcy bias ("the refusal to plan for, or react to, a disaster which has never happened before"), all of them culminating in the ostrich effect (do I really need to explain?). My adviser sent me a prepaid FedEx envelope, which has been lying on the floor of my office gathering dust. It is still there. As hindsight bias tells me, I knew that would happen. 

Ben Yagoda's books include The B-Side: The Death of Tin Pan Alley and the Rebirth of the Great American Song and About Town: The New Yorker and the World It Made. He writes for the blog MoviesinOtherMovies.com.

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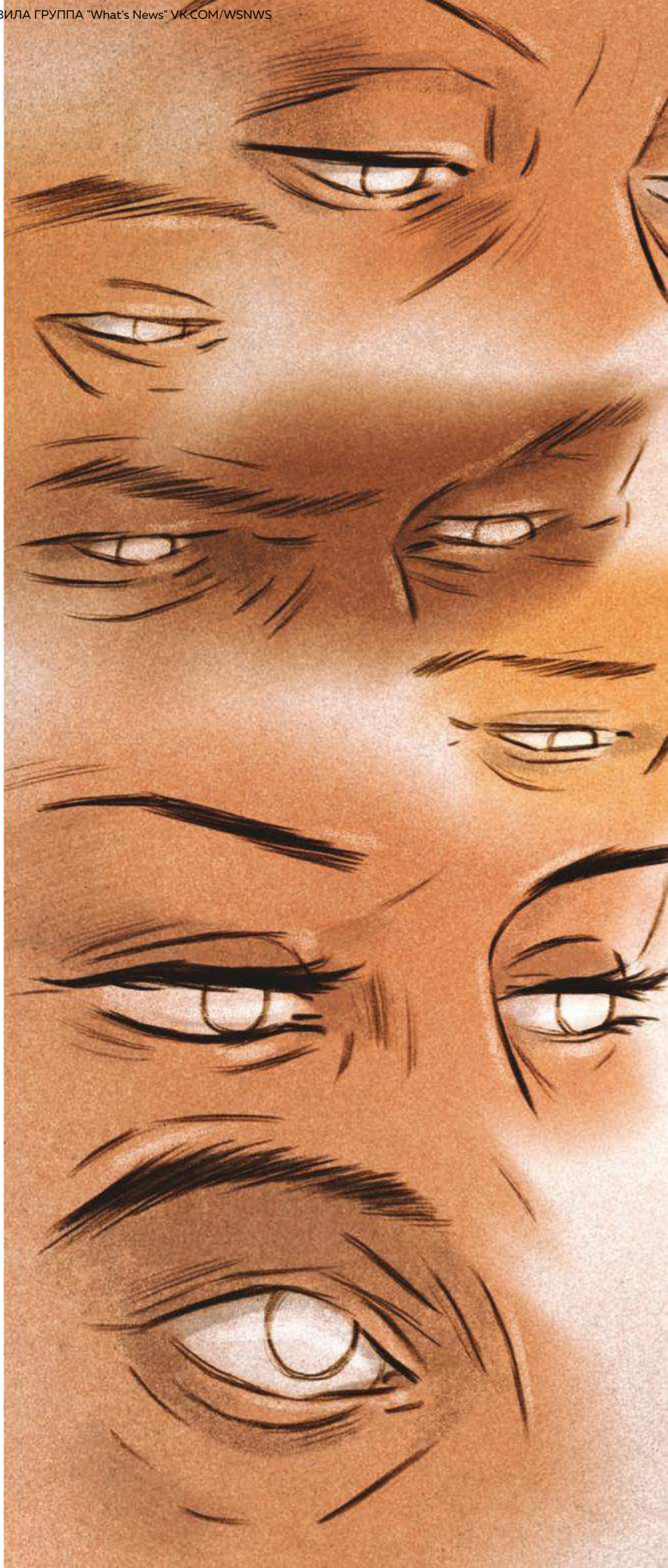
May It Please the Court

By Lara Bazon

In more than a decade as a trial lawyer, I've watched in frustration as male attorneys rely on a range of courtroom tactics that are off-limits to women. Judges and juries reward men for being domineering—and expect women to be deferential. This cultural bias runs deep and won't be easily overcome. I have the trial transcripts to prove it.

LAST YEAR, ELIZABETH FAIELLA took a case representing a man who alleged that a doctor had perforated his esophagus during a routine medical procedure. Before the trial began, she and the defense attorney, David O. Doyle Jr., were summoned to a courtroom in Brevard County, Florida, for a hearing. Doyle had filed a motion seeking to “preclude emotional displays” during the trial—not by the patient, but by Faiella.

“Counsel for the Plaintiff, Elizabeth Faiella, has a proclivity for displays of anguish in the presence of





the jury, including crying," Doyle wrote in his motion. Faiella's predicted flood of tears, he continued, could be nothing more than "a shrewdly calculated attempt to elicit a sympathetic response."

Faiella told the trial judge, a man, that Doyle's allegations were sexist and untrue. The judge asked Doyle whether he had a basis for the motion. Faiella says that he replied that he did, but the information was privileged because it came from his client. (Doyle told me the information had in fact come from other defense attorneys.) Faiella called his reply "ridiculous." She told me: "I have never cried in a trial. Not once."

As Faiella listened to Doyle press forward with his argument, her outrage mounted. But she had to take care not to let her anger show, fearing it would only confirm what Doyle had insinuated—that she would use emotional displays to gain an advantage in the courtroom.

The judge denied Doyle's request, saying, in essence, "I expect both parties to behave themselves." Afterward, Faiella confronted Doyle in the hallway. "Why would you file such a thing?" she demanded, noting that it was unprofessional, sexist, and humiliating.

"I don't understand why you are getting so upset," she says Doyle replied. (Doyle denied that gender was the motivating factor behind filing the motion; he said he had filed such motions against male attorneys as well.)

When I asked Faiella for a copy of Doyle's motion, she said that she could send me examples from more than two dozen cases across her 30-year career. She said that at least 90 percent of her courtroom opponents are male, and that they file a "no-crying motion" as a matter of course. Judges always deny them, but the damage is done: The idea that she will unfairly deploy her feminine wiles to get what she wants has been planted in the judge's mind. Though Faiella has long since learned to expect the motions, every time one crosses her desk she feels sick to her stomach. "I cannot tell you how much it demeans me," she said. "Because I am a woman, I have to act like it doesn't bother me, but I tell you that it does. The arrow lands every time."

FOR THE PAST TWO DECADES, law schools have enrolled roughly the same number of men and women. In 2016, for the first time, more women were admitted to law school than men. In the courtroom, however, women remain a minority, particularly in the high-profile role of first chair at trial.

In a landmark 2001 report on sexism in the courtroom, Deborah Rhode, a Stanford Law professor, wrote that women in the courtroom face what she

described as a "double standard and a double bind." Women, she wrote, must avoid being seen as "too 'soft' or too 'strident,' too 'aggressive' or 'not aggressive enough.'"

The glass ceiling remains a reality in a host of white-collar industries, from Wall Street to Silicon Valley. If the courtroom were merely another place where the advancement of women

has been checked, that would be troubling, if not entirely surprising. But the stakes in the courtroom aren't just a woman's career development and her earning potential. The interests—and, in the criminal context, the liberty—of her client are also on the line.

What makes the issue especially vexing are the sources of the bias—judges, senior attorneys, juries, and even the clients themselves. Sexism infects every kind of courtroom encounter, from

pretrial motions to closing arguments—a glum ubiquity that makes clear how difficult it will be to eradicate gender bias not just from the practice of law, but from society as a whole.

I began my career as a trial lawyer in 2001, the same year that Rhode published her report. I worked in the Federal Public Defender's Office in Los Angeles. When I took the job, I had braced myself for the stress; almost immediately, my caseload included clients facing lengthy prison sentences for serious felonies. I did not expect to be told in explicit terms that my gender would play a significant role in how I could defend my clients, and that learning this lesson was crucial to my success and by extension to my clients' lives. "There are things I can do that you can't, and things you can do that I can't" was the way one of the male supervising attorneys in my office put it.

