

DOUBLE ISSUE

MARCH 28 / APRIL 4, 2022



THE RESILIENCE OF UKRAINE

ART BY JR

A 148-ft. photo of Valerija, a 5-year-old Ukrainian refugee, is held up by more than 100 people outside the National Opera in Lviv on March 14

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INTRODUCING
TIME'S NEWEST NEWSLETTER

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TIME

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A Ukrainian soldier checks a combat vehicle in the breakaway Donetsk region of Ukraine on Feb. 7

Photograph by Maxim Dondyuk for TIME

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The stories of war

HOW DO YOU TELL THE STORY OF A WAR? Since the Russian invasion of Ukraine began on Feb. 24, all of us have been grappling with the constant flood of images and messages coming into our homes and onto our screens, with what feels like unprecedented immediacy. The world has been captivated by the extraordinary resilience of Ukraine's people and the unspeakable tragedies they are enduring.

This week, the war came home to TIME, with the death of Brent Renaud, an award-winning 50-year-old filmmaker who was killed by Russian fire in the Kyiv suburb of Irpin on March 13. Brent had been working on a TIME Studios documentary about the global refugee crisis. That crisis now counts among its numbers the 3 million refugees fleeing Ukraine. Brent's loss is devastating for journalism, compounded days later by the deaths of cameraman Pierre Zakrzewski, 55, and the Ukrainian journalist Oleksandra Kuvshynova, 24. The stories of war would not be possible without journalists like Brent, Pierre, Oleksandra, and so many others from Ukraine and all over the world, whose work is essential to this critical moment.

As we mourn the loss of these courageous professionals, we pay tribute to their memory through our work. "What gives me the greatest heart," Brent's brother Craig says in a remembrance in this issue, "is how specifically and genuinely the people honoring Brent acknowledge the mission that drove him."

We tell the stories of refugees, so much a part of Brent's work, in two covers that accompany this issue. One is of a 5-year-old girl named Valeria. She comes from President Volodymyr Zelensky's hometown and, with her mother Taisia, recently fled to Poland, leaving behind her brother and father. "It was very hard to leave Ukraine, very hard," Taisia tells TIME in this issue, "but everyone wants to take care of their children." An image created by the artist JR, and photographed by drone from above, is lifted up by more than one hundred of her fellow Ukrainians on Freedom Avenue in Lviv, the city in the country's west that has been a hub

▼
Renaud was killed
by Russian fire in
Irpin on March 13



**Renaud
devoted
his life to
telling the
stories of
overlooked
people**

for international aid and collaboration these past few weeks.

Three hundred miles to the east, the story in Kyiv has been much more devastating. There, the Ukrainian photographer Maxim Dondyuk has been creating a diary of life and death in and around the capital city. His photograph of a mother and child being evacuated from Irpin by a Ukrainian soldier—on a day in which Russian forces blew up the railroad tracks on a key evacuation route—also appears on TIME's cover this week.

TOGETHER, THESE IMAGES are an expression of both the fortitude and agony of Ukraine, a sentiment reflected in the words of the photographers. "This little Ukrainian girl is the future, the hope, the joy, the beauty," JR says, "and, in this ugly war, she reminds us what our Ukrainian friends are fighting for."

"When we show [the Russians] the children killed by Russian bombs, they will imagine their own children," says Maxim about another heartbreaking photograph of a child that appears in this issue. "They will see themselves in us. They will feel it."

On March 16, the morning of the day this magazine went to press, President Zelensky delivered his historic address to the U.S. Congress. "Now I am almost 45 years old," he said. "Today my age stopped when the heart of more than 100 children stopped beating." As I listened to him speak, and took in the dueling images of joy and destruction in the video he showed, my own 5-year-old played nearby. I thought of the children on these covers and of the families from Mariupol, Ukraine, to Port-au-Prince, Haiti, whose stories of searching for safety and a better life run throughout this issue. These stories connect us all. We will continue to tell them, and are grateful for your support of our work.

