

THE ALL-NEW BMW 3 SERIES.

REINTRODUCING THE
LOVE OF DRIVING.



**The Ultimate
Driving Machine®**

M Sport Package with optional equipment shown.
©2019 BMW of North America, LLC. The BMW name, model names and logo are registered trademarks.

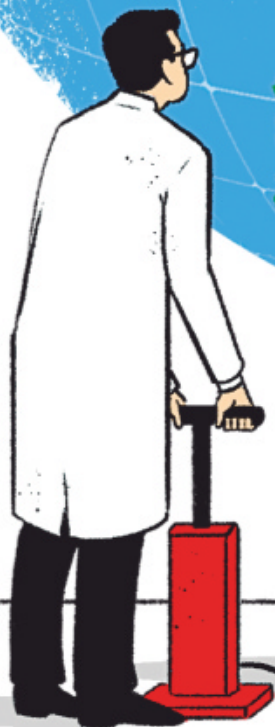
What To Read This Summer

06.14.2019

Newsweek

**THE
EARTH
IS
ROUND...**

**...BUT THE FLAT
EARTH MOVEMENT
IS GROWING**



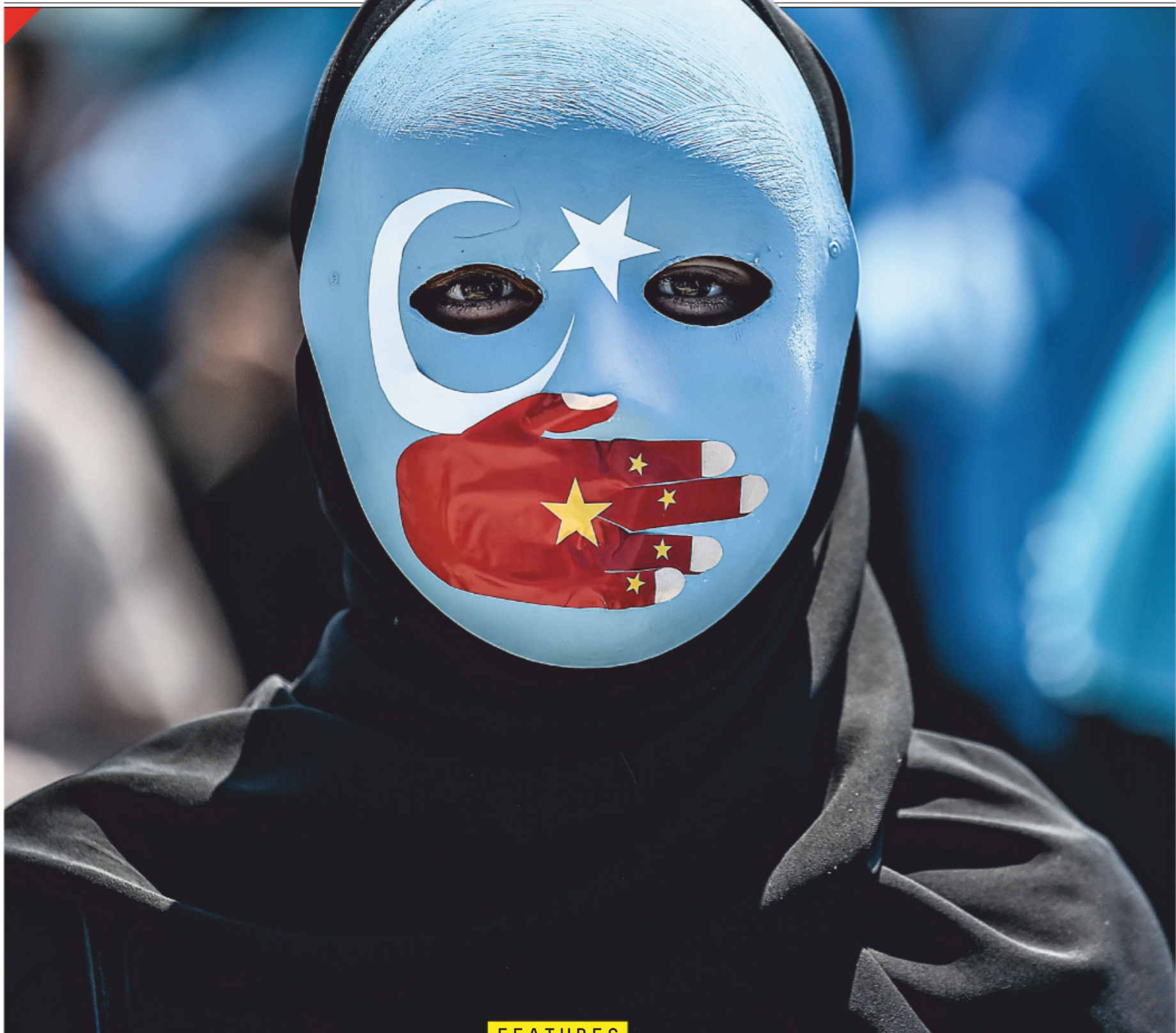
Science deniers are spreading **FALSE IDEAS** about climate change, vaccines and more. Can we find a way to push back?





HARRYS
OF
LONDON

NEVER PEDESTRIAN
harrysoflondon.com



FEATURES

TAKING IT TO THE STREETS

Supporters in Istanbul protest China's treatment of the mostly Muslim Uyghur minority at the country's consulate last July. Nearly 200 people died during a riot in 2009 in Urumqi, capital of the Xinjiang Uyghur Autonomous Region.

COVER CREDIT

Illustration by Alex Fine for Newsweek



For more headlines, go to NEWSWEEK.COM



20

The Earth is Round

But the Flat Earth movement is growing and its tactics are spreading. Can we learn to reason with science deniers?

BY LEE MCINTYRE

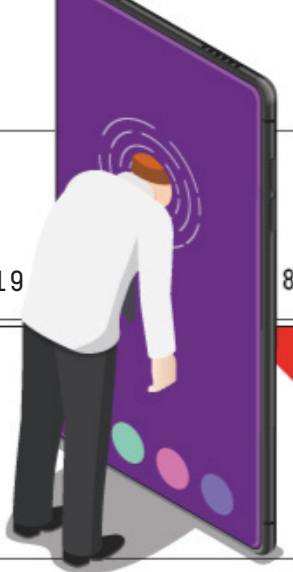
30

China Human Rights Crisis

The oppression of the country's Uyghur community is getting worse by the day. Will the U.S. Congress ever come to the rescue?

BY TARA FRANCIS CHAN

FROM TOP: OZAN KOSE/AFP/GETTY; ALEX FINE



DEPARTMENTS

In Focus

- 06 The Aftermath**
Dayton, Ohio
- 08 Tokyo Smackdown**
The Trumps
Take in Sumo
- Free Julian**
Assange Fans
In London
- Heat Wave**
New Dehli

ADVICE

Ann Dowd of *The Handmaid's Tale* on "disgusting" anti-abortion bills.



P.10

Periscope

- 10 Caught in the Web**
Are Social Media
Obsessives "Addicts"?
- 16 What the Religious
Right Gets Right**
Conservative
Christians Have
Real Concerns
- 18 Talking Points**
Merkel, Trump
and Iger Weigh In

Horizons

- 38 By the Numbers:**
Shark Attack!
All You Need
To Know
- 40 Moonshots**
Indian Entrepreneur
Sukhmeet Singh
Turns Straw to Fuel

Culture

- 42 Hot Summer Books**
Our Editors Pick
19 Good Reads
- 46 The Travel Map**
Great Museums
From Beijing to
Mexico City
- 48 Parting Shot**
Actress Ann Dowd
Speaks Out

GLOBAL EDITOR-IN-CHIEF _ Nancy Cooper

CREATIVE DIRECTOR _ Michael Goesele

EDITORIAL DIRECTOR _ Hank Gilman

DEPUTY EDITOR (EUROPE + OPINION) _ Laura Davis

MANAGING EDITOR _ Melissa Jewsbury

SPECIAL PROJECTS EDITOR _ Fred Guterl

EDITOR AT LARGE _ Diane Harris

EDITORIAL

New York Bureau Chief _ Jason Le Miere

London Bureau Chief _ Robert Galster

Managing Editor, Trending News _ Maria Vultaggio

Managing Editor, Newsweek NEXT _ Juliana Pignataro

Senior Editors _ Mo Mozuch, Peter Carbonara,
Meredith Wolf Schizer, Karin Roberts

Deputy Editors _ Jen Glennon (Trending),
Tara Chan (Politics)

Associate Editors _ James Etherington-Smith,
Hannah Osborne (Science), Dom Passantino,
Harriet Sinclair (Politics)

London Sub-Editor _ Hannah Partos

Copy Chief _ Elizabeth Rhodes Ernst

Contributing Editor, Opinion _ Lee Habeeb

Editorial Assistant _ Jason Pollack

CREATIVE

Director of Photography _ Diane Rice

Contributing Art Director _ Michael Bessire

Associate Art Director _ Paul Naughton

Assistant Photo Editor _ Alessandra Amodio

Digital Imaging Specialist _ Katy Lyness

Art Assistant _ Annie Kozak

WRITERS

David Brennan, Nina Burleigh, Dan Cancian,
Brendan Cole, Shane Croucher, Chantal Da Silva,
Sam Earle, Benjamin Fearnow, Kashmir Gander,
Ari Georgiou, Nicole Goodkind, Katherine Hignett,
Jessica Kwong, James LaPorta, Cristina Maza,
Tom O'Connor, Ewan Palmer, Callum Paton,
Tom Porter, Bill Powell, Roberto Saviano*,
Marc Vargas, Janice Williams, Christina Zhao
(*Contributing)

VIDEO

Video Production Manager _ Jessica Durham

London Video News Editor _ Daniel Orton

Bangalore Video News Editor _ Nandini Krishnamoorthy

Senior Video Producers _ Sho Murakoshi

Video Producers - Sean Billings, Chiara Brambilla,
Rufaro Ndoro, Frances Rankin, N. Ravichandran,
Holly Snelling, Alexis Wierenga

Motion Graphics Producers _ Simon Vella

PUBLISHED BY

Newsweek LLC

Chief Executive Officer _ Dev Pragad

Chief Content Officer _ Dayan Candappa

Chief Operating Officer _ Alvaro Palacios

Chief Financial Officer _ Amit Shah

Chief Technology Officer _ Michael Lukac

General Counsel _ Rosie Mckimmie

VP, HR Business Partner _ Leiann Kaytmaz

SVP Global Creative Director _ Robert Lee

Director, Content Strategy _ Nalin Kaul

Senior Digital Marketing Strategist _ Adam Silvers

Managing Editor, Branded + Native Content _ Paula Froelich

Editor, Branded + Native Content _ Dan Avery

Global Executive Producer _ Alfred Joyner

Global Head of Programmatic + Partnerships _ Jeremy Makin

SVP, Product + Business Intelligence _ Luciano Costa

Senior Sales Director _ Chantal Mamboury

Head of Subscription Operations _ Samantha Rhodes

Newsstand Manager _ Kim Sermon

NEWSWEEK (ISSN0028-9604) is published weekly except one week in January, February, March, April, May, June, July, August, September, October, November and December due to combined issues. Newsweek is published by Newsweek LLC, 33 Whitehall St., 8th Floor, New York, NY 10004. Periodical postage is paid at New York, NY and additional mailing offices.

POSTMASTER: Send change of address to Newsweek, 33 Whitehall St., 8th Floor, New York, NY 10004. For Article Reprints, Permissions and Licensing NewsweekReprints.com PARS International (212) 221-9595 x210 Newsweek@parsintl.com



“Journalism I don’t see elsewhere until later, if at all.”

NEWSWEEK.COM/TRY

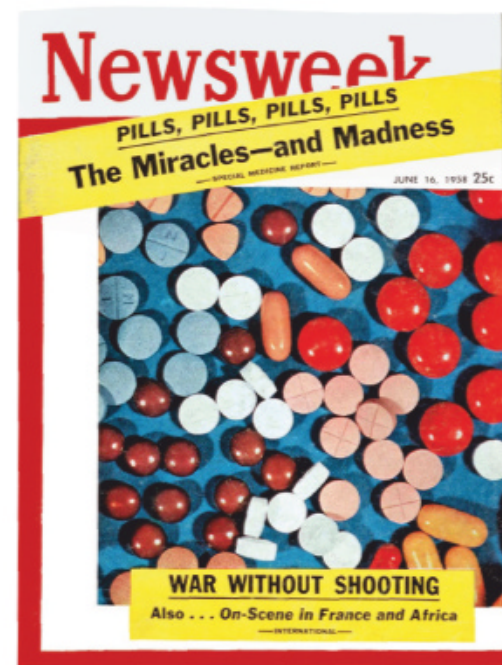
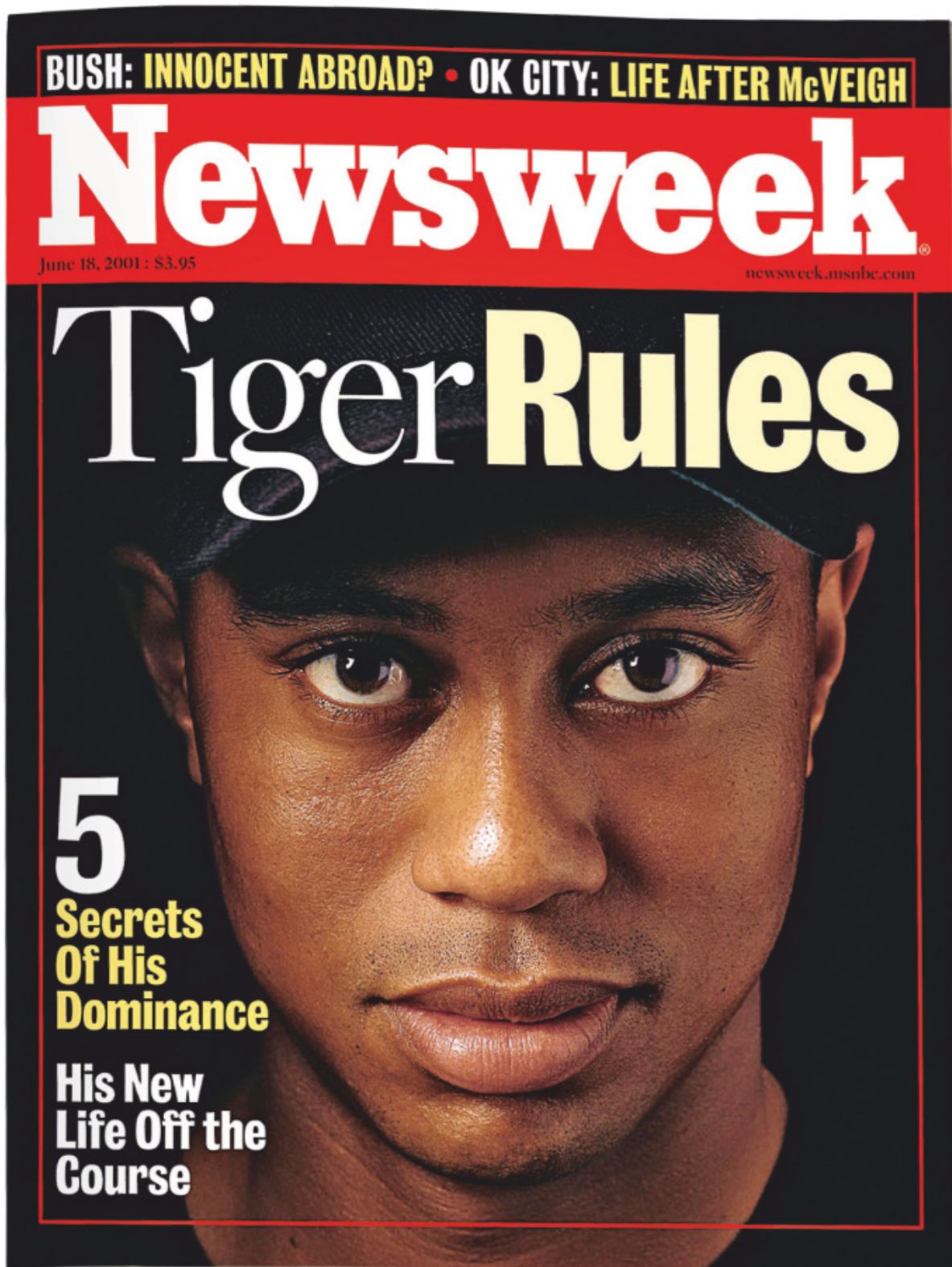


SAVE 79%

Subscribe
FROM \$1.72 PER WEEK

The Archives

2001 “It’s not just the swing,” *Newsweek* wrote on the heels of Tiger’s third consecutive win at the Memorial Tournament in Dublin, Ohio. “Woods has become a dominator, a supremely gifted athlete with emotional control and reservoirs of passion that make him the world’s greatest golfer.” Since then, Tiger has fallen from the top—both on and off the course. After breaking an 11-year major tournament drought with his latest comeback win and fifth green jacket at the Masters in April of this year, the question remains: Is he completely out of the woods?