Let's start with the clothes. In my office, and in the U.S. Attorney's Office, where the federal prosecutors worked, the men stuck to a basic uniform: a dark suit, a crisp button-down shirt, an inoffensive tie, and a close shave or neatly trimmed beard. If they adhered to that model, their physicality was unremarkable—essentially invisible.

Women's clothing choices, by contrast, were the subject of intense scrutiny from judges, clerks, marshals, jurors, other lawyers, witnesses, and clients. I had to be attractive, but not in a provocative way. At one trial, I took off my suit jacket at the counsel table as I reviewed my notes before the jury was seated. It was a sweltering day in Los Angeles, and the air-conditioning had yet to kick in. The judge, an older man with a mane of white hair, jabbed a finger in my direction and bellowed, "Are you stripping in my courtroom, Ms. Bazelon?" Heads swiveled, and I looked down at my sleeveless blouse, turning scarlet.

Observing my female colleagues and opposing counsel as I settled into the job, I took mental notes. Medium-length or long hair was best—but not too long. Heels and skirts were preferred at trial—but not too high and definitely not too short. And pantyhose. I hated pantyhose, both the cringe-inducing word and the suffocating reality. They itched miserably and ripped. But showing up in federal court with bare legs was as unthinkable as showing up drunk.

Reading over my old trial transcripts, I am taken aback by how many times I said "Thank you"—and how often I apologized.

Clothing may seem trivial, but what a woman wears at trial is directly related to her ability to do her job. When impeaching a witness to expose a lie, the men in my office would march up to the witness box, incriminating document in hand, and shove it in the witness's face. I had to approach witnesses gingerly—because I was balancing on heels.

It wasn't just men who taught me what to wear and how to act. Later in my career, I had a female supervisor who told me in no uncertain terms that I should wear makeup and color my graying hair. In fact, she told me I needed a complete makeover, and offered to pay for it. I didn't take her money, but I did take her advice, and I've borne the significant cost of these expectations since. My supervisors also reminded me to smile as often as possible in order to counteract the impression that my resting facial expression was too severe. I even had to police my tone of voice. When challenging a hostile witness, I learned to take a "more in sorrow than in anger" approach.

This isn't just dated wisdom passed down from a more conservative era. Social-science research has demonstrated that when female attorneys show emotions like indignation, impatience, or anger, jurors may see them as shrill, irrational, and unpleasant. The same emotions, when expressed by men, are interpreted as appropriate to the circumstances of a case. So when I entered the courtroom, I took on the persona of a woman who dressed, spoke, and behaved in a traditionally feminine and unthreatening manner.

In some ways, this was easy. I had been raised to be polite and to show respect for authority. In other ways, this was difficult. When I got angry, I had to stifle that feeling. When my efforts failed, I feared having come across as strident—or, worse, as a bitch. When I succeeded, I felt as if I was betraying my feminist principles. But if there was a sliver of a chance that the girl-next-door approach would deliver a more favorable outcome, not taking it would be wrong. I told myself that my duty was to my client, not my gender.

In the seven years I worked as a deputy federal public defender, I fought hard for my clients, and I had my share of victories. But I was practicing law differently from many of my male colleagues and adversaries. They could resort to a bare-knuckle style. Most of what I did in the courtroom looked more like fencing. Reading over my old trial transcripts, I am taken aback by how many times I said "Thank you"—to the judge, to opposing counsel, to hostile witnesses. And by how many times I apologized.

In 2017, after nearly a decade of holding jobs that offered limited opportunities to go to court, I took a position as a clinical professor at the University of San Francisco School of Law. I'm now training students to become trial lawyers by supervising their representation of criminal defendants in San Francisco Superior Court. During my first semester, all five of my students were women. Four were women of color. Eighteen years earlier, I had been sitting where they were. I wondered what had changed.

"I want a Jew lawyer," a client once said to me. I told him I was Jewish. "No, a man Jew lawyer," he responded.

IN 1878, CLARA SHORTRIDGE FOLTZ, who was living in San Jose, California, was left to raise five children on her own when her husband abandoned her. To support her family, Foltz decided to become a lawyer. California law prevented it: "Any white male" was eligible to practice law, but women and minorities were excluded. Undeterred, Foltz drafted the Woman Lawyer's Bill, successfully lobbied the state legislature to pass it, took the bar exam, and, on September 5, 1878, became the first female attorney admitted to the California bar.

Today, Foltz is seen in feminist legal circles as a pioneering hero. As a lawyer, she was an advocate for the poor and disadvantaged, who formed the bulk of her client base, since few people would voluntarily agree to female representation. In court, the men who opposed Foltz routinely used her gender to discredit her. In her memoirs, she recalled a prosecutor who had told the jury to reject Foltz's arguments on these simple grounds: "She is a woman, she cannot be expected to reason. God Almighty declared her limitations."

In 2002, Los Angeles renamed its downtown criminal courthouse after Foltz. It's inspiring to see a woman's name on the building; women lawyers continue to struggle to get inside, however. National data are hard to come by, but state-level studies paint a bleak picture. The New York State Bar Association, for example, found in a 2017 report that female attorneys accounted for just 25 percent of all attorneys

appearing in commercial and criminal cases in courtrooms across the state. The more complex the civil litigation, the less likely a woman was to appear as lead counsel, with the percentage shrinking from 31.6 percent in one-party cases to less than 20 percent in cases involving five or more parties. The report concluded: "The low percentage of women attorneys appearing in a speaking role in courts was found at every level and in every type of court: upstate and downstate, federal and state, trial and appellate, criminal and civil, ex parte applications and multi-party matters."

Over the past year, I've interviewed more than two dozen female trial lawyers from across the United States. Their experiences bear out these grim findings. Beth Wilkinson, a lawyer based in Washington, D.C., told me that the number of women who litigate "bet-the-company cases"—in which millions or even billions of dollars are at stake and a corporation's ability to survive absent a win at trial is in doubt—is "abysmally low."

Wilkinson enjoyed a formidable reputation at Paul, Weiss, Rifkind, Wharton & Garrison, a white-shoe firm where she was a partner, winning cases, bringing in new clients, and earning a high salary. But she told me she was "never in the inner circle. Big Law is a male-dominated place, and it is very hard for women to thrive in an institution built that

way.” In 2016, she co-founded her own firm, Wilkinson, Walsh & Eskovitz, which represents a roster of major clients, including the NCAA, Pfizer, Duke Energy, and Georgia-Pacific.

The situation is worse for female litigators who are not white. According to a 2006 report by the American Bar Association, nearly two-thirds of women of color said they had been shut out of networking opportunities; 44 percent said they had been passed over for plum work assignments; and 43 percent said they had little opportunity to develop client relationships. In a survey and in focus groups, many described feeling lonely and perpetually on edge, anxious to avoid race- and gender-based stereotypes. One respondent said she was treated like an “exotic animal,” trotted out for photo ops at diversity and recruitment events but otherwise sidelined. An Asian American woman recounted being asked to translate a document written in Korean and having to explain that she was Chinese.

Kadisha Phelps is a 37-year-old associate at a Miami-based firm. She worked her way up to first chair in part by bringing in her own business: She’s built a cottage industry representing former NFL players who claim that they were scammed out of their earnings by unscrupulous financial advisers. Phelps, who is African American, describes herself as “a pit bull in a skirt.” But she told me that when she goes to court, she often has to bring one of her male partners along—even if he knows little about the case. “That older white man at the table carries some kind of credibility,” she explained. “It gives judges the assurance that it’s not just some little black girl out there on her own.”

In July 2017, Phelps got into a heated debate with a male trial judge about how many depositions she would be allowed in a case her firm valued at \$2 million. Phelps had asked Douglas Broeker to join her in court to play the role of the silent white partner. When Phelps pressed her point, the judge turned to Broeker. “Maybe you should

take a few minutes and walk out and try to calm your associate down,” he said.

As Phelps’s experience suggests, it can be difficult to separate the various forms of discrimination women face. “I want a Jew lawyer,” a male client once said to me. I told him I was Jewish. “No, a *man* Jew lawyer,” he responded.