Edward Felsenthal,
EDITOR-IN-CHIEF & CEO
@EFELSENTHAL



BEHIND THE COVER

'For her safety, I knew we had to go'

Since Russia's invasion began, dozens of Ukraine's 7.5 million children have been killed and thousands of others have left in search of safety. Among those thousands is 5-year-old Valeria from Kryvyi Rih, President Volodymyr Zelensky's hometown in central Ukraine. Her image—a smiling child, literally supported by her fellow Ukrainians—appears on one of this issue's covers.

If you met Valeria, you might think she's shy, her mother Taisiia told TIME, but don't be fooled; at home, she commands attention. She loves the same things as many little girls—her stuffed bunny; her Elsa doll from Cold Heart (which English speakers know as Frozen); and her pink backpack, which she had to leave behind as she fled her country. Valeria also has big dreams: in particular, starting her first year of school on Sept. 1.

Now, it's hard to say when and where Valeria will be able to do so. On March 9, mother and daughter fled to Poland; for safety, they asked that TIME use only their first names. In an interview, Taisiia explained her decision to leave home to keep her child safe. "I love everything about her," she said. "She is my sunshine, my joy."

WE DIDN'T REALIZE THERE WOULD be a war.

We woke up early in the morning of Feb. 24 to learn the occupying army had started bombing our military bases. I thought about my daughter, Valeria; for her safety, I knew we had to go. We left Ukraine before we were bombarded, so we had a chance. We can say God blessed us. But even though Valeria is with me now, my husband and son stayed in Ukraine; we talk every day.

It was very hard to leave Ukraine, very hard. But everyone wants to take care of their children, so a lot of people were trying to get out. The lines for buses and trains stretched 3 km [1.9 miles]. The people, most of them women and children, were packed together in almost no space. We had to stand for 18 hours on the train to Lviv.

It's a terrible thing to see. Before, when you came to our cities, everything was beautiful, quiet, and calm. And now there is chaos, fear, danger. Every mother is afraid for her child.

**Now
there is
chaos, fear,
danger.
Every
mother is
afraid for
her child.'**

A drone was used to

capture the cover image

on March 14 in Lviv

THE [RUSSIANS] STILL haven't come to our city. Our people from Kryvyi Rih have fought them off. But they are closer and closer. I follow the news, and I can see them approaching. In the media, Russia says they aren't at war in Ukraine. But the war is real. People are dying for real. I have so many friends in Kharkiv who are in the shelters. They couldn't even get out with their children.

And here I am, with my sister, my nephew, and my mother in Poland, in a hotel near Warsaw. They take care of us: they give us food; we have a place to sleep. When we crossed the border, volunteers helped people with small children. It was well organized. They had hot food and drinks, and they tried to cheer the children with candy. Even in this difficult situation, it was a warm reception. I cannot find the words to express how grateful I am to everyone who has helped; I'm shocked in a good way.

The most important thing is the kids are secure. Emotionally, we are a little better now. Some stress has gone—almost—but there is always more, because we left our family. My daughter is calmer; before, she was anxious, a scared child.

I believe this horror will all be over very soon. All Ukrainians—women and children—will come back home, and everything will be fine.

For now, we will try to be useful for Poland, for the Polish people; we don't want to abuse their hospitality. And maybe, as we were helped, we can help other Ukrainians too.

—As told to TARA LAW, with translation by ARTEM IURCHENKO

► To learn more about how you can help the people of Ukraine, visit time.com/help-ukraine



What you said about...

TIME CORRESPONDENT

Simon Shuster, during his time in Ukraine, saw firsthand the impact of his March 14/March 21 cover profile of Ukrainian President Volodymyr Zelensky when he spotted the cover image—including a quote from Zelensky—on billboards that dotted Freedom Avenue in Lviv.

On Twitter, readers expressed how Shuster's reporting reflected the situation in Ukraine. Journalist Elise Labott tweeted that the story "really captures the resilience and bravery" of Zelensky and the Ukrainian people.