1958 The phenomenon of 1958, according to *Newsweek*, “is the ever-swelling torrent of tablets, capsules, lozenges and ampules, and the demand for them.” One of the fastest growing major industries in the U.S., the drug-making field was making major advances constantly, from antidiabetics, to anti-sunburn pills. Our pace hasn’t slowed much since.



1983 “America’s first space-bound woman has already left the rest of the world behind,” wrote *Newsweek* as Sally Ride prepared for her mission aboard the *Challenger*’s successful second flight “some 22 years, 36 manned missions and 57 astronauts after the first *Mercury* capsule splashed into the Atlantic.” **N**

CLOCKWISE FROM LEFT: MICHAEL O’NEILL; ED WERGELES; ROBERT NOEL CERRI

ORLANE

PARIS

EXTRAORDINAIRE.
YOUTH IS BACK.

**firmer
skin**

97%

**wrinkles
fade**

88%

**moisturized
skin**

97%

**radiant
skin**

97%



* Results from self-evaluation tests on 40 women after 28 days.

PATENTED

Available at neimanmarcus.com and bergdorfgoodman.com

In Focus

— THE NEWS IN PICTURES



DAYTON, OHIO

In the Eye of the Storm

Eighteen tornadoes with winds up to 170 miles per hour touched down in the Dayton area the evening of Monday, May 27th into Tuesday morning, leaving one man dead, more than 100 people injured, and up to 70,000 customers without electricity. Bottled water was distributed for those affected by the storms, and a boil-water advisory was in effect until Thursday, May 30.

📷 → MEGAN JELINGER



MEGAN JELINGER/SOPA IMAGES/LIGHTPOCKET/GETTY



TOKYO, JAPAN

Throwing Weight Around

U.S. President Donald Trump and First Lady Melania Trump accompany Japan's Prime Minister Abe Shinzo and his wife Abe Akie to a sumo demonstration in Tokyo on May 26 during Trump's four-day ceremonial visit to Tokyo. President Trump was the first foreign leader to be received by Emperor Naruhito, who ascended the throne on May 1.

📷 → BRENDAN SMIALOWSKI



NEW DELHI, INDIA

Brief Relief

An Indian boy gets some temporary respite from the heat as he tries to cool off amid rising temperatures in New Delhi on May 29. The heat wave has lasted over a week with temperatures soaring as high as 116 degrees Fahrenheit. Relief is not expected until the monsoon rainfall begins in mid- to late-June.

📷 → MONEY SHARMA



LONDON, ENGLAND

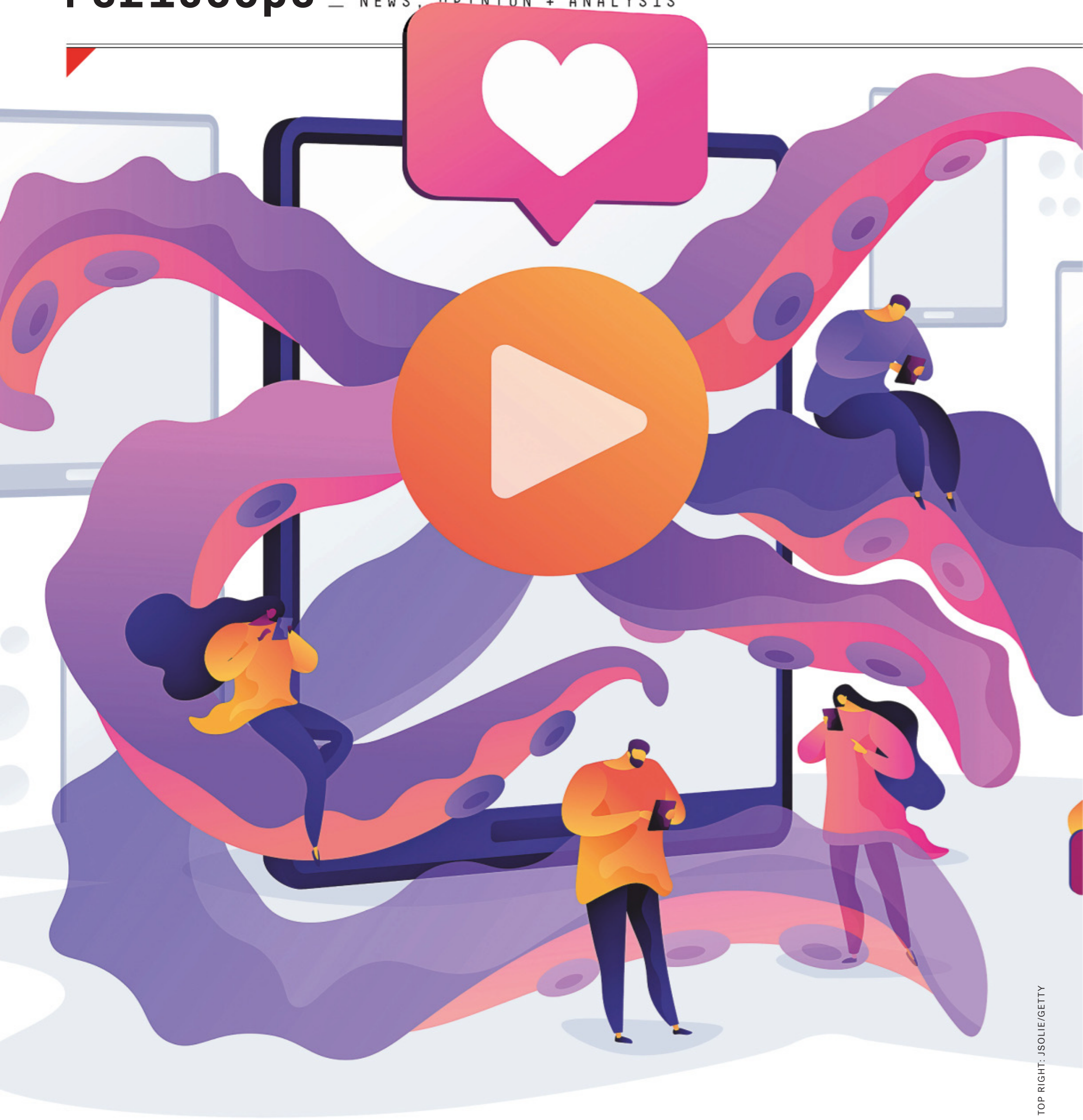
WikiProtest

Supporters of WikiLeaks founder Julian Assange protest outside Westminster Magistrates Court on May 30 during a hearing in Assange's extradition case to the U.S. He did not appear at the hearing due to his ill health. Assange was ejected from the Ecuadorian embassy after claiming asylum there for seven years, and now both Sweden and the U.S. are seeking to extradite him—Sweden for rape, and the U.S. for 17 new criminal counts in violation of the Espionage Act.

📷 → TOLGA AKMEN



CLOCKWISE FROM LEFT: BRENDAN SMIALOWSKI/AFP/GETTY; MONEY SHARMA/AFP/GETTY; TOLGA AKMEN/AFP/GETTY



SWIPE LEFT Smartphones provide constant distraction from real-world interaction—resulting in dissatisfaction with unvarnished life itself.

GETTY; TOP RIGHT: JSOLIE/GETTY

"Conservative Christians have felt increasingly culturally ostracized." » P.16



ADDICTION

Caught in the Web

Experts disagree about calling them “addicts” but compulsive gamers and social media obsessives have a lot in common with people who can’t stop drinking, taking drugs or gambling

➔ ONE SUMMER DAY IN 2010, A SWEDISH GRADUATE student named Daniel Berg approached me after a talk I gave at Christ’s College, Cambridge. During the talk, I had casually mentioned internet addiction. Berg told me that I had spoken a truth larger than I knew. Many of his male friends at Stockholm University had dropped out of school and were living in crash pads, compulsively playing *World of Warcraft*. They spoke an argot more English than Swedish. It was all raiding, all the time.

“How do they feel about their situation?” I asked.

“They feel *angst*,” Berg said.

“But they keep playing?”

“They keep playing.”

This sort of behavior does seem like an addiction, in the sense of a compulsive, regret-filled pursuit of transient pleasures that are harmful to both the individual and society. For gaming, the personal cost was highest for Swedish men. “I am,” Berg reported, “now the only male in my graduate program in economic history.”

Back home in Florida, I noticed digital distractions exacting a more impartial academic toll. The smartphones that dotted the lecture halls were as often wielded by women as by men. But when I told Berg’s tale to my students, they instantly recognized the type. One admitted that he had lost a year to compulsive gaming but was in recovery—precariously, to judge by his grades. Another knew gamers who kept cans by their

computers to avoid taking bathroom breaks.

The can by the computer became for me a symbol of the shifting meaning of addiction. As late as the 1970s, the word seldom referred to anything other than compulsive drug use. Over the next 40 years, however, the concept of addiction broadened. Memoirists confessed to addictions to gambling, sex, shopping and carbs. German sex therapists called internet porn a “gateway drug” that ensnared the young. A *New York Times* op-ed declared sugar to be addictive, “literally, in the same way as drugs.” A toothless young New Zealand mother drank up to 10 liters of Coke a day, then splashed the headlines when she died of coronary arrhythmia. A 19-year-old truant in Jiangsu Province made the news when he hacked off his hand to cure his internet addiction. Chinese officials judged as many as 14 percent

of his peers to be similarly hooked, and set up internet addiction rehabilitation camps. South Korea and Japan followed suit. Taiwanese legislators voted to fine parents who let their children spend too much

BY

DAVID T. COURTWRIGHT

time online, updating a law forbidding minors’ smoking, drinking, drug-taking and betel-chewing. Only the last habit failed to appeal to Americans, 47 percent of whom showed signs of at least one behavioral or substance addiction disorder in any given year in the early 2000s.

Often they showed signs of more than one. Medical researchers have discovered that substance and



behavioral addictions have similar natural histories. They produce similar brain changes; similar patterns of tolerance; and similar experiences of craving, intoxication and withdrawal. And they reveal similar genetic tendencies toward similar personality disorders and compulsions. The manic gambler and the casino barfly are apt to be one and the same. In 2013, the new edition of the bible of psychiatry, the *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*, described gambling disorders in language indistinguishable from drug addiction. In 2018, the WHO made it official by adding “gaming disorder” to the revised *International Classification of Diseases*.

Not everyone was happy with all the talk of addiction. Clinicians avoided it for fear of discouraging or stigmatizing patients. Libertarians dismissed it as an excuse for lack of discipline. Social scientists attacked it as medical imperialism. Philosophers detected equivocation, the misleading practice of using the same word to describe different things. For now, I will stick to the term “addiction” since it provides a concise and universally understood way of referring to a pattern of compulsive, conditioned, relapse-prone and harmful behavior. Why has this pattern of harmful behavior become increasingly conspicuous and varied?

Digital Addictions

Internet addicts and food addicts are strikingly similar. Food addicts have to eat, while drug and gambling addicts at least have a shot at a clean break. Online temptation is well nigh inescapable, internet access having become an assumed feature of life in developed societies. Addiction therapists know the score. They aim for “abstinence from problematic applications and a controlled and balanced internet usage,” just as food addiction

recovery groups promote measured and balanced eating. The similarities do not end there. Both food and internet addicts become obsessed, lose control, display tolerance, manifest associated disorders like anxiety and impulsivity and experience depression during withdrawal. They often relapse and persist despite family badgering and social opprobrium. And their numbers have been growing. Surveys undertaken in the United States and Europe between 2000 and 2009 (before widespread smartphone use aggravated the situation) reported internet addiction prevalence rates between 1.5 and 8.2 percent. Chinese studies found values ranging from 2.4 to 6.4 percent, though some subgroups, such as Taiwanese university freshmen, approached an 18 percent addiction rate. In developed nations, internet addiction has become at least as common as food addiction. Among adolescents it is much more so.

Addiction to the internet and other electronic pastimes reveals itself most clearly in the harsh light of abstinence. In 2010, an international team of researchers asked 1000 college students from 10 countries to go without electronic media for 24 hours and to record how they felt. The typical response involved a combination of surprise, restlessness, boredom, isolation, anxiety and depression, often prefaced with a frank admission of excessive use and addiction that cut across cultures.

As with alcohol, drugs, processed food and gambling, electronic media consumption is subject to the principle of *hormesis*—or more simply, “stimulation.” Stimulants often provide beneficial effects at low doses, harmful ones at high doses. Consumption runs along a spectrum from occasional, beneficial use to relieve boredom and boost morale—the digital equivalent



THE STRUGGLE IS REAL Given the pervasiveness of electronic media, digital addicts find it especially difficult to limit their usage; abstinence from the most problematic applications is the goal.

of a coffee break—to heavy, escapist use that harms self and others. Clinicians differ over whether to call the latter condition internet addiction, internet addiction disorder, internet use disorder, pathological internet use disorder, or something else entirely. They do, however, discern a common denominator. The heaviest users are those who have come to strongly prefer recreational life online as a way of tuning out IRL (in real life) hassles. They behave much like machine gamblers slipping into the zone, save that most of their activities, such as massively multiplayer online role-playing games, have a social aspect that reinforces the virtual seduction. No self-respecting *World of Warcraft* DPS (a character who inflicts a large amount of damage per second) would want to miss their guild’s next big raid. IRL types take a dim view of such pursuits. Teachers issue failing grades, parents



The can by the computer became for me a symbol of the shifting meaning of addiction.

threats, employers pink slips, spouses papers for divorce, and judges treatment orders for internet boot camps.

Libertarians and medicalization skeptics think forced treatment is absurd. The arguments over food addiction—Is it really an addiction like drugs? Is it an acquired brain disease to which some individuals are more susceptible than others?—have cropped up again over internet addiction. Only this time the debate has been messier, because internet addiction includes a much wider range of activities than compulsive eating.

Among them are addiction to digital pornography, online gambling, video and role-playing games, adult-fantasy chatrooms, shopping on sites like eBay, social media platforms, and websurfing. Different groups of people display different types of addiction. Boys and men are more inclined to online video games and pornography, girls and women to visually oriented social media and compulsive buying. Some psychiatrists class the latter as an addiction, others as a type of obsessive-compulsive disorder.

Fear of Missing Out

Another thing that makes internet addiction difficult to assess is its relative novelty, especially habitual social media use via camera-equipped, internet-accessible mobile devices. Little historical perspective is available, though three things stand out.

First, digital connectivity and mobility have spawned genuinely new patterns of addictive behavior. Putting aside academic disputes over categories and causes, the behaviors themselves have become social facts. When I told people that I was writing an updated history of addiction, the near-universal response was that I should include kids glued to their smartphones. What had once been a peripheral nuisance has become a real worry, given the rising toll of accidents caused by distracted drivers, not to say reports of increased bullying, anxiety and academic failure. Compulsively studying social media posts leaves less time for studying everything else.

Second, the development of the internet created new, global opportunities for the dissemination of old vices and addictions, including gambling, psychoactive drugs, prostitution and pornography. Indeed, porn has accounted for a significant portion of internet traffic from the time

of its commercial inception.

Third, both developments—new bad habits and new outlets for old ones—have been engineered to maximize revenue, data on consumers and time spent on the device or app. Attention is the key corporate asset and behavioral science the means to claim it. For every individual trying to exercise self-control over computer use, pointed out the ethicist Tristan Harris, there are a thousand experts whose job it is to break it down. Game makers study young players and analyze their mouse clicks to devise reinforcement schedules that prolong play and stimulate in-game product purchases.

All three aspects of digital vice and addiction—new, old, designed—figured in journalist Nancy Jo Sales' *American Girls: Social Media and the Secret Lives of Teenagers* (2016). Sales interviewed over 200 smartphone-equipped girls aged 13 to 19, about how social media had affected them.

Sales' subjects volunteered that they were addicted to or obsessed with their phones, internet videos and social media, to which the heaviest users devoted from nine to 11 hours a day. As with other addictions, reinforcement had a positive and negative dimension. Every like on a post or photo, every retweeted message, was a small psychic jackpot. The continual flow of information, especially information about where one stood in the hotness pecking order, was a potent form of reward. Not having access to that information was a source of gnawing anxiety. Like much else online, it acquired its own name, FOMO. Fear of Missing Out.