THE PROBLEM ISN’T merely that women are outnumbered in the courtroom. It’s that men occupy the positions of power in staggering proportions. Women make up only 33 percent of federal trial-court judges. As of June, Donald Trump had made 73 U.S.-attorney nominations. Sixty-six of them are men. The state-level statistics are just as



dismal: 30 percent of trial-court judges are women. In 2015, according to the Women's Donor Network, an advocacy group, 17 percent of elected prosecutors were women; women of color made up 1 percent. In the criminal context, the odds are that a female lawyer will face off against a male prosecutor in a contest overseen by a male judge.

Not all male prosecutors and judges harbor sexist views of women, though many do. Male lawyers referred to their female peers as "honey" and "sweetheart" in court frequently enough that, in 2016, the American Bar Association felt compelled to pass a rule designed to curtail the use of such demeaning terms. Judges, for their part, can reinforce gender stereotypes, implicitly normalizing them and even explicitly enforcing them. Female trial attorneys routinely report that male judges critique their voices as too loud or too shrill.

Romany McNamara is a public defender in Alameda County's Oakland office. In 2011, she had just started litigating felony trials. One morning, a trial judge called two of McNamara's cases before she'd had a chance to introduce herself to her new clients or explain the legal process to them. When she asked for a brief delay in the proceedings, she says, the judge berated her in front of the packed courtroom. "He likes to humiliate young female trial lawyers," she told me.

McNamara had a third case that day. The judge waited until the end of the calendar to call it. When the courtroom emptied and McNamara started to walk out, she says, the judge beckoned her to approach the bench. As she stood before him, he offered a lukewarm apology, emphasizing the importance he placed on running his courtroom efficiently. Then he leaned in and said softly, "Don't do it again." McNamara says the judge then struck her on the back of her hand, hard enough to leave a mark.

"I could see the outline of where he hit me in white before it turned bright pink," she told me. "There was nothing *overtly* sexual about it," she said. "But that was absolutely the undertone, like: *You've been a bad girl.*"

McNamara told a colleague about the incident; I spoke with that colleague, and he confirmed that she had told him what happened, and that they had debated how she should respond. McNamara initially decided against filing a

formal complaint. This "wasn't just any judge," she said. "He was a kingmaker. He brokered deals." She feared the repercussions of calling him out. "I thought he could ruin my career."

Years passed, but McNamara remained angry and disgusted. In 2016, she filed a complaint against the judge with California's Commission on Judicial Performance, describing the 2011 incident and accusing him of having physically assaulted her. The complaint has yet to be resolved.

Most judges, of course, don't strike female attorneys in their courtroom. But at various points during the first semester of the clinic, my all-female class of aspiring trial lawyers experienced lower-wattage versions of such treatment.

In November, one of my students was slated to argue a motion before a judge who I knew could be nasty to female lawyers. Playing the judge's role in a mock argument to prepare her, I went out of my way to be sneering and combative, my best imitation of his behavior. And indeed, in court, when my student objected to opposing counsel's request for a continuance so that a police officer could testify, the judge laid into her for lacking professional courtesy. She tried to explain her reasoning, but he interrupted, not allowing her to demonstrate that the matter could be resolved without the officer having to testify. (Two months later, a different judge agreed: The officer didn't testify, and we won the motion.)

In class later, I asked my students whether they thought the judge would have treated a male attorney the same way. There was a long pause. "That's a joke, right?" one of them said.

EVEN WHEN ARGUING before the most enlightened judge and against fair-minded opposing counsel, women enter the courtroom at a disadvantage. In America's adversarial system, the ability to compel useful testimony from a hostile witness is often essential to winning at trial. When you invade a witness's personal space, the witness may feel stress, anxiety, and anger. These emotions may lead the witness to blurt out helpful information. In general, jurors tend to be impressed by lawyers who demonstrate power and control in the courtroom. But for female lawyers, projecting power and control is a tricky proposition. When male attorneys show flashes of anger—a raised voice, a pointed finger—juries tend to view them favorably, as "tough zealous advocates," according to research cited in a 2004 *Law & Psychology Review* article. When women betray anger, they may be seen as overly emotional.

Trial lawyers routinely talk with members of the jury when a case is over in order to get their feedback, and jurors can be quite candid in their assessments. Kila Baldwin, a partner at the personal-injury firm Kline & Specter, tries about five cases a year and has won a string of multimillion-dollar verdicts. "I always



wear heels in front of the jury unless I am in pain," she told me. Last June, Baldwin *was* in pain: The tendons in her feet were inflamed, so she wore flats to a trial. Afterward, a female juror told her that she had not cared for her shoes. "I never have a casual Friday," Baldwin said. "You get less respect."

SOME FEMALE TRIAL LAWYERS have succeeded in turning the attributes associated with their gender—compassion, warmth, accessibility—to their advantage, particularly once they get in front of a jury. Shawn Holley, a prominent entertainment lawyer in Los Angeles, told me that she makes her gender work for her. She described her courtroom affect as "polite and charming"—but not so polite or charming that it "gets in the way of the job that needs to get done." Holley cut her teeth working as an associate for Johnnie Cochran during the O. J. Simpson trial. She said it was this quality—a sweet steeliness—that led Cochran to recruit her. He encouraged her to be "the person in the courtroom that everyone loves while being as capable and prepared as possible." She followed his advice, and today she represents high-profile clients including Justin Bieber, Lindsay Lohan, and Kim Kardashian.

Holley has constructed a persona that works for her in her area of the law. But when I talked with her and other women who have enjoyed courtroom success, I saw a pattern emerge. Many of them excelled in areas where being seen as a woman first and a lawyer second gave them an advantage over their male adversaries.

Embracing traits traditionally associated with women seems to pay off particularly well in litigation involving so-called women's issues. In many of these cases, female trial lawyers are favored and even actively recruited. In the civil arena, for example, women have thrived in high-stakes medical-malpractice lawsuits where the plaintiff claims that the defendant's product injured her genitalia or reproductive organs.

For a number of years, Ethicon, a subsidiary of Johnson & Johnson, has been defending itself against tens of thousands of cases alleging defects in mesh devices it created for surgical implantation in the vagina to alleviate incontinence, among other conditions. Some patients who had the devices implanted experienced complications such as bleeding and the perforation of internal organs.

In 2013, Kimberly Adkins, a 48-year-old Ohio woman, sued Ethicon, claiming that the mesh sling implanted to treat her incontinence had caused permanent internal damage, leaving her unable to have sex. Ethicon retained Kim Bueno, a partner at the Texas-based law firm Scott Douglass & McConnico, to serve as lead counsel. In May 2017, the case went

to trial in downtown Philadelphia. My sister Jill was picked to be one of the jurors.

I could not fathom why Ethicon would let Jill on the jury. I figured that my sister, a mother of two, would naturally be sympathetic to Adkins. For many women, minor urinary incontinence is a fact of life after childbirth—we cross our legs before sneezing and locate the nearest bathroom immediately upon entering an unfamiliar place.

But Jill, who has a doctorate in education policy, also comes from a family of lawyers—including our father, her husband, and three sisters. Bueno told me later that she was counting on jurors like her: highly educated individuals who would listen to both sides and apply the law to the facts.

I'm confident my sister did exactly that, but she told me she had been impressed by more than just Bueno's command of the law. Jill had related to her. She was the only woman lawyer in a courtroom packed with attorneys. The men were dour and dull; Bueno was personable and dynamic. She referred to the female anatomy with confidence and ease. By contrast, Adkins's all-male team struggled when forced to ask personal questions. "If you can't say the word *vagina*, you are probably not the best lawyer for the case," Jill said. By tiptoeing around their client's injuries, Adkins's male lawyers undersold her pain and failed to prove its direct link to Ethicon.

A turning point in the trial, Jill told me, was Bueno's cross-examination of Adkins. "She kept her same friendly demeanor while asking some very tough questions. She had to break [Adkins] down and demonstrate that she was not a reliable witness. And she did it without seeming mean or horrible." In a case involving complicated issues relating to female genitalia, my sister said, "I trusted her more because she was a woman."