The profile was also an emotional read for many. "This article brought tears to my eyes," Vanessa Williams, a Toronto software engineer, tweeted. On Facebook, user Dianne Borchert expressed solidarity with Ukraine, writing, "The world is holding its breath as we watch in fear, love, and admiration as this small country stands up to Putin."

Some readers wrote to TIME to express their preferences for the next Person of the Year. Stephanie Richardson of Park City, Utah, said that the title should go to Zelensky, while Bill Ingham of Tucson, Ariz., said he nominates the Ukrainian people "as they fight for not only freedom and Democracy but their very lives."

Behind the camera

Ukrainian photographer Maxim Dondyuk has been a TIME contributor since 2014, but documenting the conflict in Ukraine has become his most personal assignment. During his reporting, he was injured by shrapnel; Dondyuk's mother fled the nation, and his father lives under Russian military occupation. "I'm not coming at this from afar. This is my pain. This is my country," he told TIME. See Dondyuk's photo diary on page 38.



On the covers



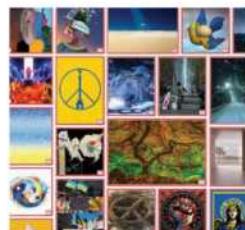
Art by JR



Photograph by Maxim Dondyuk



Photograph by Benjamin Rasmussen for TIME



Artists for Peace

TIME's web3 community initiative TIMEpieces raised more than \$350,000 for humanitarian relief in Ukraine through an auction of works by 56 artists. Among the contributors were TIME cover designers John Mavroudis, Tim O'Brien, and Charly Palmer. Browse the collection at time.com/collection/timepieces-artists-for-peace



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NFT issue of TIME

This issue of TIME is also available as a nonfungible token (NFT)—the first-ever magazine issue on the blockchain. It will be dropped to select community wallets in the coming weeks. To learn more about TIME's work in the NFT community, visit time.com/timepieces

SETTING THE RECORD STRAIGHT In the March 14/March 21 issue, an interview with Kerry Washington misstated one of the organizations she had partnered with. It is Black Voters Matter.

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VALERIA IMAGE: PHOTOGRAPH BY ARTEM IURCHENKO; DONDYUK: JÉRÔME SESSINI—MAGNUM PHOTOS; TIMEPIECES: BROBEL DESIGN/COURTESY TIMEPIECES ARTISTS FOR PEACE

Women of the Year

ON MARCH 8, IN HONOR OF INTERNATIONAL WOMEN's Day, TIME hosted an event to celebrate the publication of its Women of the Year issue at Spago in Beverly Hills, Calif. Attendees included labor activist Dolores Huerta, actor Isla Fisher, and Ayo Tometi, a co-founder of the Black Lives Matter movement. Panelists discussed a range of issues affecting women in the workplace. Katie Couric interviewed actor Kerry Washington about the impact of her show *Scandal* and the Anita Hill biopic *Confirmation*, while NAACP president Sherrilyn Ifill talked about what gives her hope for gender equality. Olympic track star Allyson Felix spoke about maternal health, stating, "We have to advocate for our own health. There's so much implicit bias in the medical field. We need to change that and listen to and believe women."



Top right: Katie Couric interviews Kerry Washington; and below, Washington and Kacey Musgraves pose with their TIME covers

Far left: Musgraves performed her songs "Justified" and "Breadwinner," plus Fleetwood Mac's "Dreams"

Center: Dolores Huerta, left, and Ayo Tometi

Bottom: Edward Felsenfeld, TIME CEO and editor-in-chief

'I hope that every single victim's face haunts your every waking moment and your sleeping ones too.'

RYAN HAMPTON, one of more than two dozen speakers at a virtual hearing March 10, in which Americans affected by the opioid crisis confronted members of the Sackler family, owners of OxyContin maker Purdue Pharma

6

Number of passengers on the next Blue Origin spaceflight, scheduled to take off on March 23; *SNL* star Pete Davidson is among the crew



27,000

Estimated number of mail ballots in Texas' March 1 primary that were flagged for rejection amid new voting restrictions in the state, the AP reported March 9

'Today's ruling leaves us devastated, but it will not deter us in our fight for climate justice.'