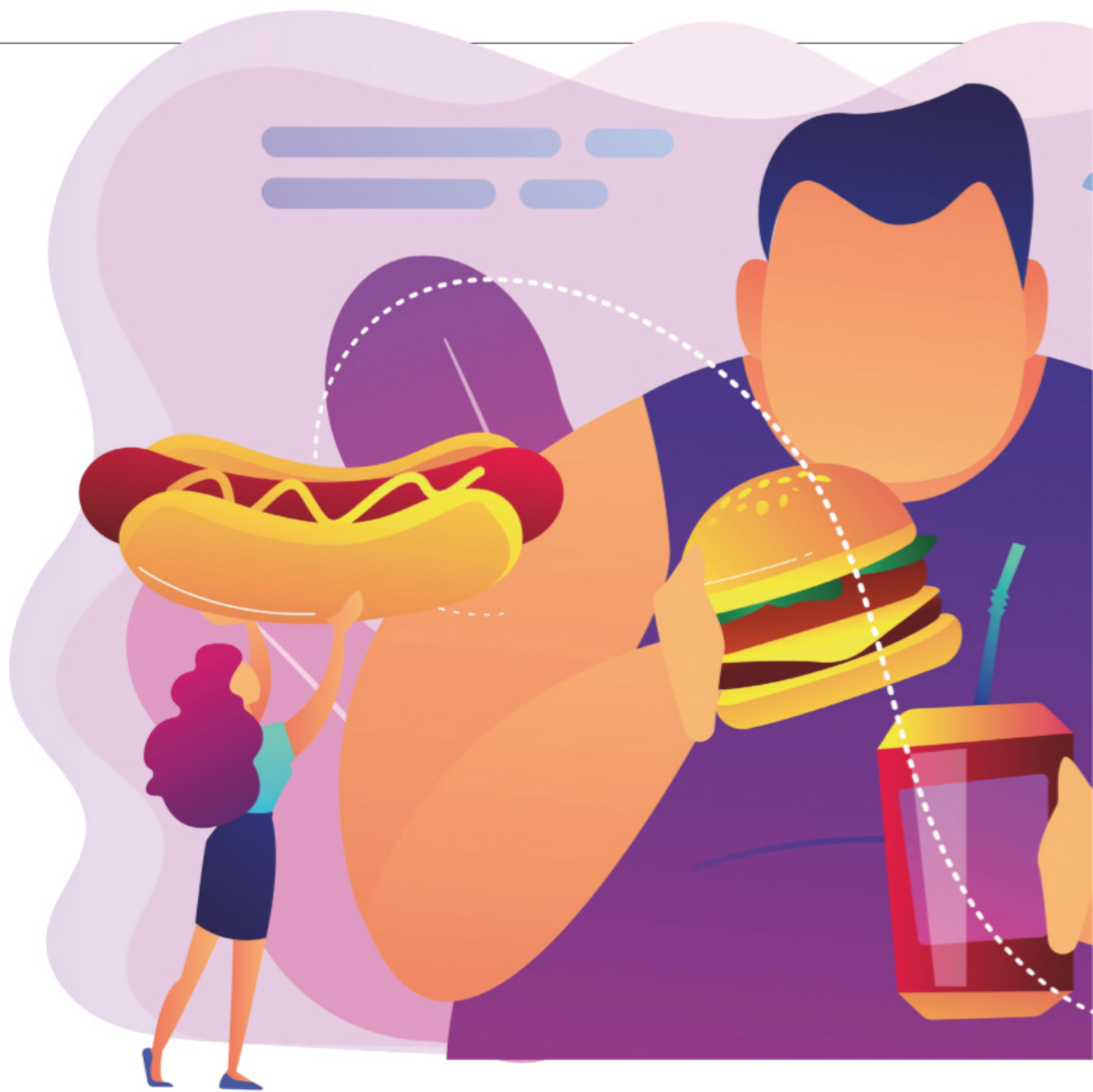
Yet boys too pay a price for easy, uncensored internet access. They become ensnared in a loutish bro culture and a world of pornographic fantasy that can result in sexual dysfunction. The reason college men

Periscope

are having trouble getting erections, a male Ivy League student told Sales, is excessive porn use.

It is as if, in the span of a century, there have been three revolutions of technology and sex. The first, artificial contraception, separated sex from procreation. The second, digital pornography, separated sex from physical contact between persons. And the third, online remoteness and impersonality, separated sex from courtship and its customary object, marriage. When sex is cheap, quick and always available, why bother with corsages, dinner dates and engagement rings?

As they multiplied, the digital hooks became sharper. In September 2006, Facebook was just another “fun” site, a novelty open to anyone who was 13 years old and in possession of a valid email address. Ten years later it was an obsession, with more than a billion daily active users, a claim on the attention of nearly 40 percent of the global online population, and the foundation of the world’s fifth most valuable corporation. None of this was accidental. Designers of social media platforms and video games rely on pleasure’s traditional art of combination. The difference is that, instead of sugar, salt and fat, they select from a menu of psychological ingredients. The big six are compelling goals just beyond the user’s immediate reach; unpredictable but stimulating feedback; a sense of incremental progress and hard-won mastery; tasks or levels that gradually become more challenging; tensions that demand resolution; and social connections to like-minded users. Insiders call the social aspect the “rewards of the tribe.” Tribes punish, too. “You’ve got to keep up with the virtual Joneses,” explained Ryan Van Cleave, an English professor who lost his job at Clemson because he was



Both food and internet addicts become obsessed, lose control, display tolerance manifest associated disorders like anxiety and impulsivity and experience depression during withdrawal.

— playing *World of Warcraft* 60 hours a week. When he finally quit, to avoid losing his family, he suffered drenching sweats, nausea and headaches.

The primary danger, particularly with smartphones, is constant

distraction from personal conversation, sleep, driving, study, reflection, practice and work, which translates into difficulty achieving or maintaining intimacy, health, safety, knowledge, creativity, expertise and socially constructive flow states. Like gambling machines, social media and other digital diversions offer alternative flow states through virtual shortcuts that exact their price in money, time and diminished real-life accomplishments, satisfactions and tolerance for electronically unvarnished life itself.

“Facebook remains the greatest distraction from work I’ve ever had,” the writer Zadie Smith confessed, “and I loved it for that.” With a literary career at stake, she broke off the affair after two months. She was wise to do so. The novelist Jonathan Franzen,



FOOD PORN Convenience food is hard to resist when loaded with sugar, fat and salt and paired with targeted product placement, packaging and advertising—helping make overeating big business.

important, like earning a living, or eating meals or caring for your children.” Like other forms of addictive behavior, time suck is self-perpetuating. If dereliction from real-life duties creates stress, or immersion in the virtual world creates loneliness, anxiety and depression, then escapism is just the thing. George Koob, the director of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) said, “People often drink because they don’t feel good, but drinking makes them feel worse, so they drink more.” This applies equally to digital addictions.

In 2017, Loren Brichter, who created the pull-to-refresh mechanism by which users of Twitter and other apps could update their feeds by swiping down on the touchscreen, said he regretted his invention. He called it addictive, a lever on a slot machine. Justin Rosenstein, who coded the like-button prototype, wished he had not bestowed “bright dings of pseudo-pleasure” on a distracted world. Chamath Palihapitiya, Facebook’s former vice president for user growth, hated that “the short-term, dopamine-driven feedback loops that we have created are destroying how society works. No civil discourse. No cooperation. Misinformation. Mistruth.” It was not, he emphasized, an American problem. It was a global problem. Capturing and monetizing eyeballs had become an irresistible game.

Repentant or not, Silicon Valley elites watched out for the eyeballs of their own families. “We limit how much technology our kids use at home,” Apple’s Steve Jobs told an incredulous reporter, who had imagined his dining table tiled with iPads.

“Not even close,” Jobs said. He wanted his children to discuss books and history at family meals. The five children of Chris Anderson, former editor of *Wired*, complained of their parents’ tech-denying rules. “That’s because we have seen the dangers of technology firsthand,” Anderson told the same reporter. “I’ve seen it in myself, I don’t want to see that happen to my kids.” Palihapitiya was more explicit. He didn’t use “this shit” and wouldn’t let his kids, either. Other tech executives and engineers dealt with the problem by imposing time limits, refusing phones to their kids before their mid-teens and never allowing screens in their bedrooms. Extending the low-tech writ beyond their homes, they enrolled their children in prep schools where iPhones, iPads and even standard laptops were forbidden.

The Age of Addiction

The medical historian Charles Rosenberg wrote that “in some ways, disease does not exist until we have agreed that it does—by perceiving, naming and responding to it.” That goes double for new addictions: we are in a bull market for perceiving, naming and responding to them, socially manufactured or otherwise. In the end, though, it matters less what we call these excesses than that we understand their price. We not only live in an age of addiction. We live in an age when the commercialized temptation to downshift our brains from disciplined, cortical pleasures to baser ones has never been more intense. Like never before, bad habits are big business. ■

→ Excerpt adapted from *THE AGE OF ADDICTION: HOW BAD HABITS BECAME BIG BUSINESS*, published by Harvard University Press. Copyright © 2019 by the President and Fellows of Harvard College. Used by permission. All rights reserved.

who wrote portions of *The Corrections* wearing a blindfold and earplugs, doubted whether anyone working with an internet connection was capable of writing good fiction. Professors doubted whether students so equipped could sustain original arguments, fears borne out by research showing social media use inversely correlated with grades. Psychologists showed that mere proximity to a silenced smartphone diminishes cognitive ability, particularly in habitual users. Lit up or vibrating, the devices are guaranteed to divert attention, as is any form of regular online access.

The condition acquired a name, “time suck,” defined in the Urban Dictionary as something “engrossing and addictive, but that keeps you from doing things that are actually

OPINION

What the Religious Right Gets Right

Conservative Christians and other religious fundamentalists have legitimate concerns. It would serve their opponents well to acknowledge that

➔ IN MY NEW BOOK *SACRED LIBERTY*, I offer many examples about how modern claims of persecution by religious conservatives are exaggerated—and how Donald Trump has weaponized religious freedom concerns to sow division and beat up opponents.

That said, it's important to understand that traditional American Christians are not hallucinating when they express concerns about their religious status and rights.

After the passage of Alabama's anti-abortion law, some progressives claimed that the action was a violation of the separation of church and state because the sponsors had religious motivations. "Under no circumstances are we supposed to be imposing our faith on other people," said presidential candidate Kirsten Gillibrand, the Democratic Senator from New York.

That logic suggests public policy positions driven by religion should be off the table, while stances driven by secular reasons are legitimate. It would be like saying that Democrats could oppose the Iraq war for practical reasons but not for moral or religious reasons. That subordinates and minimizes religious teaching and motivation.

Religious institutions get second-class status. Sometimes, an overly rigid application of separation of church and state can lead to disadvantaging religion. For instance, a federal law allows student loans to be forgiven for people who go into "public service" professions. But the Department of Education has ruled that joining the ministry doesn't count.

Similarly, the Federal Emergency Management Agency at one point refused to provide financial support to churches after devastating hurricanes in Texas. And a group of residents in Acton, Massachusetts sued to block the state from using historic preservation funds to preserve old churches along with secular buildings.

Religious institutions shouldn't get preference but they also shouldn't

be subordinated.

Religious sensibilities are ignored or disparaged. Here's a personal story. My wife and I were sitting in the audience at my son's elementary school concert in Brooklyn, New York, listening to his class belt out the lyrics to Don McLean's *American Pie*.

*Did you write the book of love
And do you have faith in God above
Everybody tells you so. . . .*

Wait. I could have sworn that last

line was, "If the Bible tells you so." Did they really just cut a reference to the Bible out of *American Pie*? Yes, they did.

The incident neatly captures a shift in the place of religion in American culture. The leaders of our son's private school figured it would be safer to excise a phrase that might offend secular people or religious minorities. But it didn't occur to them that deleting the reference to the Bible might bother devout Christians who take scripture seriously.

Same-sex marriage leads to restraints on Christian organizations and expression. Before the U.S. Supreme Court declared, in *Obergefell v. Hodges*, a constitutional right to same-sex marriage, the opinions of conservative Christians who opposed



the practice were as legitimate as anyone else's in a country of conflicting views and laws. After the ruling, they were opposing a *Constitutional right*.

That shift has real implications. For instance, the federal government at one point in the 1980s tried to withdraw financial benefits from Christian colleges that banned interracial dating. A logical extension of *Obergefell* might be that the government would eventually deny benefits to schools that are against same-sex marriage, as many conservative Christian colleges are.

Meanwhile, some conservative organizations have been labeled "hate groups" because of their anti-LGBT position. This could conceivably make conservative churches that share their beliefs the targets of

efforts to curtail "hate speech."

Even when they're not in legal jeopardy, conservative Christians have felt increasingly culturally ostracized. When the owners of Memories Pizza in Walkerton, Indiana, told a local television station that, if asked, they would not provide pizza for a same-sex wedding because it violated their religious beliefs, they were deluged with attacks and negative reviews on Yelp, and even had to close down the restaurant temporarily.

Part of the difficulty with the issue of same-sex marriage is the speed with which public opinion shifted. Religious beliefs usually take centuries to evolve. With *Obergefell*, same-sex marriage passed from a marginal idea to acceptable to required within two decades, leaving conservative Christians feeling as if the ground had fallen out beneath them.

The LGBT position is understandable: Christian churches now use the Bible to justify discrimination. But Andrew Sullivan, one of the intellectual forefathers of the same-sex marriage movement, advocates for giving religious conservatives much leeway, saying: "We're winning this argument. We've made the compelling moral case that gay citizens should be treated no differently by their government than straight citizens. And the world has shifted dramatically in our direction. Inevitably, many fundamentalist Christians and Orthodox Jews and many Muslims feel threatened.

In a free and live-and-let-live society, we should give them space."

Sullivan's argument is not about the Constitution. It's about tactics and the big picture. LGBT advocates in Utah recently took this approach, joining with leaders of the Mormon Church to forge the "Utah Compromise." In exchange for rules to protect gays in the workplace, LGBT leaders agreed that employees could not be fired for expressing their religious views, even if they were anti-gay.

Professor Chai Feldblum, a prominent LGBT activist who was raised as an Orthodox Jew, suggests that if we discard the winner-take-all mentality, we can sensibly balance the rights of LGBT families and religious believers.

The key, she says, is to make the effort. See if there is a way to accommodate believers. If there isn't, Feldblum says, by no means compromise on core principles. But don't start with the premise that any accommodation is a capitulation to bigotry. Instead, "acknowledge the full and complex reality of those who are different from us and then find the generosity of spirit to reach across divides."

The same can be said for the progressive approach to religious conservatives in general. If you attempt to see the new landscape through their eyes, you may still disagree but you may understand their fears and motivations. That would be both shrewd—outcomes like the Utah Compromise might result—and gracious. If you want religious conservatives to stop caricaturing you, then you should return the favor. ■

**Even when they're not
in legal jeopardy,
conservative Christians
have felt increasingly
culturally ostracized.**

→ **Steven Waldman** is the author of *SACRED LIBERTY: AMERICA'S LONG, BLOODY, AND ONGOING STRUGGLE FOR RELIGIOUS FREEDOM*, and co-founder of *Report for America*. The views expressed in this article are the author's own.

NEWSMAKERS

Talking Points

Chicago Tribune

"I want to put a net around the whole stadium"

—CHICAGO CUBS OUTFIELDER ALBERT ALMORA JR. AFTER HITTING A FOUL BALL THAT STRUCK A 3-YEAR-OLD GIRL IN THE STANDS

CNN

"THE PRESIDENT HAS HIS OPINIONS. I HAVE MINE. VERY OFTEN WE ALSO FIND COMMON GROUND. IF NOT, WE HAVE TO KEEP ON TALKING AND NEGOTIATING."

—ANGELA MERKEL



Angela Merkel



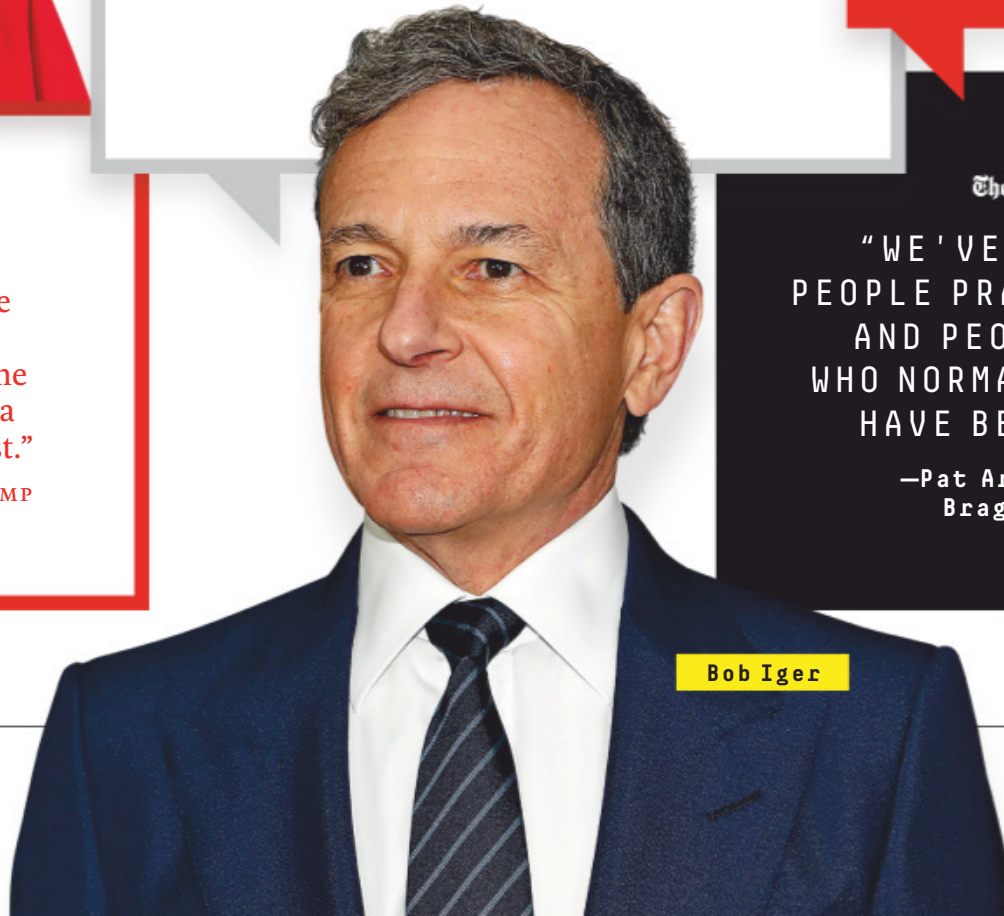
"And now Russia has disappeared because I had nothing to do with Russia helping me to get elected. It was a crime that didn't exist."