In a sweeping victory for Ethicon, the jury found that the mesh had been defective but that Adkins had failed to prove that it had caused her injuries. (In August 2017, the judge overrode the jury's verdict; Ethicon has appealed.) When I spoke with Bueno,

she told me that she has been involved in hundreds of mesh cases. "A woman is able to cross-examine a female personal-injury victim with greater sensitivity," she said. "She can probe a little further without coming across as attacking the victim."

Johnnie Cochran told one female associate: Be "the person in the courtroom that everyone loves."

LYNNE HERMLE conducted what was perhaps the highest-profile cross-examination of 2015. Ellen Pao was seeking \$16 million in damages from her former employer, the Silicon Valley venture-capital firm Kleiner Perkins Caufield & Byers, claiming that she had experienced gender discrimination—and had been fired when she'd spoken up about it. Hermle, a partner at Orrick, Herrington & Sutcliffe, was the lead counsel for the all-female defense team. Hermle is the senior partner in Orrick's Silicon Valley employment group, where 10 of the 13 attorneys are women. "I think women are better at the conflict aspect in the courtroom," she told me. "We are able to confront people directly and

dismantle false stories in a way that men can't do without coming across as a bully." In the Pao case, "I had a really tight, well-crafted cross-examination that never involved shouting." The proof, Hermle said, was in the result: The jury ruled for her client.

Yet Hermle's success in the Pao case came at the expense of a woman ostensibly fighting for gender equity in an industry notorious for its chauvinism. I asked her whether she saw an irony in this. Hermle said no. Pao, she maintained, was simply the wrong messenger for a righteous cause.

Hermle's success has been a boon for her practice at Orrick. But a nagging question remains: Would women like Bueno and Hermle have had the same opportunities if they'd pursued a legal career in which they would not have been perceived as having a gender-based advantage—as, say, a prosecutor in a homicide division? Hermle argued that taking on cases in which being a woman offers an advantage can provide a ladder up and out. "Women can use these [cases] to get high-profile trial experience, which is hard to get, but ultimately I think that falls away once you achieve a certain stature." She told me that only about 40 percent of her cases involve gender and that some of her biggest wins came when she was defending companies against discrimination claims based on race, ethnicity, disability, or religion. Since her win in the Ellen Pao case, Hermle has defended both Twitter and Microsoft in class-action lawsuits brought by employees alleging gender discrimination.

EVERY WOMAN I interviewed said she had experienced Deborah Rhode's double bind: the imperative to excel under stressful courtroom conditions without abandoning the traits that judges and juries positively associate with being female. It is a devilishly narrow path to walk, and can severely hinder the ability to offer a client the best and most zealous defense.

I know this because in the middle of a case in 2013, I consciously stopped trying to walk that path. My client had been convicted in 1979 of a murder he did not commit and had spent 34 years in prison. The case against him was preposterous, and the refusal by the Los Angeles County District Attorney's Office to concede error infuriated me. Just days into the evidentiary hearing that would determine his fate, what was left of the state's case fell apart.

For the first and only time in my life as a litigator, I knew we were going to win. As the hearing had gone on, I had grown angrier. Now I had nothing to lose by pretending otherwise. When I went after the police, who I believed had lied and covered up evidence, I was by turns angry, sarcastic, and, yes, aggressive. My cheeks were red, not from shame but from righteous indignation. My voice shook as I questioned my client, not because I was being hysterical or manipulative but because the travesty of his stolen life broke my heart. In closing, I raised my voice and slammed

I tell my female law students that their body and demeanor will be under relentless scrutiny from every corner of the courtroom.


my fist into my open palm as I argued to the judge—a woman—that the case had been a colossal miscarriage of justice. It was exhilarating to allow myself to feel the full range of emotional responses and to use the full array of tactics available to men.

The judge threw out the conviction. Afterward, my client's 76-year-old mother paid me what I consider the greatest compliment of my career. Gripping my wrists, she looked at me and said, "You are a trial beast."

IT WOULD MAKE FOR a tidy ending to say that I am training my law students to be trial beasts. But it would not be true. The case I just described, tried before a female judge, and in which I was armed with overwhelming evidence of my client's innocence, comes along once or twice in a career in criminal court—if ever. My students will litigate murkier cases in courtrooms controlled by men, facing juries who will be more willing to listen to and be convinced by a traditionally feminine woman.

In 1820, Henry Brougham, a lawyer tasked with defending Queen Caroline before the House of Lords against allegations by her husband, King George IV, that she had committed adultery and should be stripped of her crown, explained his role this way: "An advocate, in the discharge of his duty, knows but one person in all the world, and that person is his client. To save that client by all means and expedients, and at all hazards and costs to other persons, and, among them, to himself, is his first and only duty."

I've always loved that definition of a lawyer's work and its description of the sacrifices we make for our clients. But in the courtroom, whether as an attorney or as an instructor, I'm constantly reminded that women lawyers don't have access to the same "means and expedients" that men do. So I tell my female students the truth: that their body and demeanor will be under relentless scrutiny from every corner of the courtroom. That they will have to pay close attention to what they wear and how they speak and move. That they will have to find a way to metabolize these realities, because adhering to biased expectations and letting slights roll off their back may be the most effective way to advance the interests of their clients in courtrooms that so faithfully reflect the sexism of our society.

Sometimes I worry that I am part of the problem, that I am holding my students back by using valuable class time to pass on the same unfair rules that were passed on to me. And then we go to court. 

Lara Bazelon is a professor at the University of San Francisco School of Law. Her first book, Rectify: The Power of Restorative Justice After Wrongful Conviction, will be published in October.

ESSAY

How Poetry Came to Matter Again

Minority poets, queer poets, immigrant poets, refugee poets—a young generation of outsiders in America has found itself on the inside, winning prizes and acclaim with ambitious debuts. Exploring and exploding identity in new ways, these voices are also—of all things—drawing crowds.

BY JESSE LICHTENSTEIN

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THE POETRY WORLD would hardly seem a likely place for a “race row,” the phrase *The Guardian* applied in 2011 to a blunt exchange of literary verdicts. The celebrated (and white) critic Helen Vendler had disparaged the celebrated (and black) poet Rita Dove’s selections for the new *Penguin Anthology of Twentieth-Century American Poetry*. Dove, Vendler wrote, had favored “multicultural inclusiveness” over quality. She’d tried to “shift the balance” by choosing too many minority poets at the expense of better (and better-known) writers. The poems were “mostly short” and “of rather restricted vocabulary,” the presiding keeper of the 20th-century canon judged. Over at the *Boston Review*, the (also white) critic Marjorie Perloff, the doyenne of American avant-garde poetics, weighed in too. She lamented what she saw as new poets’ reliance on a formulaic kind of lyric already stale by the 1960s and ’70s—a personal memory dressed up with “poeticity,” building to “a profound thought or small epiphany.” Her example: a poem by the acclaimed (also black) poet Natasha Trethewey about her mother’s painful hair-straightening routine.

Dove took strong exception to a pattern she saw in the response of established white critics. Were they, she demanded, making

a last stand against the hordes of up-and-coming poets of different skin complexions and different eye slants? Were we—African Americans, Native Americans, Latino Americans, Asian Americans—only acceptable as long as these critics could stand guard by the door to examine our credentials and let us in one by one?

It’s been a long time coming, but the door has since been blown off its hinges. Skim the table of contents of the major literary journals, including white-shoe poetry enterprises like *Poetry* magazine, and even general-interest weeklies with vast reach such as *The New Yorker* and *The New York Times Magazine*. Scan the recipients of the prestigious and sometimes lucrative fellowships, awards, and lecture-ships granted annually to the most promising young poets in the country. They are immigrants and refugees from China,

El Salvador, Haiti, Iran, Jamaica, Korea, Vietnam. They are black men and an Oglala Sioux woman. They are queer as well as straight and choose their personal pronouns with care. The face of poetry in the United States looks very different today than it did even a decade ago, and far more like the demographics of Millennial America. If anything, the current crop of emerging poets anticipates the face of young America 30 years from now.