ANJALI SHARMA, one of eight teenagers who on March 15 lost an appeal by the Australian government against a ruling that it has a duty of care to protect children from harm caused by climate change

'I just miss all those small things we took for granted when she was here.'

ROBERT PETERSON, whose mother Yong Ae Yue was killed in one of the March 16, 2021, mass shootings at an Atlanta-area spa, at a memorial event marking the anniversary

'It was my antiwar decision. I made this decision by myself because I don't like Russia starting this invasion.'

MARINA OVSYANNIKOVA, Russian journalist, on her decision to protest the war in Ukraine during a live television news program on March 14; she was arrested for doing so

52

The number of reptiles U.S. border authorities found hidden in a man's clothing, officials said March 8



'MY PLACE IS STILL ON THE FIELD AND NOT IN THE STANDS.'

TOM BRADY, NFL quarterback, announcing his return from retirement on March 13

ILLUSTRATIONS BY BROWN BIRD DESIGN FOR TIME

The Brief



CHINA'S OMICRON CRISIS

BY CHAD DE GUZMAN/HONG KONG

Hong Kong's uncontrolled outbreak spills into the mainland, in a test for China's zero-COVID policy

INSIDE

SONIA MANZANO ON SESAME STREET'S EMILIO DELGADO

FAR-REACHING CONSEQUENCES FOR THE RUSSIAN OIL BAN

REMEMBERING FILMMAKER BRENT RENAUD

SUNDAY, MARCH 13, WAS AN OMINOUS DAY IN THE history of the COVID-19 pandemic in China. Health authorities recorded 1,938 cases, of which 131 were imported. To countries around the world that have made the decision to live with the coronavirus, and tally daily caseloads in the tens of thousands, these were figures to be envied. But with its zero-COVID policy, China has steadfastly refused—so far—to allow the virus to establish a foothold within its borders.

Worryingly, nearly 26% of the imported cases were recorded in China's most populous province, the southern economic powerhouse of Guangdong. Half of those were found in the city of Shenzhen, a booming technology hub that is Guangdong's crown jewel—and all but one of Shenzhen's cases originated from Hong Kong, where the Omicron variant is out of control. For the past two weeks, the onetime British colony had been reporting in excess of 30,000 infections a day. On March 1, it earned the ghastly distinction of being the place with the highest COVID-19 mortality rate in the developed world.

Although Hong Kong has an administrative border with China, it and the 10 other cities of Guangdong's Greater Bay Area are physically part of one vast contiguous conurbation of 86 million. Shenzhen's office towers loom over Hong Kong's northern suburbs, and even though only limited movement across the border has been permitted during the pandemic, it was inevitable that Hong Kong's COVID-19 crisis would spread to the densely populated hinterland. Imported cases from Hong Kong have now been found in at least seven Guangdong cities, and authorities are scrambling to contain the damage. On March 13, they put Shenzhen's 17.5 million people under lockdown for at least a week. (A day later, an unrelated outbreak in Jilin province, on the China–North Korea border, saw 24 million people told to stay home.)

The stakes are enormous. Modeling by Chinese researchers projects that hundreds of millions of infections would spread across the country, resulting in at least 3 million deaths, without aggressive zero-COVID policies. Given China's patchy health care system and critically low number of ICU beds, a breach of the COVID-19 defenses could spell disaster. “The more opportunities the virus has, sooner or later it will find a way,” warns Ben Cowling, an epidemiologist at Hong Kong University (HKU).

The exodus from Hong Kong may be one of those opportunities. The city's residents have been leaving in droves in a bid to escape the contagion, with many waiting it out in mainland China, seen as a safe haven. Not all enter legally

and undergo the mandatory two-week quarantine at a government-specified hotel; a few pay smugglers to get them across the border by boat—and authorities fear that they are bringing COVID-19 with them.