—PRESIDENT DONALD TRUMP



"I think many people who work for us will not want to work there, and we will have to heed their wishes in that regard."

—WALT DISNEY CEO BOB IGER ON GEORGIA'S NEW LAW BANNING ABORTION AFTER A HEARTBEAT IS DETECTED



Bob Iger



"CHAMPIONNE" (CHAMPION), "REINE" (QUEEN), "DEESSE" (GODDESS) AND "MERE" (MOTHER)

—Words on warm-up jacket worn by Serena Williams at French Open



Serena Williams

The New York Times

"Wow, what is that, man? Look at it fly!"

—U.S. NAVY PILOT SEEING AN UNIDENTIFIED OBJECT

The New York Times

"WE'VE GOT A LOT OF PEOPLE PRAYING IN BRAGGS, AND PEOPLE PROBABLY WHO NORMALLY DON'T PRAY HAVE BEEN PRAYING."

—Pat Arney of flooded Braggs, Oklahoma

FROM LEFT: BERND VON JUTRCZENKA/PICTURE ALLIANCE/GETTY; TAYLOR HILL/FILMMAGIC/GETTY; TIM CLAYTON/CORBIS/GETTY

Violence is an epidemic.

What if there was a cure?

As a critical response to violence and injustice, a worldwide campaign is introducing the reality of nonviolence to billions of people. Real stories. Real change.

Discover more at nonviolencenow.org

nonviolence n^ow



THE EARTH

BGBLUE/GETTY



...But the Flat Earth
movement is growing,
and its tactics are spreading.
It's time we learned how
to talk to science deniers

IS ROUND...

by LEE MCINTYRE



COUNTERCLOCKWISE FROM LEFT: AVALON/UGC/GETTY; HARRISON H. SCHMITT/NASA; PAUL MORIGI/GETTY; HYOUNG CHANG/THE DENVER POST/GETTY

E

VERY DAY IN THE MEDIA, WE SEE ONCE-unthinkable science headlines. More than 700 cases of measles across 22 states in the U.S., largely due to those who believe vaccines do more harm than good. Climate change legislation stalled in the U.S. Senate—mainly because of partisan politicians who routinely confuse climate and weather—even as scientists tell us that we have only until 2030 to cut worldwide carbon emissions by half, then drop them to zero by 2050. And, in one of the most incredible developments of my lifetime, the Flat Earth movement is on the rise.

The attack on science has gotten so bad that two years ago there was a “March for Science” in 600 cities around the world. At the one in Boston, I saw signs that said, “Keep calm and think critically,” “Extremely mad scientist,” “No science, no Twitter,” “It’s so severe, the nerds are here,” and “I could be in the lab right now.”

It takes a lot to get scientists out of their labs and onto the streets, but what else were they supposed to do? The issue of what’s special about science is no longer purely academic. If we cannot do a better job of defending science—of saying

how it works and why its findings have a privileged claim to believability—we will be at the mercy of those who would reject it.

Scientists (and others who care about it) have not really found an effective way of fighting back against science denial. In this “post-truth” era—with headlines like “Why Facts Don’t Change Our Minds”—it is an open question how to convince people who reject evidence, not just in science, but also on a host of other factual matters. In the empirical realm, scientists often choose to respond by presenting their evidence, then get upset and refuse to engage more when their data aren’t accepted or their integrity is questioned. Perhaps this is understandable, but I also believe it is dangerous just to walk away and dismiss science deniers as irrational (even if they are). Even worse is to react to their hectoring on the question of whether there is “100 percent consensus” on global warming, or whether we’re “certain” that vaccines don’t cause autism, by blustering about “proof,” which only gives aid and comfort to one of the most damaging myths about science: that until we have proof, any theory is just as good as any other.

But we really can’t afford to do this anymore, nor can we afford to defend science simply by talking about its successes.

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal,
providing you various content:
brand new books, trending movies,
fresh magazines, hot games,
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



AVXLIVE **ICU**

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>

Climate change “skeptics” already know about the marvels of penicillin ... but what does that have to do with the spike in global temperatures in 1998? And philosophers of science have spent the past hundred years looking in vain for some definitive logical “criterion of demarcation” between science and non-science, so we can clearly call out pseudo-science.

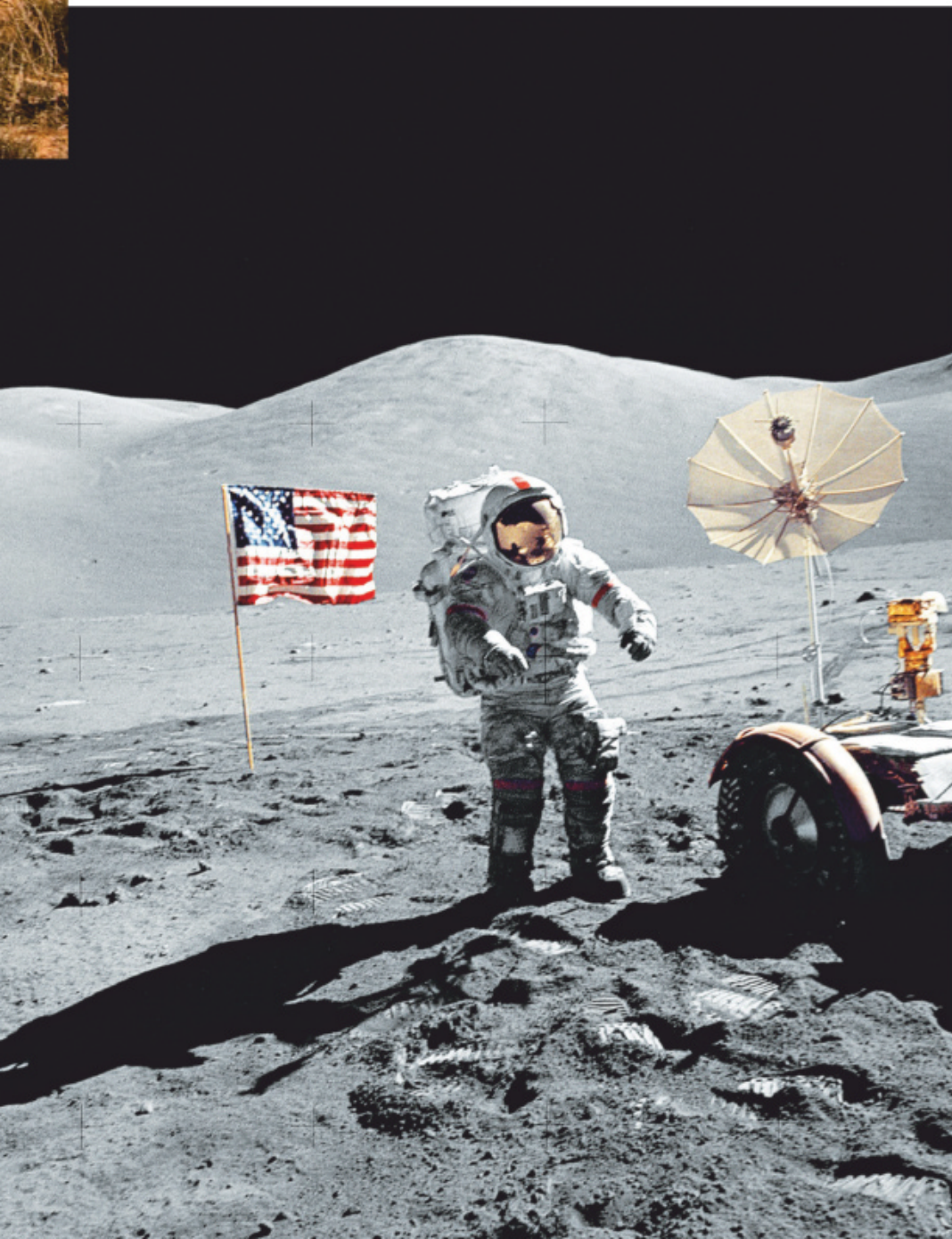
A better way to respond is to stop talking about proof, certainty and logic, and start talking more about scientific values. What is most distinctive about science is not its method but its attitude: the idea that scientists care about evidence and are willing to change their views based on new evidence. This is what truly separates scientists from their deniers and imitators.

I had a chance to test this theory in person when I attended the Flat Earth International Conference (FEIC) in Denver last November. I found myself among 600 cheering, clapping Flat Earth advocates in the main ballroom of the Crowne Royal Hotel and Convention Center, who were taking part in a two-day

extravaganza of talks and multimedia performances that present “evidence” that the “globalists” have been pulling the wool over our eyes for millennia.

On a scale of mainstream respectability, Flat Earthers would probably fall below climate change deniers and even anti-vaxxers. Few people truly believe that the Earth is flat (though the number increases among millennials compared to other age groups). Indeed, I’ve encountered many people who question rising temperatures and the safety of vaccines who are loath to be included in the same category as those who think Pythagoras, who first postulated that the Earth was a sphere, was part of a vast conspiracy that extends to airplane pilots and passengers, NASA scientists and anyone else in a position to know “the truth” about Earth’s shape. But the habit of thought among all these groups, as my visit to Denver confirmed, is strikingly similar. If we are going to understand science denial and figure out how to counter it, the Flat Earth conference is a good place to start.

VAST CONSPIRACIES Some people believe unlikely plots rather scientific consensus not only on climate change but also on whether or not the earth is flat. Clockwise from below left: the Apollo moon program is a hoax, according to Flat Earthers; maps of the “flat” earth were on sale at last year’s meeting of the Flat Earth society; the March for Science in Washington, D.C. was a response to science deniers. Facing page: a coal-fired power plant emits climate-changing gases.



NASA and Other ‘Space Lies’

First, let’s deal with the threshold question: Yes, these people were serious. Believing the Earth is flat is not something one would come to lightly, for they are routinely persecuted for their views. Everyone I spoke to said they used to believe in the global Earth but one day “woke up” and realized that there was a worldwide conspiracy of people who had been lying to them. “Trust your eyes” was their mantra. “Do your own experiments.” “Water is level.” “Space is fake.” “A government that could lie to you about 9/11 and the moon landing is one that could lie to you about Flat Earth.”

Most Flat Earthers describe their conversion as a quasi-religious experience, where one day they “took the red pill” (they adore the movie *The Matrix*) and realized the truth that the rest of us have been blind to for our entire lives, as a result of our miseducation and indoctrination—the Earth is flat.

To state this immediately raises a series of questions: What do they actually believe? (That the Earth is a disk, with the “mountains of Antarctica” spread out along the perimeter and a dome over the top.) Who could keep such a secret? (The government, NASA, airline pilots and others.) Who put them up to it? (“The adversary,” one man told me. “The devil rewards them mightily for covering up God’s truth.”) Why don’t others realize the truth? (Because they’ve been fooled.) What is the benefit of believing in Flat Earth? (Because it’s the truth! And, for many, it is the only physical account that is consistent with the Bible.) What about all of the scientific proof of a round Earth? (All flawed...which is what the conference was about.)

To spend two days attending seminars with titles such as “Globebusters,” “Flat Earth With the Scientific Method,” “Flat Earth Activism,” “NASA and Other Space Lies,” “14+ Ways the Bible Says Flat Earth,” and “Talking to Your Family and Friends About Flat Earth” felt in some ways like spending two days on another planet. The arguments were absurd, but intricate and not easily run to ground, especially if one buys into the Flat Earthers’ insistence on first-person proof. And the social reinforcement that participants seemed to feel in finally being among their own was palpable. Psychologists have long known that there is a social aspect to belief. FEIC 2018 was a lab experiment in peer pressure.

For the first day, I kept my mouth shut and just listened. I wore the conference badge and took notes. The second day, I came out hard as a philosopher of science. After numerous conversations, I came away with the conclusion that Flat Earth is a curious mixture of fundamentalist Christianity and conspiracy theory, where outsiders are distrusted and belief in Flat Earth is (for some) tantamount to religious faith. This is not to say that most Christians believe in Flat Earth, but almost all of the Flat Earthers I met (with a few notable exceptions) identified as Christians. While they claimed not to rely on faith as proof of their beliefs—and were anxious to present their own “scientific evidence”—most did seek empirical findings that would make all of their beliefs (both

DENIAL STRATEGY

The best way to respond to science deniers, says the author, is to talk about scientific values. Clockwise from right: Flat Earthers convened in Chicago last year; parents and teachers held a rally in Los Angeles in 2015 to oppose efforts to end “personal belief” exemptions for childhood vaccinations; pilots who point out that the Earth is round are in on the conspiracy, deniers say; an example of the “mirage effect.”



CLOCKWISE FROM TOP: INTERIM ARCHIVES/GETTY; IRFAN KHAN/LOS ANGELES TIMES/GETTY; NICOLAS ECONOMOU/NURPHOTO/GETTY; PETE TURNER/GETTY



The problem with conspiracy theorists is that they hold themselves up as skeptics, but they are actually **QUITE GULLIBLE.**

spiritual and worldly) consistent with one another. And once they started looking, the evidence was all around them.

Most of the presentations were designed to show that the “scientific” evidence for a global Earth was flawed, and that their own “evidence” for Flat Earth was solid. Virtually all of the standards of good empirical reasoning were violated. Cherry-picking evidence? Check. Fitting beliefs to ideology? Check. Confirmation bias? Check. How to convince anyone in this sort of environment? You don’t convince someone who has already rejected thousands of years of scientific evidence by showing them more evidence. No matter what I presented, there was always some excuse: NASA had faked the pictures from space. Airline pilots were in on the conspiracy. Water can’t adhere to a spinning ball.

So I tried a different tactic. Instead of talking about evidence, I went after their reasoning.

The problem with conspiracy theorists is that they hold themselves up as skeptics, but they are actually quite gullible. There is a rampant double standard for evidence: No evidence is good enough to convince them of something they do not want to believe, yet only the flimsiest evidence is required to get them to accept

something they do want to believe. Contrast this to the “scientific attitude,” which is a mindset of flexibility toward changing one’s beliefs based on new evidence.

This was my leverage.

Instead of saying, “Show me your evidence,” which they were only too happy to do, or “Here’s my evidence,” which they wouldn’t believe anyway, I asked, “What would it take to convince you that you were wrong?” They seemed unprepared for this question.

I started with one of the main presenters after he had just walked off stage. Although he admitted that he didn’t have any science background, he wore a white lab coat, which was all the authority he said he needed. What evidence, I asked, might convince him the Earth was round? He said, “Just give me proof.” I asked what kind, and he referred me back to one of the pieces of “evidence” he had just presented from the stage: A picture of the Chicago skyline from 60 miles out in Lake Michigan that had been taken by a Flat Earth “researcher.” If the Earth was curved, the buildings should have fallen below the horizon, out of sight.

“But wait,” I said, “You just told us that every photo from NASA was Photo-



shopped.... Yet I'm supposed to believe this one?"

"Yes," he answered, "because I know the guy who took it—and I went out on Lake Michigan myself and recreated it from only 46 miles out."

I'll say this for the Flat Earthers: They can do math. During his talk I'd done a quick calculation to determine that you only had to go out 45 miles for the tallest building in Chicago to disappear below the skyline. So was he right?

No, due to something called the "superior mirage effect." This is a familiar physical phenomenon that occurs during a temperature inversion, when air near the surface is cooler than the air above it; light from a distant object bends slightly downward, creating an optical illusion in which the object appears to be higher in the sky than it actually is. The Chicago skyline in the photographs was a mirage. (We've all seen a similar illusion of the "inferior mirage effect" when, on a hot day, water seems to appear on the pavement.)

He laughed.

"I dealt with that in my talk," he said. "It's made up."

"You didn't deal with it in your talk," I said. "You just said you didn't believe it."

"Well, I don't," he said.

A crowd of his admirers was pushing close and he began to get antsy, but I had one final question.

"So why didn't you go out one hundred miles then?" I asked.

"What?"

"A hundred miles. If you'd gone out that far not only the city would've disappeared but also the mirage too. If it didn't, you'd have your proof."

He shook his head, "We couldn't get the captain of the boat to go out that far."

Now it was my turn to scoff.

"What? You've devoted your entire life to this work and you



If we cannot do a better job of defending science,



FROM LEFT: SUSAN WALES/GETTY; MADDIE MEYER/GETTY; MARIO TAMA/GETTY

DO YOU BELIEVE YOUR LYING EYES?

People with strongly held beliefs, research shows, are usually not persuaded to change their minds by data or logic but by people they trust. Left to right: Due to the earth's rotation, stars appear to circle the North Star above Joshua Tree National Park in California; Kyrie Irving, who plays basketball for the Boston Celtics, has publicly said that he thinks the earth is flat; an iceberg the size of Delaware calved off the Larson C Ice Shelf in Antarctica in 2017, due to rising temperatures.

didn't go? You had the definitive experiment within reach and you couldn't go out an extra 55 miles?"