These outsiders find themselves, at the very start of their careers, on the inside—and not just of a hermetic realm of poetry whose death knell someone sounds every April, when National Poetry Month arrives. At literary festivals, many

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of these poets are drawing big crowds, as I saw in November when what looked like hundreds of people waited in the rain to hear Danez Smith and Morgan Parker discuss “New Black Poetry” at the Portland Art Museum, in Oregon.

When I spoke this spring with Smith, who uses plural pronouns, they were just back from a United Kingdom tour for their collection *Don’t Call Us Dead*, a National Book Award finalist. The British press had marveled at poetry that could win critical notice in *The New Yorker* and rack up 300,000 views on YouTube. There are “a lot of stories that we’ve been telling that are now being told in more public ways,” Smith said, noting the collective energy of this generation, and of poets of color

and queer poets more broadly. Each new book and accolade spurs a fruitful competition to do and dare more. "I don't want to be the one to show up wearing the bad dress," Smith went on. "A win for somebody is really just a win for poetry, the people that read it, and the people that we come from."

More than a few of this generation's bright lights found poetry first through performance, or come from communities where "spoken word" and "poetry" are not separate lanes. Other poets have shown a talent for building an audience in less embodied ways. Before Kaveh Akbar published his strong 2017 debut collection, *Calling a Wolf a Wolf*, he had established himself through his interview series on the website Divedapper, which offers intimate and engaging introductions to new American poets. He also tirelessly shares what he is reading with his 28,000 Twitter followers, posting daily screenshots of pages from books that have excited him.

Emerging poets of this digital-native generation are ready to work at getting their words and their names out there. A

number of them have agents and publicists (this is not, historically speaking, normal!). Some are genre crossers, bucking poetic insularity. Saeed Jones (*Prelude to Bruise*, 2014) is a public presence as an on-camera host of a *BuzzFeed News* show. Fatimah Asghar (*If They Come for Us*, 2018) wrote and co-created a popular web series, *Brown Girls*, now being adapted for HBO. Eve L. Ewing (*Electric Arches*, 2017) is a sociologist and commenter on race with a massive social-media presence.

Poets a little older may grumble at the networking and exposure, but their juniors respect the hustle, convinced that poems, with the right push, can "enter the jet stream of the ongoing national discourse," as Jones has put it. They are onto something: A recent survey by the National Endowment for the Arts revealed that poetry readership doubled among 18-to-34-year-olds over the past five years.

The energy on display is about more than savvy marketing or niche appeal. "From what I'm seeing," says Jeff Shotts, the executive editor of Graywolf Press,

who edited three of the 10 collections that made it onto the long list for the 2017 National Book Award in poetry, "this is a renaissance." And most striking among

Having come of age in the heyday of identity politics, the diverse poets now in the spotlight are reclaiming "the democratic 'I.'"

the many forces propelling that renaissance is a resurgence of the first-person lyric—just what the "language poets" of the late 1970s declared obsolete. Too



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narrowly experiential, too sentimental, too accessible, inadequate to the task of engaging with a postmodern, media-saturated culture—this was the verdict of a previous avant-garde that abandoned “the speaker” in favor of a recondite poetics that appealed to an ever more exclusive audience. But the rising generation—while embracing avant-garde techniques (the use of radical disjunction and collage, the potpourri of “high” and “low” cultural references)—hasn’t bought the message. Having come of age in the heyday of identity politics, the diverse poets now in the spotlight are reclaiming “the democratic ‘I,’” in the words of the poet Edward Hirsch.

This “I,” reared on multiple languages and dialects, could not be said to suffer from a restricted vocabulary, as Vendler complained. Lyric, for this generation, definitely needn’t mean short. Making their debut in the wake of Claudia Rankine’s best-selling *Citizen: An American Lyric* (2014), poets dare to tackle *project* books, with historical sweep and hybrid form, right out of the gate. This “I,” aware of the variously marginalized “we”s to which it belongs, marries the personal to the ambitiously political. Its ascendancy has raised poetically energizing questions about identity. The young poets who stand out have helped make race and sexuality and gender the red-hot centers of current poetry, and they push past as many boundaries as they can. They strain to think anew about selfhood and group membership. Drawing on eclectic traditions, they mine the complexity latent in the lyric “I.” At its best, the last thing this “I” aspires to deliver is tidy epiphanies.

THE LABOR OF removing the hinges from the door in fact began decades ago. While the language poets were upending late-20th-century American poetry—trying to subvert the powers that be by flouting expressive conventions—minority poets were pushing to integrate the literary world and the canon, as well as championing alternatives. The Black Arts Movement of the 1960s and ’70s, and the numerous organizations it spawned, advocated independent outlets for black, Asian American, and Latino artists. But by the ’80s, the drive was on to claim a seat at the table—which meant demanding a bigger table.

That wasn’t easy in a poetry culture that was white in its present and white in its past, and not exactly eager to confront this fact. In 1988, tired of feeling like tokens in poetry workshops, two Harvard undergraduates and a composer friend formed the Dark Room Collective in a yellow Victorian house in Cambridge, establishing a space in which to foster the work of young black poets. Over the next decade, a remarkable array of talent found a home there, including Natasha Trethewey and Tracy K. Smith (both future U.S. poet laureates), Kevin Young, Carl Phillips, and Major Jackson. Ambition ran high, and so did a restless urge not simply to fit in but to call new shots. “Even if we were all published in *The New Yorker*,

**Chen Chen’s poems
 boast the frank
 ease of a late-night
 Gchat with a bright,
 emotionally
 available friend.**

would that be the point?” Young, then a Harvard senior, told *The Harvard Crimson* in 1992. “You’re missing the point if it’s a new driver driving the same old truck.”

Within a few years, new faces were, if not at the wheel, more welcome and visible in the poetry world. In 1993, Rita Dove became the U.S. poet laureate. That same year, in his introduction to *The Open Boat*, the first anthology of Asian American poetry to be edited by an Asian American, Garrett Hongo could point to progress in mainstreaming: “These days, some of us even serve on foundation and [National Endowment for the Arts] panels, sit on national awards juries, teach in and direct creative writing programs, and edit literary magazines.”

In a landscape of poetry by then dominated by M.F.A. programs, a spreading network of supportive institutions soon offered young poets from marginalized groups a supplemental world of free workshops and mentorship. Cave Canem, founded in 1996 to serve emerging black poets, was followed by

Kundiman (for Asian American writers) and CantoMundo (for young Latino and Latina poets). The Lambda Literary Foundation has provided similar backing to LGBTQ poets. The traditional gatekeepers of poetry—big journals, respected publishing houses large and small, prize-giving committees—now know where to turn to find a broad spectrum of already vetted work.

But mainstreaming rarely happens without turbulence. The Dark Room alumni have come in for their share of sharp critiques as they have taken seats at a table that has been extended but is still very much within establishment walls. With inclusion among the dominant “we” comes pressure to produce and promote more broadly accessible or depoliticized work. The *Open Boat* anthology was soon taken to task for presenting Asian American poetry through a narrow lens of familiar immigration and assimilation narratives. Kevin Young’s recent arrival as *The New Yorker*’s poetry editor at age 47 raises the inevitable question of how new and different the truck will look and sound.

Tensions have thrummed within even the coziest, most supportive of the various minority enclaves, from the Dark Room onward: Embracing the outsider “we” and *its* group narratives comes with its own pressures. Poets have chafed at—as well as thrived on—them. Of course they have: How else does poetic ferment happen? Carl Phillips has written recently of feeling that he was effectively exiled from the Dark Room because he “wasn’t writing the kind of poems that were correctly ‘black.’” In an essay called “A Politics of Mere Being,” he wonders about the effects not just of a call to be politically correct, but of “a push to be *correctly political*”—that is, to address a particular set of “issues of identity, exclusion, injustice.” Shouldn’t “poets of outsidersness, of whatever kind,” he suggests, resist the notion that “resistance” alone defines what is political?