Some provincial cities are now offering the equivalent of almost \$80,000—more than four times Guangdong's average annual salary—as a reward for information leading to the detention of anyone from Hong Kong illegally on the mainland. In Shenzhen, searchlights comb the coastline nightly, looking for Hong Kong's COVID-19 refugees, who have good reason for wanting to escape.

FROM THE START of the pandemic in early 2020, to the beginning of the latest surge on Dec. 31 last year, Hong Kong registered a little over 12,000 infections and some 200 deaths in a population of 7.4 million. These days, however, the city's COVID-19 defenses are in stunning collapse. Cumulative infections soared to nearly 693,500 on March 13, with total deaths approaching 4,000—a toll blamed on dithering leadership and a failure to vaccinate the elderly. “The government is sending conflicting signals,” says Jean-Pierre Cabestan, professor of political science at Hong Kong Baptist University. “It's really a mess.”

Beijing has not hidden its disappointment. President Xi Jinping publicly instructed Hong Kong's top official, Carrie Lam, to “mobilize all power and resources” to “ensure the safety and health of the Hong Kong people.” Xia Baolong, a senior official in charge of Hong Kong affairs, tersely reminded the city's top administrators to uphold their oaths of office and “have the courage to shoulder arduous responsibility.”

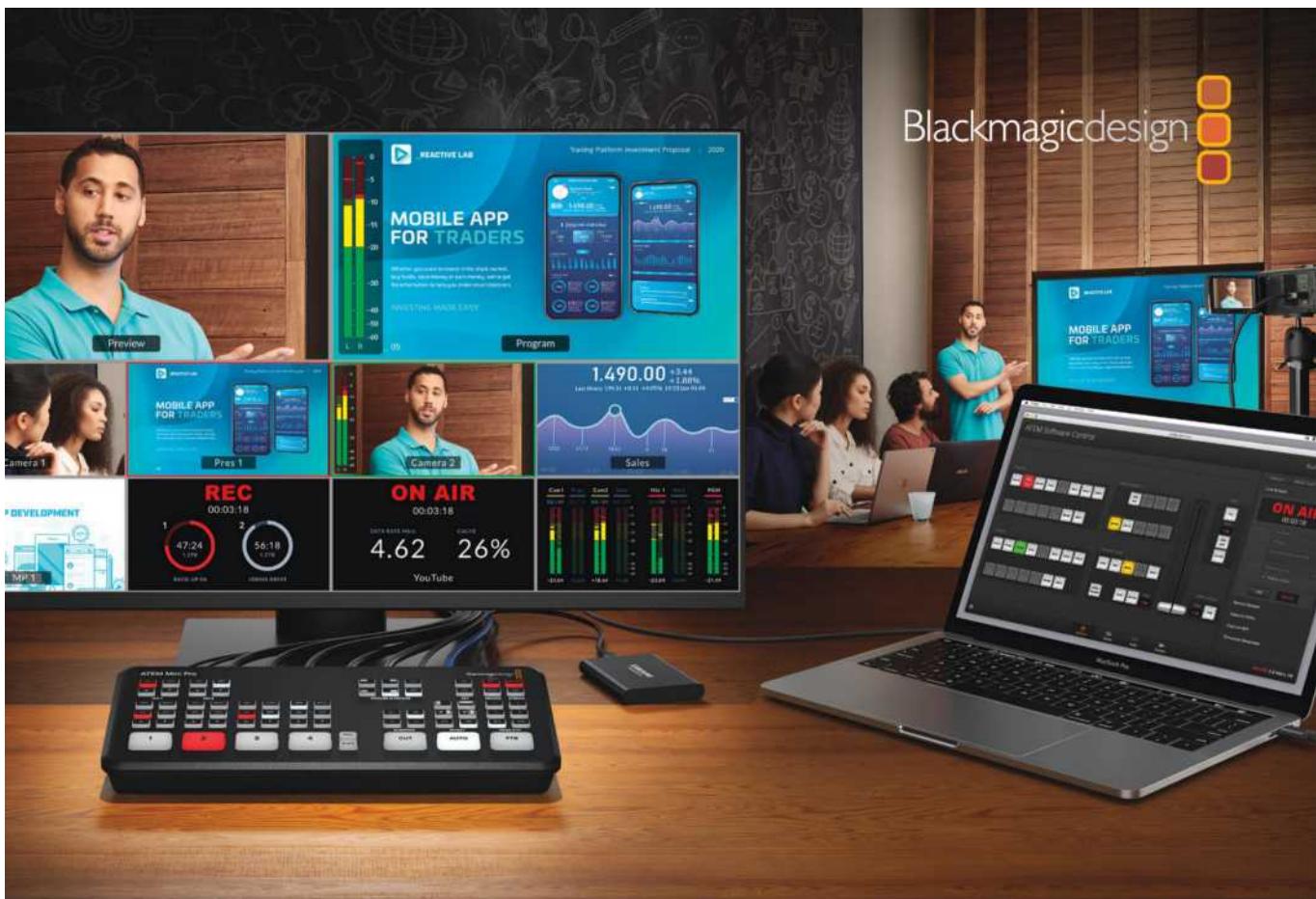
The central government isn't leaving it up to Hong Kong, however. Media reports say hundreds of officials have set up a Shenzhen command center to respond to developments in the semiautonomous territory. On a war footing, they put in 16-hour days and are authorized to cut through red tape, given the seriousness of the crisis.