He turned his head and began to talk to someone else.

Why Worry about Flat Earthers?

SUCH AN ENCOUNTER MIGHT SEEM LIKE A HARMLESS CURIOSITY, but something similar happens every day with other science deniers. I went to FEIC 2018 to test my theory that all science deniers follow the same basic reasoning strategy: start with a hypothesis you are committed to, no matter its improbability; cherry-pick evidence in its favor; discredit those who disagree with you and cast doubt on their work; cite your own experts (even if they have no expertise); claim that you are being more scientific than the scientists; and throw in a little conspiracy theory. That's what Flat Earthers do. It's what Robert F. Kennedy Jr. is doing when he says the Centers for Disease Control paid to suppress the data on thi-

merosal, the mercury-based vaccine additive claimed (falsely) to cause autism. It's what Ted Cruz is doing when he claims, using the abnormally hot year of 1998 as a baseline, that there has been no global warming in two decades. Flat Earthers may not be dangerous per se, but their tactics are having life and death consequences.

Talking with science deniers is going to be a long process. They won't be persuaded by evidence because their views are not based on a rational way of responding to evidence in the first place. Of course I didn't convince the speaker, or anyone else over my 48 hours at FEIC 2018. But I did do one important thing that might have affected their belief. I showed up.

Research has shown that people aren't convinced by data, but by having conversations with people they trust. I don't pretend that the speaker at FEIC trusted me, but I do think that I built up some credibility by not just doing a quick hit-and-run interview, then leaving. I stayed at the convention and had many more

we will be at the mercy of those who **WOULD REJECT IT.**



conversations. I even took another guest speaker out to dinner, where we had a two-hour talk about rocket travel and flights over Antarctica. He was intelligent, nimble and an excellent debater. I even liked him. But we disagreed on almost everything.

When people feel threatened they tend to retreat into their silos, and the Flat Earth community is no different. They do their “research” by viewing a spate of Flat Earth videos on Youtube and—now that a quorum has been reached—they go to conventions. There is even an upcoming Flat Earth cruise planned to “reach the ice wall” in 2020. They really do seem to want to pursue evidence. (My idea: How about a reality TV show that follows them on this cruise? Call it Edge of the Earth.)

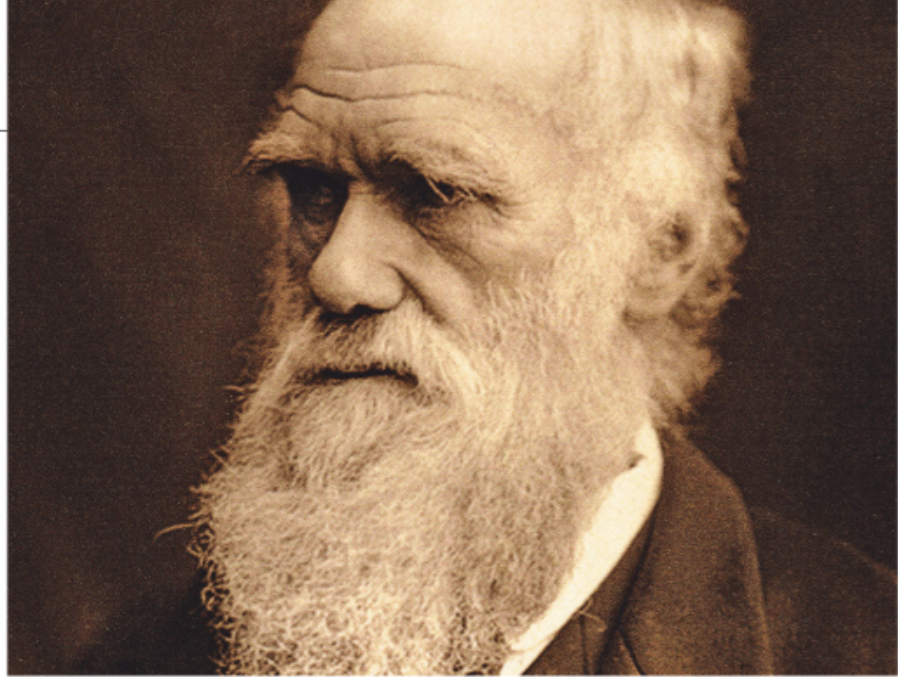
But the problem with Flat Earthers—and other science deniers—is not that they don’t pursue evidence, but that they don’t respond to it in a rational way. They lack the scientific attitude. So how should we respond?

I don’t think it is wise just to dismiss them. This only creates more distrust and further polarization. Instead, I think scientists and lay people alike need to engage. Scientists, after all, would never want to be accused of retreating into their own silos. (At the FEIC conference I heard a rumor—though never confirmed—that there was a scientific conference at the hotel up the street. But of course none of them bothered to show up and refute the Flat Earthers—who made hay out of that.)

Science denial is too dangerous to ignore. You might think that Flat Earth isn’t harming anyone, but they had sessions on how to recruit new members, including children. When one dad complained that his daughter was getting shut down in class by her teacher, the presenter recommended that she talk to her friends about Flat Earth theories on the playground, where the teacher couldn’t overhear. The Flat Earth movement is growing fast. They’ve recently recruited some prominent celebrities like Kyrie Irving (before he recanted) and Wilson Chandler. There are Flat Earth “meet up” groups in many cities, including Boston. Just before the convention in Denver, someone funded a billboard. How many more years before the Flat Earthers are running for school board, asking physics teachers to “teach the controversy,” just as Intelligent Designers did not too many years back?

If we can understand science denial in its most elemental form, might we not be able to make progress against all of it at once? For those of us who care about science, it is important to fight back against science denial in whatever form it arises. But we must do it in the right way.

We need to stop merely pointing to the successes of science and promote the view that uncertainty is a strength rather than a weakness of scientific reasoning. No matter how good the evidence, science cannot “prove” that climate change is real. Or that vaccines are safe. Or even that the Earth is round. That is just not how inductive reasoning works.



EXTRAORDINARY CLAIMS

Dismissing science deniers only creates more distrust. Clockwise from top left: Charles Darwin posed his theory of natural selection more than a century ago; Spencer Marks (left) is part of a volunteer group that seeks to educate people on scientific inquiry; climate scientist James Hanson investigates boulders in the Bahamas that may have been left by storms, a scientist takes measurements at the foot of a volcano in Ecuador.

CLOCKWISE FROM BOTTOM: CHARLES OMMANNEY/THE WASHINGTON POST/GETTY; JUAN CEVALLOS/AFP/GETTY; ADOC PHOTOS/CORBIS/GETTY; JOEL FORREST/BARCROFT IMAGES/BARCROFT MEDIA/GETTY



SCIENCE

What scientists can do, however, is say much more than they do about the importance of likelihood and probability, to puncture the myth of scientific “proof.” Scientific beliefs are not based on certainty but on “warrant”—on justification given the evidence. To say that the evidence for anthropogenic global warming has hit the “five-sigma” level, which means that there is only a one in a million chance of a false positive, is something less than certainty. But who

could deny that this is enough for rational belief? When certainty is the standard, science deniers may feel justified in holding out for proof. So let’s explain to them that this is not how science works: that certainty is an irrational standard for empirical belief.

When a scientist looks for evidence, and it shows that his or her theory is wrong, this cannot just be ignored. If the problem gets bad enough, the theory must be changed or perhaps even abandoned, else one is no longer really a scientist. Yet I do not believe that this is a matter of method or logic (as Karl Popper and other philosophers have long

argued), but of values. One of the reasons that science works as well as it does is that—as opposed to ideology—it does not pretend that it has all the answers. It is open to new ideas while insisting that these must be rigorously tested. In science there is a community standard to enforce this, based on data sharing, peer review and replication. The scientific attitude exists not just in the hearts of individual scientists, but as a group ethos that guides empirical inquiry in a rational way. But how many of the lay public know this?

That’s why the best way to defend science is to have more conversations with science deniers. I’m not talking about those TV debates of yore, where they put James Hansen (a NASA scientist and leading voice on climate change) on a split screen with some conspiracy theorist and give them equal time. There are obviously legitimate concerns about giving a platform for falsehood. I’m talking about getting more scientists in front of the media, to talk not just about their findings, but about the rigorous process by which scientific results are produced. And yes, I think it is reasonable to expect more interactions between scientists and science deniers, as is now happening with the measles outbreak in Washington state, where public health officials are holding workshops to talk with anti-vaxxers.

In scientific reasoning there’s always a chance that your theory is wrong. What separates science deniers from actual scientists is how rigorously they pursue that possibility. **N**

→ **Lee McIntyre** is a Research Fellow at the Center for Philosophy and History of Science, Boston University. His book *THE SCIENTIFIC ATTITUDE: DEFENDING SCIENCE FROM DENIAL, FRAUD, AND PSEUDO-SCIENCE* is available from the MIT Press.



How many more years before the Flat Earthers are running for school board, asking physics teachers to **“TEACH THE CONTROVERSY,”** just as Intelligent Designers did not too many years back?



C H I N A ' S

H U M A N

R I G H T S

C R I S I S

The oppression of the country's Uyghur community is ge

by
TARA
FRANCIS
CHAN

FROM LEFT: KEVIN FRAYER/GETTY; JOHANNES EISELE/AFP/GETTY

**FEAST OF
THE SACRIFICE***

A Uyghur man stands in his doorway in Turpan, China, during the worldwide celebration of the *Eid-al-Adha. Uyghurs are subject to restrictions by China's Communist Party during such religious celebrations.



...tting worse. Will the U.S. Congress come to the **RESCUE?**

A

T LEAST 1 MILLION PEOPLE ARE languishing in what the U.S. military has called “concentration camps” in China. But recent attempts by U.S. officials and lawmakers to push for change have made little difference as the human rights crisis continues to worsen.

In Congress’ strongest move yet, the Senate Foreign Relations Committee recently passed the Uyghur Human Rights Policy Act, which would require the creation of a report and a position within the State Department focused on China’s crackdown. The bill, which also says President Donald Trump should condemn the abuses, will now head to the Senate floor.

“It is long overdue to hold Chinese government and Communist Party officials accountable for systemic and egregious human rights abuses,” the bill’s sponsor Florida Senator Marco Rubio said.

The bill’s progression comes weeks after the Pentagon said it estimates that between 1 to 3 million Uyghurs and other Turkic Muslim minorities have been held in “concentration camps,” one of the first times a U.S. official has used the term usually associated with the Holocaust. The label comes three years after China, in a bid to stamp out religious influence in the northwest region of Xinjiang, began arbitrarily placing Uyghurs in detention and building what has become an inescapable surveillance state.

Since 2016, China has radically cracked down on the Uyghur population in Xinjiang in the name of combatting extremism among the ethnic Muslim minority population. However, the campaign has largely been seen as a way for Beijing to control and even stamp out diverse religions and cultures, with Xinjiang considered by experts as a testing ground for surveillance, suppression and detention that will be exported across the country.

“The Communist Party is using the security forces for mass imprisonment of Chinese Muslims in concentration camps,” Randall Schriver, assistant secretary of defense for Indo-Pacific security affairs, said at a press briefing in early May. When pressed by a reporter about the phrase, Schriver said it was an “appropriate description” given the “magnitude of the detention... what the goals are of the Chinese government and their own public comments.”

The Defense Department’s new position capped off several weeks of escalation over the issue by Beijing, Congress and the Trump administration. But a



DETENTION AND RETRIBUTION
Clockwise from top left: Kyrgyz men with portraits of relatives they fear are being held in “re-education camps” in China’s northwest Xianjing region; street scene in Yarkand in Xianjing; a Muslim Uyghur woman in the regional capital Urumqi begs as Chinese paramilitary police march past; Secretary of State Mike Pompeo meets with Uyghur representatives in Washington, D.C.



CLOCKWISE FROM RIGHT: ERIC LAFFORGUE/ART IN ALL OF US/CORBIS/GETTY; PETER PARKS/AFP/GETTY; MICHAEL GROSS/STATE DEPARTMENT; VYACHESLAV OSELEDKO/AFP/GETTY



HUMAN RIGHTS

“I have to shut up, I have to stay quiet. If not, I won’t be able to see my mom or hear her voice again,” Jawdat told Newsweek in April one of the messages said. Despite moving to the U.S. in 2011 with most of his family, Jawdat says China refused to give his mother a passport and is now threatening her safety and that of remaining family members to try to end his public protests—a strategy local police and officials have used to silence overseas Uyghurs in recent years.

“It’s fairly clear that China engages in retaliation against Uyghurs overseas,” Peter Irwin, a spokesman for the World Uyghur Congress rights group, told Newsweek.

In February, hundreds of Uyghurs and other ethnic Muslim minorities shared photos of their loved ones online as part of the #MeTooUyghur movement. According to Irwin, the widespread attention is something China wants to prevent from happening again. “China likely would like to re-instill this fear in the diaspora community



single event encapsulates how little success Washington has had so far.

At the end of March, Secretary of State Mike Pompeo met with four Uyghurs to discuss Xinjiang’s human rights crisis. Within days, the aunt and uncle of one of those men, U.S. citizen Ferkat Jawdat, were moved from a detention camp and sentenced to eight years in prison.

Jawdat, whose mother was also moved from a camp to a prison, said it was clear from WeChat messages passed on to him from family friends that the punishments were doled out in retaliation for his meeting with Pompeo. The State Department confirmed to Newsweek it was aware and “disturbed” by reports of the retaliation.

“**CHINA** is being more brazen because China can be more **BRAZEN**”

that has been largely absent over this period.”

House Speaker Nancy Pelosi, who co-sponsored a House version of the Uyghur bill, told Newsweek in a statement that “the jailing of the relatives of a U.S. citizen for engaging in dialogue with the American government to pursue a more hopeful future is an affront to the basic ideas of justice, human rights and human dignity, and must be condemned by all.”

“The unabated oppression that the Uyghur community faces at the hands of China is a stain on the conscience of the world,” she said.

Three Trauma-Soaked Years

“EVERYTHING IS GOING IN THE WORSE DIRECTION,” Ferkat Jawdat says. Xinjiang began sending residents to extrajudicial “re-education” camps in 2016 for transgressions as vague as observing religious practices like Ramadan and as minor as having a beard, buying a SIM card or speaking to family overseas.

Since then, the State Department says there have been reports of torture and “instances of sexual abuse and death.” Some experts fear the situation devolving into genocide.

Outside the camps, Uyghurs generally cannot leave Xinjiang, let alone China. Facial recognition technology is omnipresent and Uyghurs are banned from entering many public spaces and shops. Party officials have lived in their homes and



“The language everyone is speaking is **MONEY**. The language

others have forced Uyghurs to eat pork. Mosques and graves have been razed. And earlier this month Human Rights Watch released a report on a mass surveillance app that aggregates everything from blood type to electricity usage and package deliveries, alerting authorities to suspicious behavior.

But the recent development with Jawdat not only highlights potential consequences for the families of Americans who dare meet with U.S. officials about the crisis, but illustrates the troubling next stage of China’s crackdown as more detainees are transferred to prisons in Xinjiang and beyond.

“[They’re] basically being redistributed across China proper where they kind of disappear off the radar because the spotlight is on Xinjiang at the moment,” Joanne Smith Finley, an expert on China and the Uyghur identity at Newcastle University, told Newsweek. She added that many people are sent to high-security prisons where they’re “kept in shackles the whole time.”

“I personally think things have got worse,” she said.

Radio Free Asia (RFA) confirmed the transfer of detainees to other provinces in February. One prison official told RFA that the number of detainees





everyone is speaking is **BILATERAL TRADE.** "

again and “she doesn’t know if she can come back or when she can come back. And then she was crying from beginning to end.”

But in May this year, Jawdat told Newsweek that his mother called him from outside the camps to say she had been released and that he should stop criticizing China. But the next day she was returned to the camps. Jawdat said he was later told by others that “five or six cops” were monitoring his mom and that they listened to his conversation the whole time.

“I felt like I got betrayed, I got played. I can’t describe my feelings, it’s so confusing,” Jawdat said, describing the situation as a “dark hole.”

Smith Finley has been traveling to Xinjiang since 1995 and says the changes she saw on her most recent trip in 2018 were palpable.

“Fear, absolute fear. Terror, trauma, people crying in the streets once they realized that I knew the ‘situation,’” she said. “I’ve never seen it like that ever.” Most of Smith Finley’s contacts wouldn’t even take her calls and only two would meet with her—agreeing to do so only if it was af-

ter sundown and they kept moving while they spoke. “We would have to change our conversation every time we approached one of the convenience police stations because of the audio surveillance,” she said.

Many Hui Muslims and other ethnic minorities in China are now concerned that the repression fine-tuned by authorities in Xinjiang will be exported across the country, a future that concerns Jawdat.

“There is no way the Chinese government is going to stop on the Uyghurs only,” he said. “I can tell you, 100 percent right now, that this will be written in the history books as a genocide that happened in the 21st century.”

Have U.S. efforts helped? Not much.