A quarter of a century younger than Phillips, the Iranian American poet Solmaz Sharif—whose first collection, *Look* (2016), was a finalist for the National Book Award—also sees the value of a voice that is “continually

outside, questioning and speaking back to whatever supposed ‘here’ or ‘we’ or ‘now’ we’ve created.” Her poetic ideal is “a nomadic presence, or a mind that is consistently on the run, and preventing these political moments from calcifying.” As a stab at summing up the mutable and provocative new lyric “I,” it would be hard to do better. The quest to truly contain multitudes—to probe the protean self and the society that shapes and reshapes it—within a coherent lyric is still a radical experiment.

“**A** M I A GAY BLACK MAN when roasting a chicken at home for friends?” Carl Phillips asks in “A Politics of Mere Being,” and he answers, “Sure. But that’s not what I’m most conscious of at the time. Am I necessarily, then, stripped of political resonance at that moment?” The 29-year-old Chinese American poet Chen Chen confidently embraces the realm of chicken roasting—of quotidian routines and ruminating—as he stakes a poetic claim to the “politics of mere being” in his 2017 debut, *When I Grow Up I Want to Be a List of Further*



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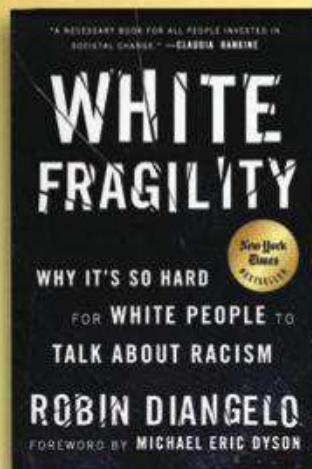
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Possibilities, which was long-listed for the National Book Award.

As the title suggests, in Chen's work the new lyric "I" is open-ended, cumulative, marked by potential. His poems boast the frank ease of a late-night Gchat with a bright, emotionally available friend, and the terrain is, at least overtly, more personal than political. At the same time, the conversational tone (in tune with an era in which many of our conversations are typed) offers a welcome into a world that is neither insular nor stable.

Chen, who left China with his family when he was 3 and grew up in Massachusetts, shows little interest in patrolling the no-man's-land between the "I" and the author. Several key poems deal with a central event in the speaker's—the poet's—life: coming out to his parents as a teen and the violent scene that follows. The speaker runs away, climbs a tree, scales a wall, falls back to Earth—eventually hobbling home to face abiding parental disappointment.

Chen joins an array of other talented young poets (among them Ocean Vuong, Hieu Minh Nguyen, and Fatimah Asghar) whose work explores the challenges of being a queer Asian American in an immigrant family. For Chen, poetry is "a way for those different experiences to come together, for them to be in the same room," but without any predetermined expectations of how they may interact. In the face of a mother who wants her sons "to gulp up the world, spit out solid degrees, responsible grandchildren ready to gobble," Chen's speaker dreams instead "of one day being as fearless as a mango. / As friendly as a tomato. Merciless to chin & shirtfront."

Like the great mid-century New York poet Frank O'Hara, Chen has an avid eye for everyday details that bridge emotional, domestic, and cultural landscapes. O'Hara once invented a fake movement called "Personism," in which "the poem is at last between two persons instead of two pages." Many of Chen's poems display a similar yearning to connect with the "you" they address, though the speaker knows that the space between never quite vanishes. When the poems do tread close to familiar child-of-immigrant tropes—"forgiving / the Broken English of Our Mothers"—they still manage to be more tender than trite or ironic:

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I don't know what to tell you. I
thought I could
tell this story, give it a way out of itself.
Even here, in my fabulous
Tony-winning monologue of a
New York, I'm struggling to get
to the Joy, the Luck. I tell you my
mother still
boils the water, though she
knows she doesn't have to
anymore.
Her special kettle boils in no time, is a
feat of engineering.
She could boil my father in it
& he'd come out a better person, in
beautiful shoes.

It's a bracingly wry meta-reflection on his story of identity—the loving particulars balanced by a dose of filial bitterness. Chen is a rarity among this new cohort of poets, many of whose debuts deal in justifiable rage, plunge into agony, flash with fleeting moments of ecstasy. "I'm keenly aware of the political forces, the layers of artifice, the whiffs of strategic essentialism, and the bouts of slippery fragmentation that go into group identity formation," he has said. But the "I" that rides the crosswinds of "queer Asian American," while also telling a personal story, conveys a daring and unusual suppleness: *When I Grow Up* permits itself both to dwell in realms of everyday sadness and to champion the lesser virtues of amusement, curiosity, and delight.

NOT LONG AGO, at a packed reading in Los Angeles, Aziza Barnes introduced a poem whose title posed a version of Carl Phillips's question, implying a starker answer: "my dad asks, 'how come black folk can't just write about flowers?'" A few knowing laughs rose from the audience before Barnes launched into the poem and everyone grew quiet. Barnes, too, deals in the quotidian—the overpolicing of black life, the under-investigation of black death, routine harassment—but in a register worlds away from Chen's. The speaker in the poem is walking with friends near her own house. Her "milk neighbors," as she calls her street's pale new residents, "collaborate in the happy task of surveillance": They call the police, three squad cars appear, and an officer begins interrogating. For the poem's speaker,

it didn't make me feel like I could see
less of the gun in her holster because
she was blk & short & a woman, too.
she go,

this your house?
I say *yeah*. she go,
can you prove it?
I say *it mine*.
she go *ID?* I say *it mine*.
she go *backup* on the sly

Despite this trajectory, the poem ends not in tragedy, rage, or even reconciliation. Instead, it settles in a place of bone-deep weariness. "I'm bored & headlights quit being interesting," Barnes intoned, "after I called 911 when I was 2 years old because it was the only phone number I knew by heart." Somehow, resignation feels more damning than any high dudgeon the poet might have brought us to.

Make no mistake: An Aziza Barnes poem can scorch the earth without breaking a sweat. A figure on the poetry-slam circuit who grew up in L.A. and studied at NYU's Tisch School of the Arts and the University of Mississippi's M.F.A. program, she has won praise for her "swagger and verve"—and her "screaming, precise, incisive" language, in one critic's words, is indeed vital to her poems. "I love being able to be mean or curt in my poetry," Barnes has said, and her lyric "I" can level invective that rivals the weird specificity of a Yiddish curse:

In the next life

I pray you the one plant

Ain't pollinate.

But if that makes Barnes—who has described her work as "quite black and quite gay"—sound like an assertive preacher, she is not. Solmaz Sharif's "mind ... constantly on the run" is more like it. "Poetry is the best medium for the self to be subverted / performed / exploded," Barnes has said. The title of her debut collection, *i be, but i ain't*, points to contradictions within the "I" that need subverting, performing, and exploding.

In the midst of emotionally—and racially and politically—charged territory, Barnes does not hesitate to take unexpected paths, create her own forms, and explore them at her own pace. The

book moves through the discomforts and complexities of identity and history, the baseline fear felt by a young black person in America, the poet's unconventional relationship to her assigned gender. But the poems rarely land where their opening salvos suggest they are heading.

One poem of Barnes's that I keep returning to starts with a minor domestic scene: The speaker finds a centipede near her writing desk. In lines that span the width of the page, broken up by white spaces, the poem proceeds to cover a vast territory—apartheid, colonialism, a fascination with the bodies of saints, bodies in extremis—before

An Aziza Barnes poem can scorch the earth without breaking a sweat.

arriving at a quiet indictment of the poet herself for killing the creature she can't be bothered to understand. The opening poem of the book, it's a wandering lament for a basic human failing. Squashing the insect is not equivalent to the acts of cruelty, ignorance, and injustice—great and small—that bear on this particular poet's place in the world, but the impulse prompts a recognition of their common seed.