SECRETARY OF STATE MIKE POMPEO MAY HAVE described China’s practices in Xinjiang as “Orwellian” several times during April, but his department has yet to make any public indications about sanctioning Xinjiang officials involved in human rights abuses. Activists believed sanctions would be forthcoming in December but were left disappointed, with many experts believing the trade talks have taken priority in the Trump administration.

transferred out of Xinjiang is “huge.”

“They are not here because they committed certain crimes, but for a special reason, and they are under particularly heavy security,” the official said.

In Xinjiang, Jawdat says his relatives, including his grandmother, have been “threatened by the Chinese police” and forced to sign agreements that they won’t talk to people in the U.S.

Like many Uyghur activists overseas, the attention came after his decision to speak out about the detention of loved ones. Jawdat said his mother was held for 22 days in November 2017, before she was initially released.

“But her phone was taken away by the Chinese police at the time. And she was so scared,” Jawdat said. “She’d just call us again and she doesn’t say anything. We just look at each other and then she starts crying. I can see the fear in her eyes.” His mother also mentioned she was risking getting into trouble when they were talking, “so that means she knew somebody was monitoring her and maybe listening to her phone calls.”

On February 6, 2018, Jawdat says he received a message from his mom saying she was going away

DEEDS AND WORDS

Opposite page: Kazakh Omir Bekali shows how he was shackled during his detention in a “re-education camp” in China. Above top: Sen Marco Rubio has accused China of “crimes against humanity.” Below: President Trump at a dinner meeting with Chinese president Xi Jinping.

When pressed during television interviews in May, Pompeo refused to confirm when or if sanctions will be imposed at all, saying only that he had “raised” the issue with his counterparts in Beijing.

“The language everyone is speaking is money. The language everyone is speaking is bilateral trade,” Smith Finley said, adding that sanctions like those instituted against South Africa in 1986 over apartheid would likely be effective. “And this is turning into, in some ways, a comparable situation because what the Chinese state is doing in Xinjiang is thoroughly racist.”

U.S. lawmakers have urged a similar approach. On April 3, Rubio, who co-chairs the Congressional-Executive Committee on China, led dozens of bipartisan lawmakers, including Massachusetts Senator and Democratic candidate for president Elizabeth Warren, in requesting Magnitsky sanctions—which can be levied by the Treasury Department to punish individual human rights abusers—against Chinese Communist Party officials involved in Xinjiang’s human rights violations. In a letter, the lawmakers also said they were “disappointed” with the administration’s “failure” to already do so.

“The Communist Chinese government is committing crimes against humanity as it detains over a million Uyghurs and other religious and ethnic minorities in so-called ‘re-education’ camps and expands its Orwellian high-tech surveillance state in Xinjiang,” Rubio said in a statement to Newsweek.

The Florida Senator also wants to strengthen export controls and financial transparency requirements to ensure American products and investments are not enabling “China’s growing Orwellian digital authoritarianism” and human rights abuses.

The day after the letter was published, freshman Muslim congresswoman Ilhan Omar tweeted her support saying, “These are crimes against humanity and anyone responsible must be fully held to account. Words alone are not enough.”

Experts who spoke with Newsweek criticized both Democrats and Republicans for not yet passing any legislation or sanctions targeting Xinjiang.

The Uyghur Human Rights Policy Act, co-sponsored by more than 90 bipartisan lawmakers across the House and Senate, is still far from passing and needs to clear both floors. And then there’s the White House. It’s unclear if President Donald Trump would sign such a bill—issuing a

veto would jeopardize the administration’s efforts and global leadership on the Xinjiang crisis, but signing would almost certainly plunge trade talks and relations with China to new lows.

“This is a drop in the ocean of course,” Smith Finley, the China expert, said. “It’s very easy for China to discredit the U.S. right-wing politicians by saying, ‘They don’t really care about human rights, they don’t really care about the Uyghurs at all, they only care about their trade war with us and they only care about containing China... So what we need is for the left to make much, much more noise.’”

She added: “We need the Democrats to make





majority Muslim countries, Saudi Arabia's Crown Prince Mohammed bin Salman and Pakistan's Prime Minister Imran Khan. The Saudi Crown Prince defended China's actions in February saying the country has "the right to carry out anti-terrorism and de-extremization work for its national security" while Khan has dodged questions on the issue, saying he doesn't "know much."

At this stage without U.S. sanctions, Irwin still believes that international pressure from neighboring countries, including Kazakhstan, Uzbekistan, Iran, Turkey, and the Gulf, are the best hope for change because this is where the Chinese govern-

"We need the **LEFT-WING** across the world generally to make much **MORE NOISE**"

much more noise in the U.S. and we need the left-wing across the world generally to make much more noise... What we've got is the American right-wing threatening to levy the Global Magnitsky Act but not doing so. There's no point threatening to levy it if you're not going to actually levy it. China's just sitting there laughing, saying, 'Well, do your worst' but yet you're not doing anything."

China is emboldened because it can be

BEIJING INITIALLY DENIED THE EXISTENCE OF Xinjiang's detention centers before, late last year, suddenly claiming they did in fact exist but were just harmless vocational training centers. The country faced little blowback, either then or now.

"China is being more brazen because China can be more brazen because no one is holding China properly to account," Smith Finley said. "And China perceives this very clearly."

Part of the reason for this boldness is the repression in Xinjiang has essentially received the seal of approval from leaders of two of the largest

ment is "much more concerned about its image" as well as the future of Xi's signature global infrastructure project, the Belt and Road Initiative (in which Xinjiang, coincidentally enough, sits at the heart).

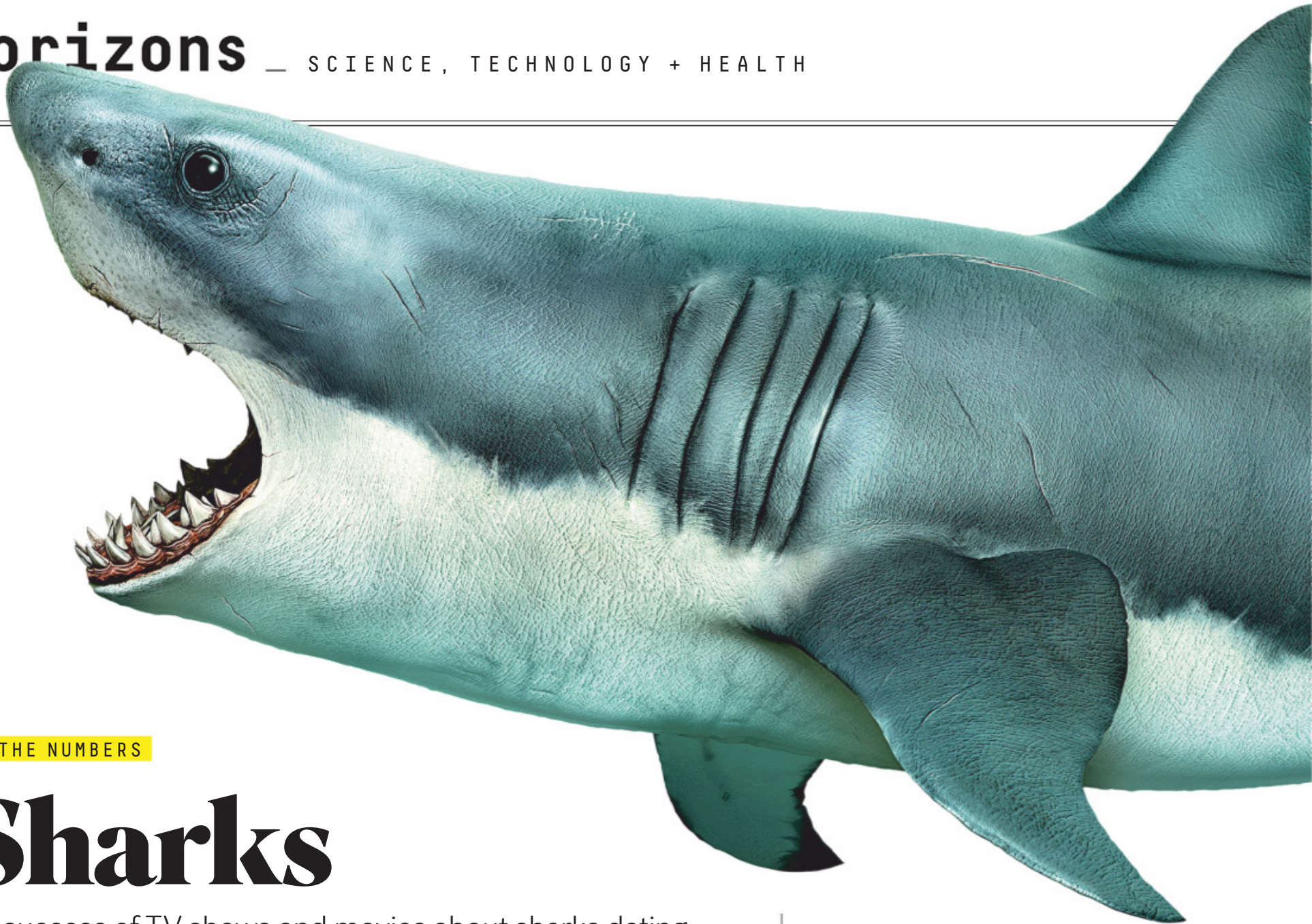
Until more countries take action, experts remain concerned about escalating abuse and torture. For Max Oidtmann, an expert on the Chinese Communist Party's policy toward Muslims and Islam at Georgetown University Qatar, this is particularly troubling as growing facilities require staffing of "thousands" of poorly trained guards. "I also foresee increasing abuse within these detention centers as local and national budgets for running them come under greater and greater economic pressure," he said.

But even if new directives were ordered at the national level, there really is no telling how the situation in Xinjiang would unfold. It brings to mind an Uyghur saying repeated by Smith Finley about Beijing policies becoming unrecognizable once they reach the local level.

"If I ask him to bring me his doppa [skull cap], he brings me his head." **N**

CLASS ACTION
Clockwise from bottom left: Supporters of China's Uygur population at the White House last March; "Words alone are not enough," says Congresswoman Ilhan Omar; an ethnic Muslim woman in the old town of Kashgar, the cultural heart of Xinjiang province.

FROM TOP: KEVIN FRAYER/GETTY; TOM WILLIAMS/CQ ROLL CALL/GETTY; MICHAEL CANDELORI/NURPHOTO/GETTY



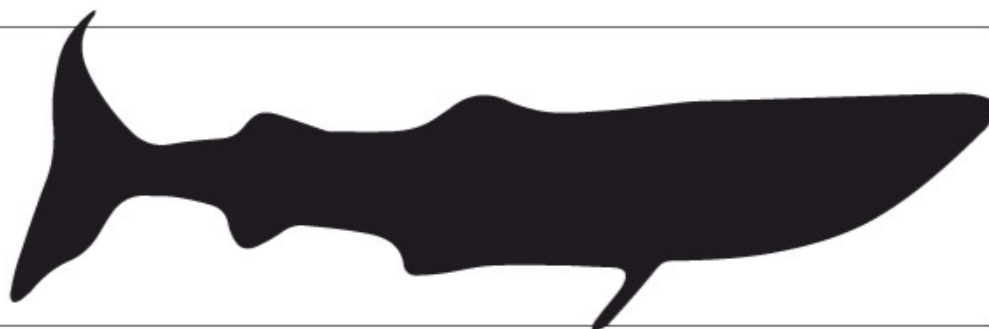
BY THE NUMBERS

Sharks

The success of TV shows and movies about sharks dating at least back to *Jaws* is based on primal fear: It's hard to think of anything more terrifying than being attacked by a shark. Fortunately it's very unlikely. Late in May, when a man was killed in a shark attack about 60 yards from the shore in Maui, he became only the third shark fatality worldwide this year.

39 FEET

Length of largest species, the whale shark.



3 types of sharks implicated in most confirmed human attacks:



TIGER

BULL

GREAT WHITE



16

Number of shark attack bites in U.S. waters this year.



07

Number of shark attack bites in Australian waters this year.

WARPAINTCOBRA/GETTY

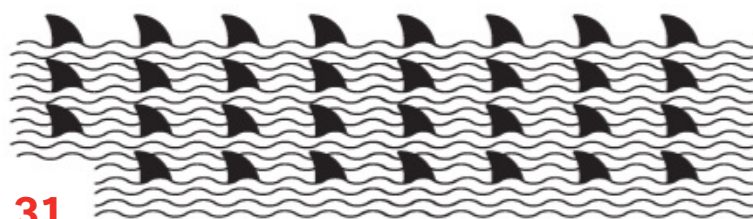


07

Number of shark attacks in Florida this year.

1 IN 3,700,000

Likelihood of being killed by a shark.



31

As of May 25, there have been 31 confirmed shark attack bites worldwide this year.

Three

Number of **fatal shark bites** worldwide this year.



The biggest great white sharks can reach up to 20 feet long.



364 vs. 11

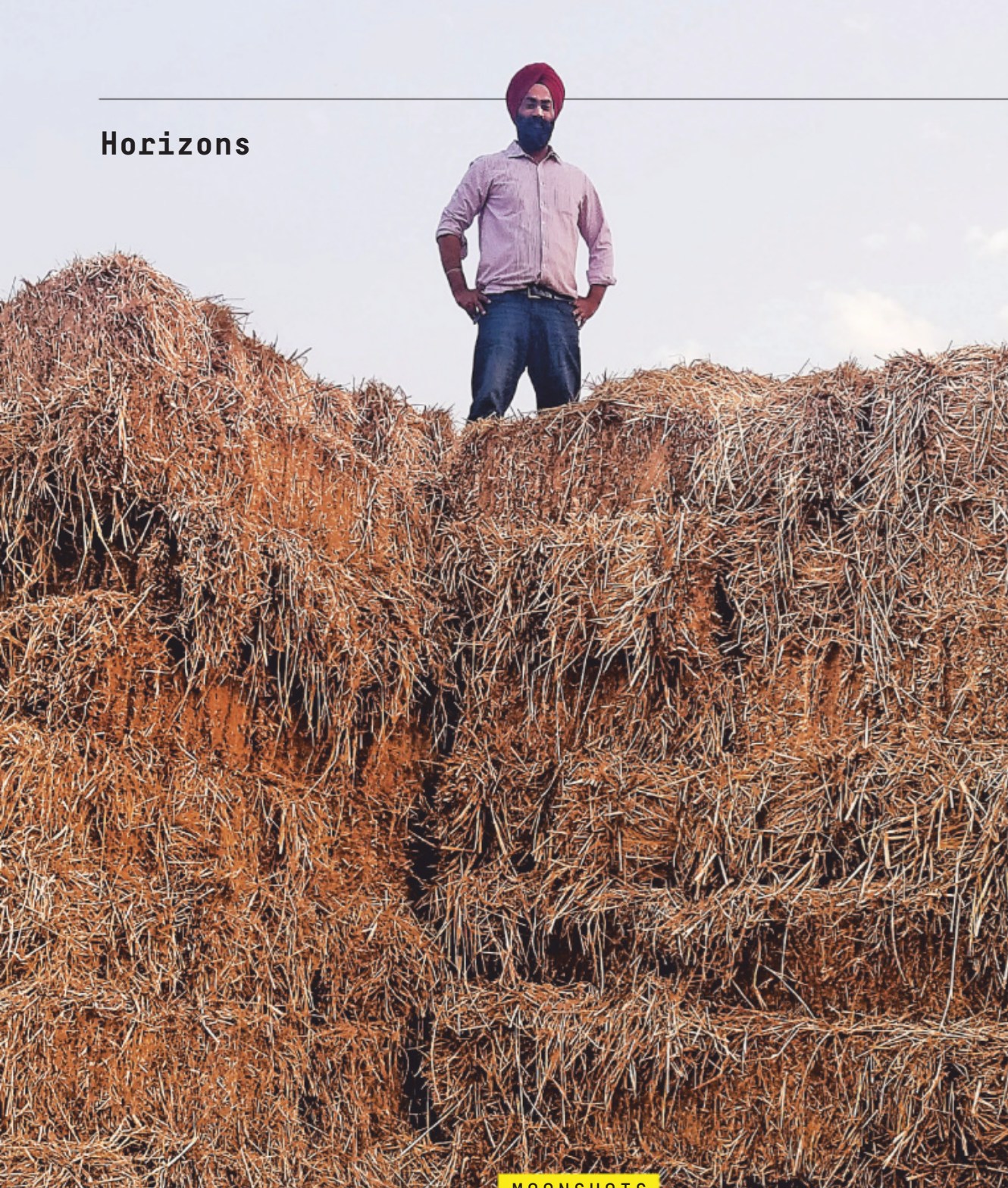
Deaths by dog attacks vs. shark attacks in the U.S. between 2001 and 2013.

MORE THAN 500

Number of known shark species.

100,000,000

Estimated number of sharks **killed by fishermen** every year.



MOONSHOTS

Clearing the Air

Entrepreneur Sukhmeet Singh is buying the straw Indian farmers used to burn and is turning it into fuel and other products—dramatically reducing pollution in the process

↑ IN ANTICIPATION OF THE 50TH ANNIVERSARY OF NASA ASTRONAUTS LANDING on the moon, Newsweek is spotlighting pioneers in science and technology, highlighting their very own moonshots and how they hope to change the world.