Many of the poems in *i be, but i ain't* beg to be experienced viva voce, and it's easy to imagine them bellowed in front of the footlights, or slung coolly back and forth in front of the camera. Though to praise "performance poets" for their voice and "literary poets" for their prosody is something of a cliché—reinforcing a distinction that fits this generation poorly—Barnes has pushed a talent for enacted speech further than most of her poetry peers. In December, her play, *BLKS*, about four 20-something black women living in Brooklyn and looking for love, opened to glowing reviews at the Steppenwolf Theatre, in Chicago, and will move off-Broadway next spring. Poetry readers can only hope that Barnes's growing stature on the stage doesn't pull her too far away from the lyric she's capable of breathing such life into.

WHILE PERFORMANCE seems to suit the strengths of Barnes's work, Layli Long Soldier's poetry is harder to separate from the page—which doesn't mean that it rests there comfortably. Quite the contrary. Midway through *WHEREAS* (2017), her debut collection and a National Book Award finalist, the speaker states, "I will compose each sentence with care, by minding what the rules of writing dictate." The declaration is noteworthy because, up to this point in the book, as an epigraph announces, Long Soldier shows little inclination to mind the rules:

Now
make room in the mouth
for grassesgrassesgrasses

The language of *WHEREAS* enacts the struggle of its project: the sheer weight of representing an "I" that is both a self and a part of a highly diverse collective—American Indians—whose identity has largely been imposed from without. For Long Soldier, an enrolled member of the Oglala Sioux tribe and a visual artist who has taught at Diné College, in the Navajo Nation, syntax itself strains and cracks under the burden.

The vow to compose sentences with care comes from "38," a five-page poem that acts as a fulcrum between the shorter poems in the book's first section and the longer "Whereas Statements" of the book's second and final section. "38" is an account of the largest "legal" execution in U.S. history: 38 Sioux prisoners hanged, with President Abraham Lincoln's approval, following the 1862 Sioux Uprising. The poem builds force with stark, declarative sentences, each standing as a stanza or paragraph on its own.

The hanging took place on December 26, 1862—the day after Christmas.

This was the *same week* that President Lincoln signed the Emancipation Proclamation.

In the preceding sentence, I italicize "same week" for emphasis.

The Sioux fought because they were starving: They hadn't received the payments agreed to in treaties with the U.S. government, they had lost their hunting grounds, and local traders refused to extend them credit to buy food. One of the traders was supposed to have said, "If they are hungry, let them eat grass." After a raid by Sioux warriors, this trader's body was found with his mouth stuffed with grass. Some might call this poetic justice. Long Soldier goes further:

I am inclined to call this act by the
Dakota warriors a poem.

There's irony in their poem.

There was no text.

"Real" poems do not "really" require words.

Then she reconsiders: After all, the trader's words initiate the poem, "click the gears of the poem into place." It's telling that even in the most straightforward portion of the book, Long Soldier deploys language to mark its own limits, to probe its utility, to take its measure against concrete and tangible actions.

Long Soldier's fitful, yearning relationship to the language of her father and older relatives—her palpable "ache of being *language poor*" when it comes to Lakota—embodies that sense of inadequacy, of constantly reaching and failing to connect or express. "I climb the backs of languages," she writes, "ride them into exhaustion—maybe I pull the reins when I mean go." Because even with Long Soldier's rich command of it, English is a fraught instrument for exploring the dark legacies of the U.S. and the Sioux's shared history, which Long Soldier, as a dual citizen, is heir to. Her visual artistry at work, she avails herself of the spatial elements of text—ellipses, disjunction, concrete poetry, blank space—to convey

uncertainty and instability. This grasping at the elusiveness of sense-making can be thrilling, but it demands that the reader weather discomfort, abstraction,

**"I climb the backs
of languages,"
Layli Long Soldier
writes, "ride them
into exhaustion—
maybe I pull the
reins when I
mean go."**

and incompleteness—and not flinch from asking, with Long Soldier, about the whole endeavor: Is poetry up to the task?

For Long Soldier, language and the body are not really separable. Apology is at the heart of the book, and physical gesture is at the heart of apology. As she tells us, "In many Native languages, there is no word for 'apologize.' The same goes for 'sorry,'" yet there are ways to admit error and make amends. The title, *WHEREAS*, comes from the careful, official language of a federal apology to American Indians—a series of toothless "whereas" clauses in a Senate resolution that was later cut to half a page and tucked into a defense appropriations bill, signed by President Barack Obama one December weekend in 2009, with no announcement and no tribal representatives present. The U.S. government's apology to American Indians is almost the definition of an empty gesture.

Long Soldier sets this in contrast to a quiet moment with her estranged father over breakfast in her kitchen. A little sound escapes him, and then: "He pinched his fingers to the bridge of his

The Atlantic (ISSN 1072-7825), recognized as the same publication under *The Atlantic Monthly* or *Atlantic Monthly (The)*, is published monthly except for combined issues in January/February and July/August by The Atlantic Monthly Group, 600 New Hampshire Ave. NW, Washington, DC 20037 (202-266-6000). Periodicals postage paid at Washington, D.C., Toronto, Ont., and additional mailing offices. Postmaster: send all UAA to CFS (see DMM 707.4.12.5); NONPOSTAL AND MILITARY FACILITIES: send address corrections to Atlantic Address Change, P.O. Box 37564, Boone, IA 50037-0564. Printed in U.S.A. Subscription queries: Atlantic Customer Care, P.O. Box 37564, Boone, IA 50037-0564 (or call 800-234-2411). Privacy: we make portions of our customer list available to carefully screened companies that offer products and services we believe you may enjoy. If you do not want to receive this information, please write to the Customer Care address above. Advertising (646-539-6700) and Circulation (202-266-7100): 600 New Hampshire Ave. NW, Washington, DC 20037. Subscriptions: one year \$39.95 in the U.S. and poss., add \$8.00 in Canada, includes GST (123209926); add \$15.00 elsewhere. Canada Post Publications Mail Agreement 41385014. Canada return address: *The Atlantic*, P.O. Box 1051, Fort Erie, ON L2A 6C7. Back issues: send \$7.50 per copy to *The Atlantic*, Back Issues, 1900 Industrial Park Dr., Federalsburg, MD 21632 (or call 410-754-8219). Vol. 322, No. 2, September 2018. Copyright © 2018, by The Atlantic Monthly Group. All rights reserved.

nose, squeezed his eyes. He wiped." What seems at first to the speaker like a sneeze is an almost-silent sob—a prelude to words of remorse for decades of absence and inattention. "WHEREAS when offered an apology," Long Soldier writes:

I watch each movement the shoulders
high or folding, tilt of the head both
eyes down or straight through
me, I listen for cracks in knuckles or in
the word choice, what is it
that I want? *To feel* and mind you I feel
from the senses—I read
each muscle, I ask the strength of the
gesture to move like a poem.

A nation cannot pinch its fingers to the bridge of its nose, but there are ways of giving flesh to language. Long Soldier's lyric "I," at once fractured and centered within its fissures, attempts a poetry that can bear grief and make something new—just as the poet wishes that her young daughter, learning Lakota and Navajo and beginning to appreciate the fragments that make up her identity, may someday come to understand

wholeness for what it is, not for what
it's not, all of it the pieces;

LARGELY WHITE-RUN literary institutions," Claudia Rankine remarked in an essay she co-authored with the writer Beth Lofreda, "can always remind you you're a guest." When I spoke with Danez Smith, the poet stressed that if a renaissance is to continue, the publishing world—meaning editors and publicists, and reviewers, too—has to better reflect the writers whom it is now delivering to a growing readership. But Smith was sanguine: "We have a long way to go in terms of who is celebrated and who is lifted up and who is noted, but I think we can keep making strides." So far, this generation has shown little patience, which may be what saves it. Poets who know their worth and throw themselves into convincing us of it may be just the poets to expand and sustain an art form.

When Nicole Sealey, the executive director of Cave Canem and author of *Ordinary Beast* (2017), marvels at the "dynamic sense of urgency" she sees in this generation, I think of the young

Honduran-born poet Roy G. Guzmán, whose debut is forthcoming from Graywolf. Just days after the 2016 shooting at the Pulse nightclub, Guzmán published "Restored Mural for Orlando," a long, discursive meditation on death, familial love, queer brown bodies in congregation, and a city you visit "to fantasize about the childhood you didn't have."

Forget William Wordsworth's "emotion recollected in tranquillity": Guzmán's poem was an almost instant eulogy, and deeply affecting—Exhibit A of the power of the new lyric "I" to anchor a broad public response in the crosscurrents of complex, marginalized identities. Young poets are producing work that taps intimate veins, and responds to the headlines with impatience, nuance, compassion, and sometimes fury; with historical breadth and sharp critique; with unapologetic stabs at beauty; with ambition; and—above all—with the expectation of an audience. This is poetry that firmly believes it is necessary. **A**

Jesse Lichtenstein is a journalist and poet based in Oregon.



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Q:

Whose untimely death would you most like to reverse?

Alison Sweeney, actor and producer

Abraham Lincoln's assassination changed the trajectory of the United States. We'll never know what could have been if he'd been able to finish his second term.

Victor Levin, writer and director, *Destination Wedding* and *5 to 7*

Anton Yelchin died tragically at 27, having made some 40 feature films. There was no finer actor. He was also a gifted writer and director, with a dazzling intellect and revolutionary ideas. Had he lived, I believe he would have been the Orson Welles of his generation.

Ashley Eckstein, founder, *Her Universe*, and actor, *Star Wars: The Clone Wars*

I often ask myself what **Walt Disney** would think of his company if he were alive today—is it what he hoped it would be? Disney changed the world. Imagine how much more happiness and magic he could have spread had he not passed away early.

READER RESPONSES

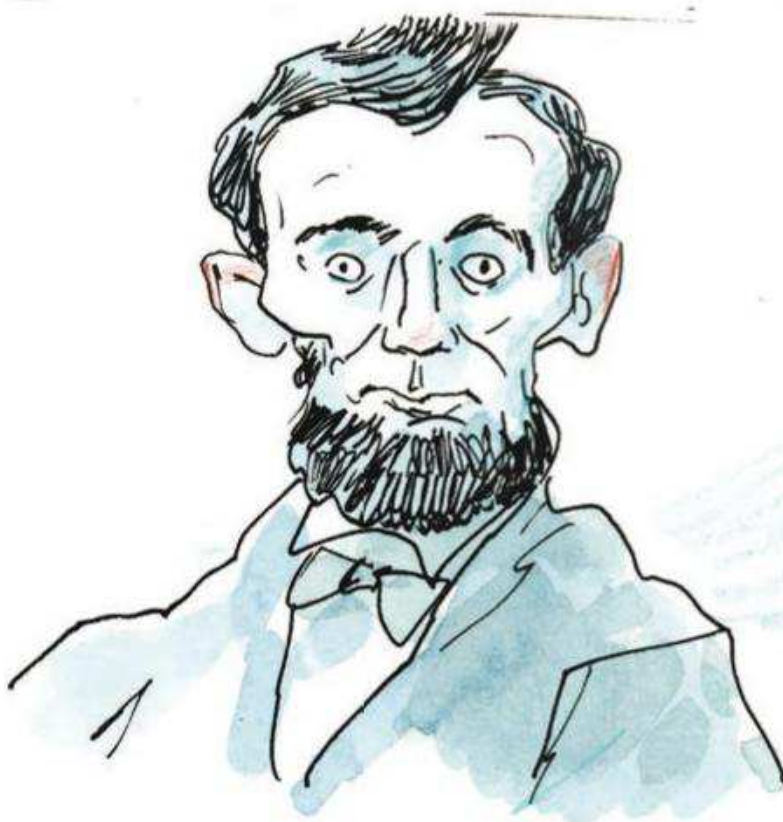
Robert A. Legg, Greensboro, Ga.

Listening to a sample of **Buddy Holly's** best work—"That'll Be the Day," "Oh, Boy!," "Maybe Baby," "Rave On," "Peggy Sue"—one can't help but wonder how many other classics he might have written and recorded had he lived past the age of 22.



Betsy Golden Kellem, New Haven, Conn.

Jim Henson. No one was better at navigating life's dualities: youth and age, innocence and darkness,



slapstick and depth, men and Muppets. "Bein' Green" still makes me cry.

Eric Weinberger, Cambridge, Mass.

Yitzhak Rabin. Some people now say that the Oslo Accords were never going to work. But that's not how it seemed in 1995, when Israel was led by perhaps the one person who could, by force of will and brave politics, bring a decent peace to Israel and its neighbors.

Thomas Cahill, Bar Harbor, Maine

A twofer: **Martin Luther King Jr.** and **Robert F. Kennedy.** What America could have looked like today had they not died in 1968.

Erik Hogstrom, Dubuque, Iowa

The Delta bluesman Robert Johnson, who died at age 27. How would music history have unfolded had Johnson lived long enough for recording technology to catch up with his prodigious talents? I suspect that the development of 20th-century musical styles would have been greatly accelerated.

Ernest F. Imhoff, Baltimore, Md.

James Garfield was assassinated by a crazed job seeker just months after he became the 20th president. Some contemporaries and historians have said that with his intelligence, high moral purpose, and record as a Union general in the Civil War, Garfield might have become one of America's greatest presidents.

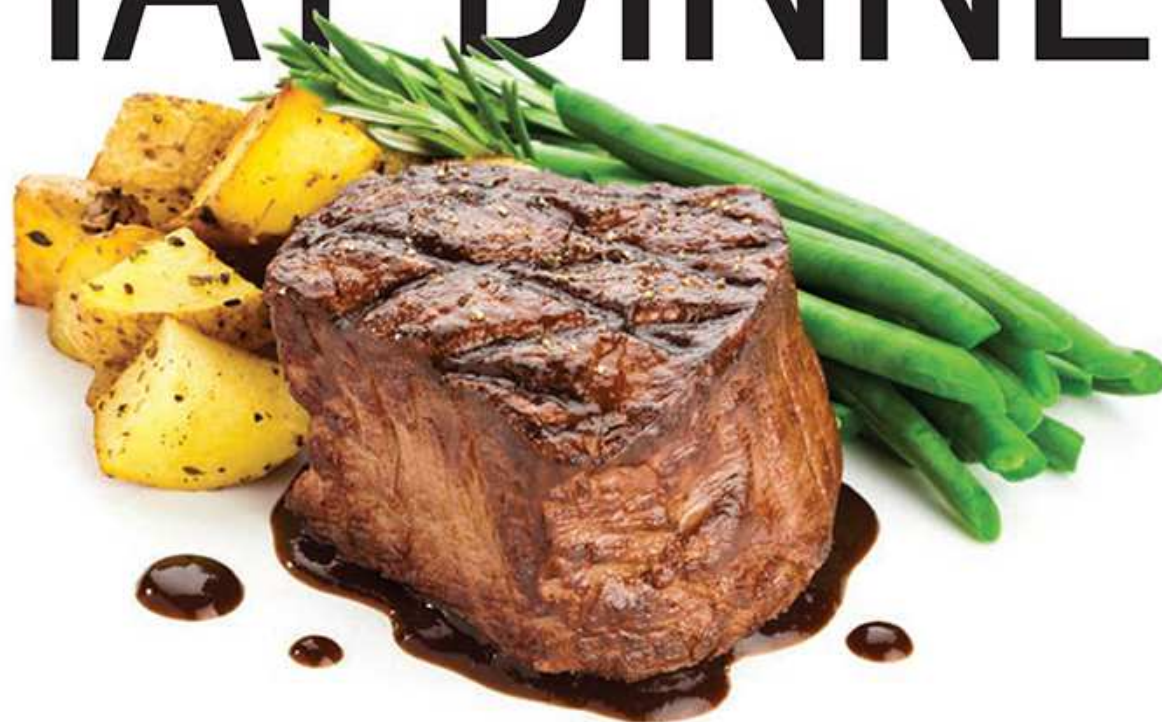


Leslie Ellen Brown, Spring Mills, Pa.

The trifecta of brilliant composers who died before we could call them middle-aged: **Mozart** (35), **Schubert** (31), and **Mendelssohn** (38). What great music churned in their brains but wasn't put down on paper?

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