Sukhmeet Singh, the founder of A2P Energy, which stands for Agriculture 2 Power, is tackling a big environmental problem in Southeast Asia: straw burning. After the harvest, grain farmers set fire to the wheat and rice stubble that's left over to make room for the next planting. Burning is the cheapest way to clear fields, but it is a big contributor to massive air pollution in places like New Delhi. Singh and A2P Energy instead buy straw from farmers and process it into a range of pellets that can be burned as fuel, fed to animals or used to enrich soil. A finalist in the Mohammed bin

BY

JULIANA PIGNATARO

[@julie_pignataro](#)

TURNING STRAW INTO FUEL

Singh wants to make use of farmers' leftover straw, turning it into a valuable, sustainable commodity instead of a pollutant.

Rashid Initiative for Global Prosperity's Sustainable Energy challenge, a contest for up to \$1 million in funding for entrepreneurs launched by the crown prince of Abu Dhabi, A2P says it has so far kept more than 1 million pounds of CO₂ from being emitted into the atmosphere.

What is your moonshot?

Every year 35 million tons of straw are burned in northern India in just September and October. I want to turn all of that straw into clean fuel for industry.

What is the inspiration behind this idea?

All the straw being burned has a significant negative impact. New Delhi ranked as having the worst air quality in the world in 2018. The air has 20 times more polluting particles than the World Health Organization recommends. And children in Delhi have smaller lungs than children in the U.S. because of the air pollution. The economic and health costs of this are estimated to be \$30 billion in a single season, 1.5 times the Indian budget for health and education.

How does A2P work?

We make different several products. Our first—fuel—is made from straw and replaces conventional fuel like wood and coal. Other products include a particle board made from rice paddy straw, like what you'd find in furniture at Ikea. We also make bio-char which is a more eco-friendly replacement for coal that's used as a soil nutrient.

FROM LEFT: COURTESY OF SUKHMEET SINGH; NARINDER NANU/AFP/GETTY; COURTESY OF SUKHMEET SINGH

How do you get the farmers involved?

Governments want farmers to put the straw back into their fields instead of burning, but farmers don't want to do that because it hampers the next crop and can increase the presence of pests. They say if the government wants to do something about the straw, the government can take it. But there's no available land for storage. We decided to buy the straw from the farmers to help them generate extra income and then make products that are high value for industry. We also help them buy machinery for straw collection.

How do you determine which farmers to partner with?

We use satellite data from NASA, which lets us see how and where the straw is being burned. Then a machine-learning algorithm scans the images and tells us which fields

have straw that is continuously being burned.

What have you learned from people who try to tackle similar problems?

There are reasons why other people are not doing this type of work. Straw is very hard on any machine used to process it. My co-founder and I put our backgrounds in academia and industry to work and did extensive research on the subject.


How close do you feel you are to overall success?

We finally have the perfect model in terms of the right machinery. Now we have to scale up; we need multiple manufacturing plants to justify the cost and achieve more success.

What is your biggest obstacle?

Funding. Venture capitalists don't like this kind of business where we're building manufacturing plants; the turnaround cycle on their investment is much longer than they prefer. We need people to understand the value of what we're trying to build. We're not just a profit-focused organization.

What do you see the world being like in 20 years if you are successful?

I see a world where farmers earn additional income, where we have clean air in Delhi and where children can breathe normally. 

“Children in Delhi have smaller lungs than children in the U.S. because of the air pollution.”



UNHEALTHY AIR QUALITY

Indian farmers burn straw stubble from rice paddies to clear their fields; Singh's model compensates farmers for the straw to create sustainable biofuel.





BOOKS

Summer Books

19 Fiction and Nonfiction Picks To Read Before Labor Day

DON'T STAB ME IN THE BACK

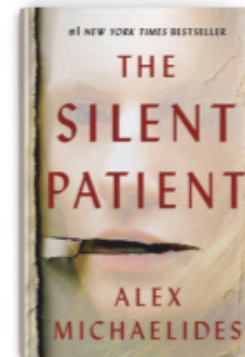
Ann Dowd on reproductive rights and *The Handmaid's Tale* » P.48



MARCO BOTTIGELLI/GETTY; TOP RIGHT: RICH FURY/BAFTA LA/GETTY

➔ NEARLY SIX MONTHS INTO 2019, there's an ever-growing checklist of books on our personal reading radar. The *Newsweek* staff has spent the first part of the year exploring new genres, authors and stories, and finding inspiration in unexpected content. While we're already setting our sights on upcoming releases for the summer and fall, it's important to note there are more than enough new and exciting releases, from late 2018 to early 2019, ready to be enjoyed today. Here are our top picks for the best new fiction and nonfiction titles of the year (so far).—*Juliana Pignataro*

Fiction

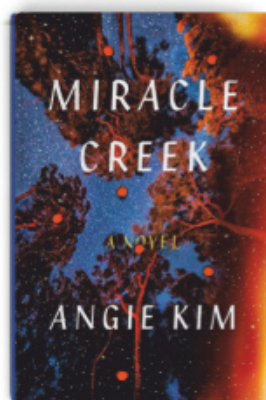


The Silent Patient

By **Alex Michaelides**

CELADON BOOKS | \$26.99

Michaelides' debut novel is that rare thriller that'll satisfy your taste for both lush writing and delicious plot. Famous artist Alicia Berenson shoots her husband five times and then stops speaking altogether. We follow a criminal psychotherapist on his quest to break her silence—all the way to an epic twist.



Miracle Creek

By **Angie Kim**

SARAH CRICHTON BOOKS | \$27

An immigrant family, an experimental medical treatment device dubbed the "Miracle Submarine," the deaths of two people and a trial played out in a Virginia courtroom. Safe to say, this debut novel is unlike anything you've read before.



Olivia Twist: Honor Among Thieves

By **Darin Strauss and Adam Dalva**

BERGER BOOKS | \$19.99

Charles Dickens' classic novel gets a futuristic female makeover in this graphic novel starring an orphan named Olivia Twist. Come for the ambitious adaptation, stay for the beautiful illustrations.



Recursion

By **Blake Crouch**

CROWN | \$27

From the mind behind *The Wayward Pines* trilogy and *Dark Matter* comes another profound science-fiction thriller. Crouch masterfully blends science and intrigue into the experience of what it means to be deeply human.

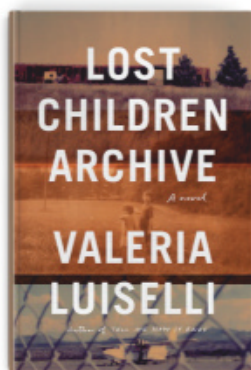


The Farm

By Joanne Ramos / RANDOM HOUSE | \$27
 Would you trade the indulgence of an upstate New York retreat, endless amenities included, if you couldn't leave for nine months? Questions of motherhood, surrogacy and capitalism abound in Ramos' debut novel.



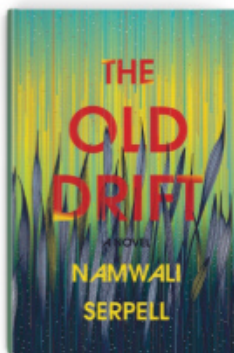
Gingerbread
By Helen Oyeyemi
 RIVERHEAD BOOKS | \$27
 Inspired by the fairytales of yore, a gingerbread recipe plays a central role in this abstract family saga blended with a dash of magical realism.



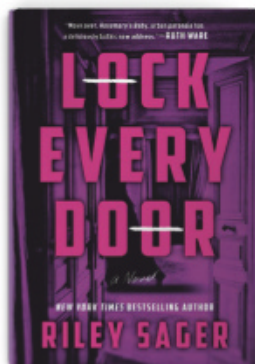
Lost Children Archive
By Valeria Luiselli
 KNOPF | \$27.95
 It's hard to imagine a more fitting time to read this unique story of a family's drive across the country, imbued with a political undercurrent and flush with symbolism.



Daisy Jones & the Six
By Taylor Jenkins Reid
 BALLANTINE BOOKS | \$27
 The author of 2017's spellbinding *The Seven Husbands of Evelyn Hugo* is back with an oral history that spans the '70s through the eyes of a fictional singer and her bandmates.

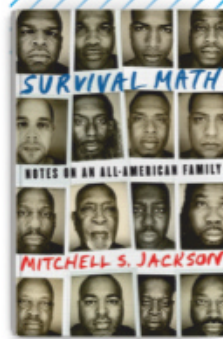


The Old Drift
By Namwali Serpell
 HOGARTH | \$28
 Three generations of three families are followed in Serpell's debut novel, set along Zambia's Zambezi River.

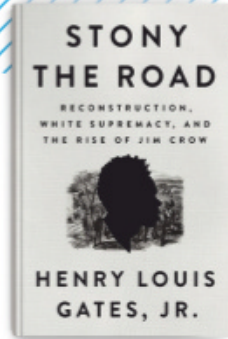


Lock Every Door
By Riley Sager
 DUTTON | \$26
 Bestselling author of *Final Girls*, Riley Sager returns with another terrifying page turner. Perfect for devouring its dark depths in a single sitting—preferably somewhere sunny.

Nonfiction



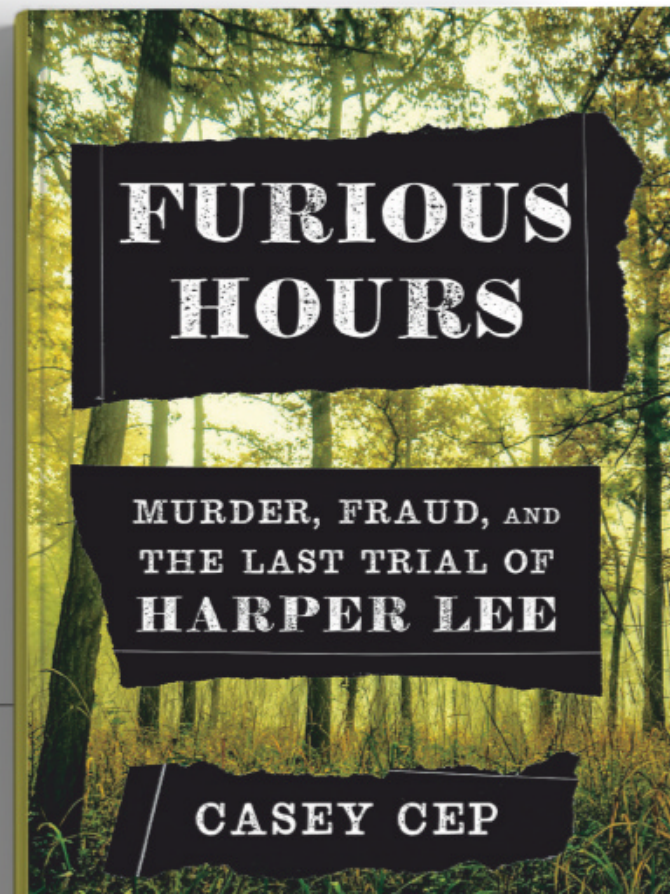
Survival Math: Notes on an All-American Family
By Mitchell S. Jackson
 SCRIBNER | \$26
 With unusual style, Jackson tackles race, class and family matters by weaving various narratives together. Photos and "survivor files"—stories from the author's family—are peppered through this gritty and original book.



Stony the Road: Reconstruction, White Supremacy, and the Rise of Jim Crow
By Henry Louis Gates, Jr.
 PENGUIN PRESS | \$30
 Gates' examination of racism and segregation after slavery and the failure of Reconstruction in the United States stretches from the end of the Civil War to beyond World War I.

Furious Hours: Murder, Fraud, and the Last Trial of Harper Lee

By Casey Cep / KNOPF | \$26.95
 Cep's deep dive into an old murder trial shines a light on the notoriously elusive Harper Lee and her own experience related to the crime.

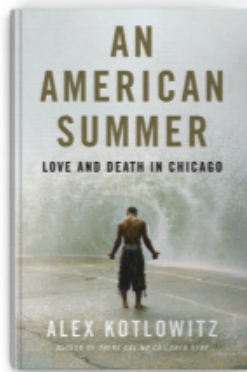




Stay Sexy & Don't Get Murdered: The Definitive How-To Guide

By Karen Kilgariff and Georgia Hardstark
FORGE BOOKS | \$24.99

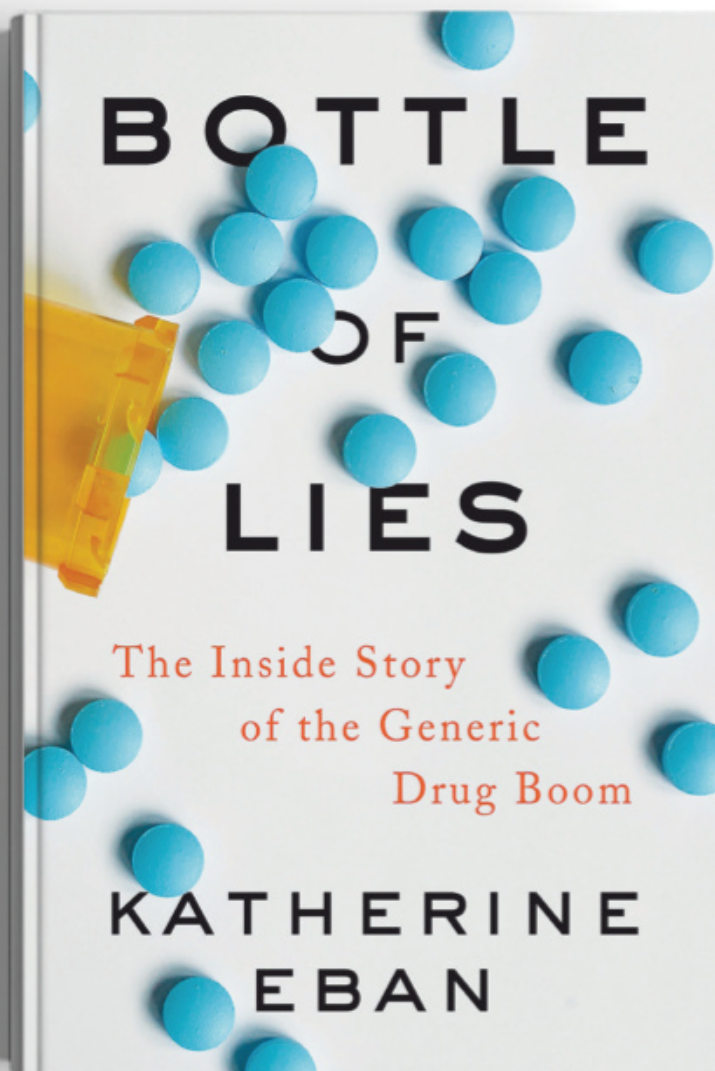
This first book from the hosts of the popular true-crime podcast *My Favorite Murder* is light on murder, heavy on personal stories, poignant insights and anecdotes—and in classic Kilgariff and Hardstark fashion, more than its fair share of laughs.



An American Summer: Love and Death in Chicago

By Alex Kotlowitz
NAN A. TALESE
\$27.95

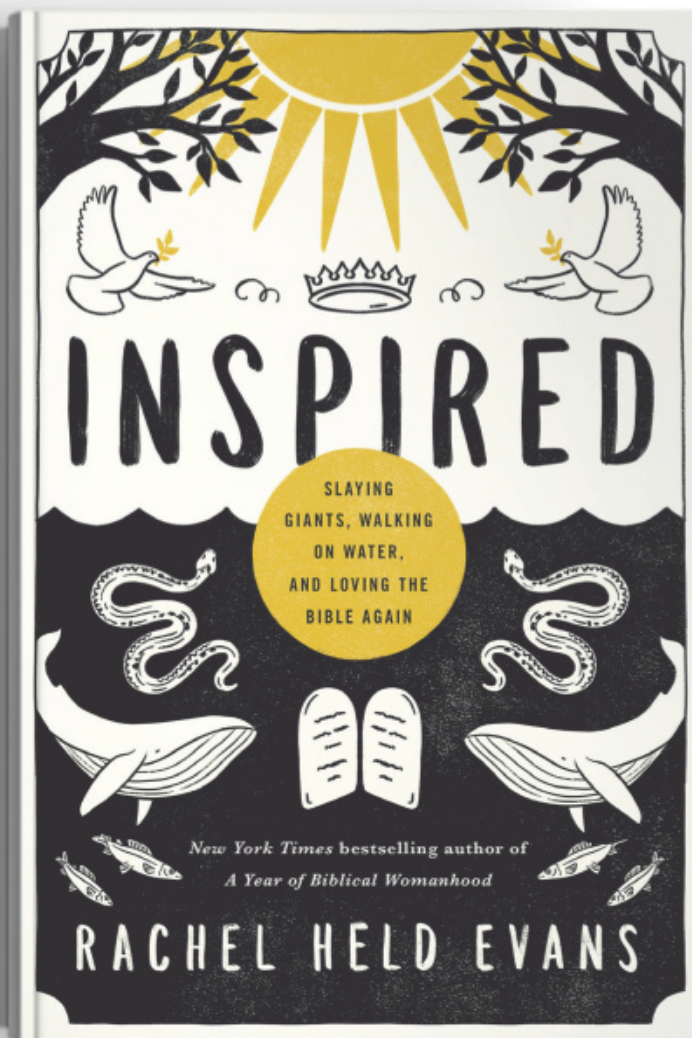
The author of *There Are No Children Here* focuses his attention on Chicago: the city and its turbulence through the eyes of its inhabitants. Up close and personal, *An American Summer* captures the city at its most human.



Bottle of Lies: The Inside Story of the Generic Drug Boom

By Katherine Eban / Ecco | \$28.99

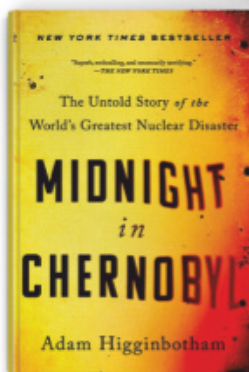
Eban's investigation into the widespread use of generic drugs probes the depths of drug manufacturing, public health and pharmaceutical companies—with shocking revelations.



Inspired: Slaying Giants, Walking on Water, and Loving the Bible Again

By Rachel Held Evans / THOMAS NELSON | \$16.99

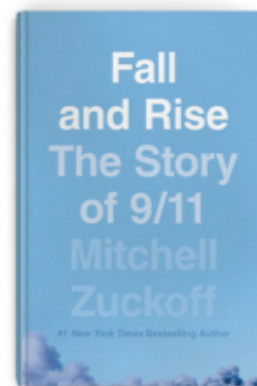
An exception to our list, Evans' final book was published in 2018 before her premature death at the age of 37. In her last work, Evans, an influential Christian, explores just how the Bible is meant to be read.



Midnight in Chernobyl: The Untold Story of the World's Greatest Nuclear Disaster

By Adam Higginbotham
SIMON & SCHUSTER
\$29.95

Thirty-three years after Chernobyl and hundreds of hours of interviews later, journalist Higginbotham comes through with perhaps one of the most far-reaching and powerful investigations into the biggest nuclear plant disaster in history.



Fall and Rise: The Story of 9/11

By Mitchell Zuckoff
HARPER | \$29.99

Eighteen years after 9/11, Zuckoff delivers a singularly comprehensive and wrenching account of that day. *Rise and Fall* weaves together minute-by-minute accounts—ranging from those of first responders to the last words of victims aboard the hijacked flights. **N**

Culture



01 Museo Soumaya

— Mexico City

The museum's second location, open on Plaza Carso since 2011, is striking both inside and out. Housing the largest collection of August Rodin sculptures outside of France, this private museum also houses the vast and varied collection of Mexican billionaire, Carlos Slim.

02 Crystal Bridges Museum of American Art

— Bentonville

The Moshe Safdie-designed museum, opened in 2011 in Arkansas, celebrates the American spirit through art and architecture. The permanent collection ranges from the Colonial era to the current day with important works by Mary McCleary, Winslow Homer and Jasper Johns.



03 MoMA (Museum of Modern Art)

— New York

New York City's Museum of Modern Art set the standard in contemporary art—and with its expansion opening this October, it raised the bar even higher. With new performance spaces and galleries, the museum explores the works of artists like Donald Judd, Dorothea Lange, Pope.L and Betye Saar. Galleries are open during the renovation.



UNCHARTED

Great New Museums Not To Be Missed

A good museum is interesting, but a great museum can elevate thoughts, open new worlds and change entire perspectives. While iconic museums like the Metropolitan Museum of Art in New York City, or the Hermitage in St. Petersburg, Russia, are well-known throughout the world, a new crop of museums have sprung up in the last 10 years that are set to rival the grand masters. —*Paula Froelich*



05 Zeitz Museum of Contemporary Art Africa

— Cape Town

Dedicated to contemporary art from the Africa and its diaspora, Zeitz MOCAA opened in 2017 with works by Mary Sibande, Nandipha Mntambo and Sethembile Msezane in its permanent collection.

01: ROMANA LILIC/GETTY; 02: EDDIE BRADY/GETTY; 03: DOSFOTOS/GETTY; 04: STEPHANE DE SAKUTIN/AFP/GETTY; 05: MELANIE STETSON FREEMAN/THE CHRISTIAN SCIENCE MONITOR/GETTY; 06: GIUSEPPE CACACE/AFP/GETTY; 07: VCG/GETTY; 08: GOH CHAI HIN/AFP/GETTY



◀ **04 Musée Yves
— Saint Laurent**

Paris

This museum celebrates the eponymous fashion designer whose clothing forever changed the way women dressed. The original in Paris opened in September 2017, one month before its outpost in Marrakesh, Morocco.



▲ **07 UCCA Center for Contemporary Art
— Beijing**

This center for contemporary Chinese art underwent a major restructuring in 2017, separating its commercial and nonprofit functions. Featuring artists like Liu Wei, Wang Jianwei and Liu Xiaodong, it places Chinese artists firmly in the center of the global art dialogue.

6

7

8

**08 Museum MACAN (Modern and
— Contemporary Art in Nusantara)**

Jakarta

Only two years old, this museum features a growing international collection of Indonesian and other international art and is already considered one of the greats; it has over 800 works in its permanent collection including Yayoi Kusama's *Infinity Mirrored Room—Brilliance of the Souls*.

5



▲ **06 The Louvre Abu Dhabi
— Abu Dhabi**

This outpost of the Paris-based Louvre is a tribute to human history as seen through art, as well as an homage to globalism and the effects of trade routes on society. Opened in 2017, it includes important works by René Magritte and Alberto Giacometti.



PARTING SHOT

Ann Dowd

“IT’S DISGUSTING TO ME,” WAS THE REACTION FROM *THE HANDMAID’S TALE* STAR Ann Dowd when asked about the abortion restrictions being passed in states like Georgia, Alabama and Missouri. The series, set in Gilead—a totalitarian society in a dystopian future where some women are forced into sexual servitude—premiered in April 2017, and is the perfect foil to Trump’s presidency, according to Dowd. She plays the strict, God-fearing Aunt Lydia who prepares the handmaids to be concubines. Season 2 ends with Aunt Lydia being stabbed by Alexis Bledel’s Emily. *The Handmaid’s Tale*, originally written in 1985 by Margaret Atwood (a consulting producer on the series), has garnered dozens of Emmy award nominations, with Dowd winning in 2017 for Outstanding Supporting Actress in a Drama Series. *The Handmaid’s Tale* is a cautionary tale about what could happen if women’s rights are taken away. Dowd has a message for people supporting the anti-abortion bills: “Go to church and ask for forgiveness: That’s my advice to all of you who are dying to shut down women’s rights.” Season 3 premieres on June 5th.

What’s next for Aunt Lydia after she literally and figuratively gets stabbed in the back?

She was stunned by her own lack of awareness. Lydia is pretty instinctual and has a sixth sense for when something’s up, yet she didn’t sense betrayal from her girls. Now Lydia is left to examine what happened and how she didn’t see it coming. She’s scared and unsure, and she wants to get back on her feet, but the accident was very costly to her.

Do we get to see a new side of Aunt Lydia in Season 3?

We get to see her backstory. We learn something about her past. It makes sense and it adds up. Shooting it was eight of the best days of my life. It was very meaningful and helpful to coming to understand Lydia.

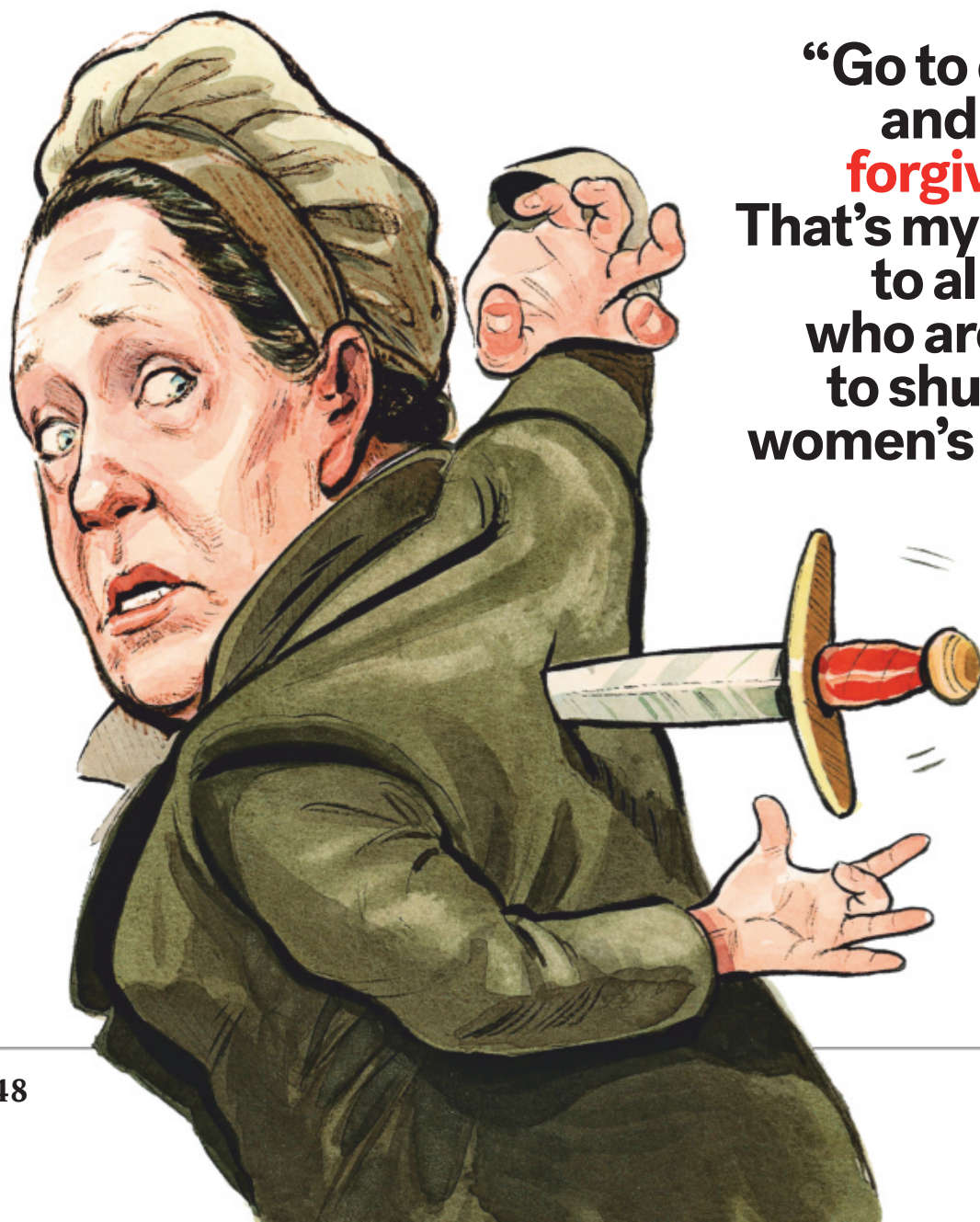
Tell me about Margaret Atwood.

She is one of the most intelligent, sharpest people. She’s way ahead of the game, and I like her tremendously. She’s not shy about identifying who’s wrong.

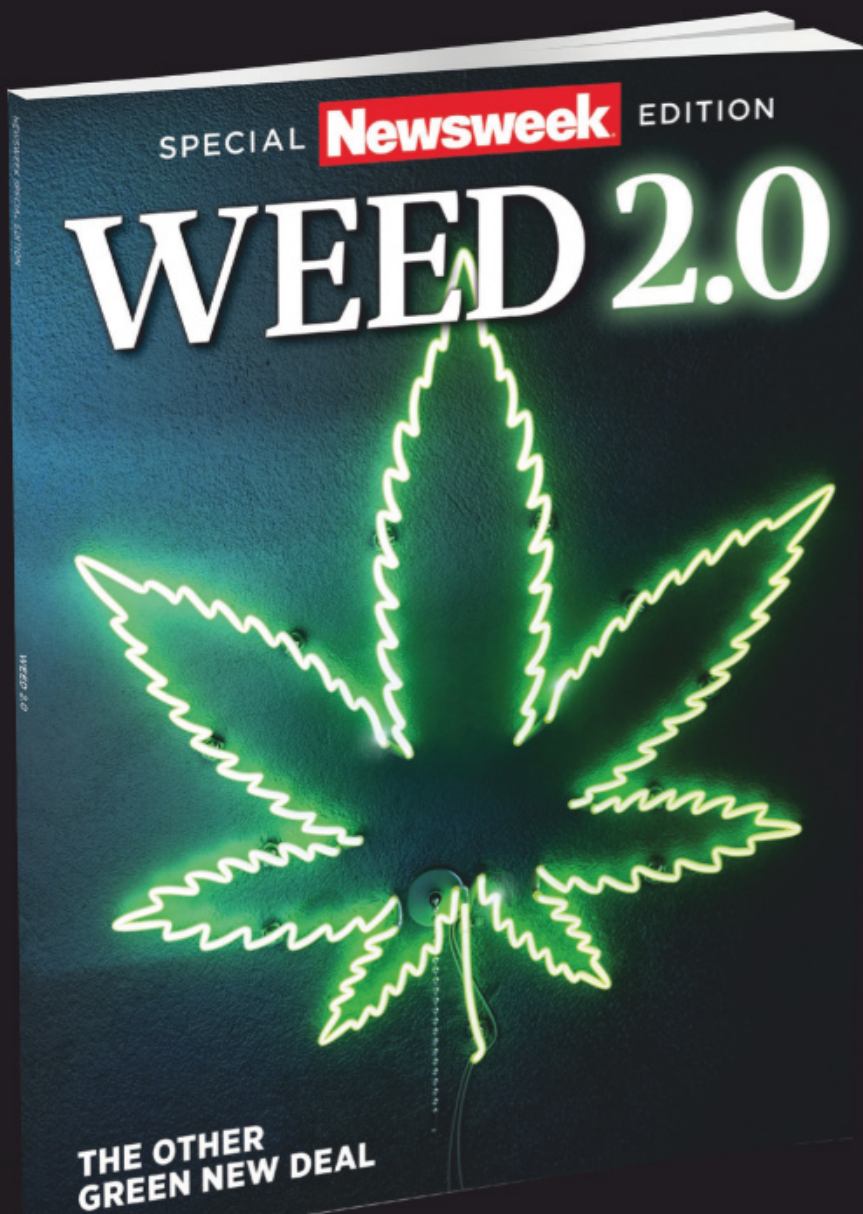
What is your view about the abortion bans that are currently being passed?

The drama and the sensationalizing from the point of view of the people who want to pass these bills is appalling to me. I’m enraged about how the situation is being portrayed. —*Maria Vultaggio*

“Go to church and ask for forgiveness: That’s my advice to all of you who are dying to shut down women’s rights.”



The green tide is rising. Are you ready?



WEED

HE'S ON A MISSION FROM GOD

HOW BELIEVED CHARACTER ACTOR JIM BELUSHI FOUND A NEW CAREER AND A NEW PURPOSE.

WHEN JIM Belushi introduces himself, the first words come with a rush of recognition. Preparing for the annual event isn't just a job; it's a mission. The actor, who has been in the industry for over 40 years, is now a cannabis advocate. Belushi, who has been in the industry for over 40 years, is now a cannabis advocate. Belushi, who has been in the industry for over 40 years, is now a cannabis advocate.

Jim Belushi and his team pose for a photo after touring a cannabis field in Oregon. Belushi is wearing a plaid shirt and a hat. The workers are wearing hard hats and safety vests. The field is filled with rows of cannabis plants in various stages of growth.



WEED HEALTH UPDATE

RECONSIDERING CANNABIS?

AS MORE AND MORE PEOPLE ACCEPT CANNABIS INTO THE MAINSTREAM, SOME STILL QUESTION ITS HEALTH RISKS.

TWENTY YEARS AGO, few people in the United States knew what to do with a cannabis plant. Today, it's a common sight in many homes and gardens. But as more people use cannabis, there's growing concern about its health effects. A new report from the National Academies of Sciences, Engineering, and Medicine provides a comprehensive look at the risks and benefits of cannabis use.

WHAT WAS YOUR REACTION TO HEARING THAT RESEARCH?
I was shocked. I had always thought of cannabis as a harmless herb, but this report shows that it can have serious health effects, especially on the brain and mental health.

AS MORE STATES MOVE TOWARD LEGALIZATION, WHAT WILL FACTOR IN YOUR RESEARCH?
I'll be looking at the long-term effects of cannabis use, particularly on the brain and mental health. I'll also be looking at the effects of different strains and methods of consumption.

WHAT ABOUT PEOPLE WHO USE MARIJUANA TO TREAT THE SYMPTOMS OF DEPRESSION AND ANXIETY?
That's a complex issue. While some people find relief from their symptoms, others find that cannabis makes their symptoms worse. It's important to talk to a doctor before using cannabis to treat any medical condition.

WHAT REGULATION IS NECESSARY?
There needs to be strict regulation of the cannabis industry to ensure that products are safe and of high quality. There also needs to be education about the risks of cannabis use.

HAS CRIME INCREASED IN STATES THAT HAVE LEGALIZED MARIJUANA?
The data is mixed. Some states have seen an increase in crime, while others have seen a decrease. It's important to look at the data on a state-by-state basis.

Find it on newsstands nationwide
or at OnNewsstandsNow.com