China's zero-COVID strategy has been largely successful. On March 11, the world's most populous nation had registered a total of 113,528 cases since the start of the pandemic, with 4,636 deaths. It even managed to stage the Winter Olympics without mishap. Could that be about to change?

“There'll be a lot of concern right now about the risk posed by people traveling from Hong Kong,” says Cowling at HKU. “There'll be an unlucky event, where there's transmission to, maybe, local staff in a hotel, or to local testing staff, or something—and then that will start an outbreak.” □

‘The more opportunities the virus has, sooner or later it will find a way.’

—BEN COWLING, EPIDEMIOLOGIST,
HONG KONG UNIVERSITY



Introducing ATEM Mini Pro

The compact television studio that lets you create presentation videos and live streams!

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NEWS TICKER

Powerful earthquake rocks Japan

An earthquake of 7.3 magnitude struck off the coast of Japan on the night of March 16, leading officials to issue temporary **tsunami advisories for Fukushima and Miyagi prefectures**. More than 2 million households in Tokyo and nearby areas lost power as a result, Tokyo Electric Power Company said.

South Korea elects populist President

South Korea elected a populist former public prosecutor—dubbed the South Korean Donald Trump by some observers—in the nation's **tightest ever presidential race** on March 9. Yoon Suk-yeol of the conservative People Power Party won support amid growing antifeminist sentiment in the country.

New Zealand to open its borders

New Zealand Prime Minister Jacinda Ardern announced March 16 that the country will open its borders to fully vaccinated international travelers on May 2. The borders of the island nation have been **closed for two years in response to the outbreak of COVID-19**, leaving some New Zealanders stranded abroad and visitors banned.

**Order on the court**

Naomi Osaka of Japan signs autographs after losing to Veronika Kudermetova of Russia during the BNP Paribas Open tennis tournament at the Indian Wells Tennis Garden in Indian Wells, Calif., on March 12. After being heckled by a spectator during the match, an emotional Osaka addressed the crowd, saying it reminded her of a 2001 incident in which Venus and Serena Williams were harassed at the same venue.

THE BULLETIN

Environmental regulations aren't preventing oil drilling. Skittish investors are

AS GAS PRICES SPIKE FOR AMERICAN drivers, fossil-fuel boosters are slamming President Joe Biden for restrictive policies and environmental regulations they say artificially constrain U.S. energy production. But oil and gas executives—gathered the first week of March at CERAWeek by S&P Global, the industry's most influential annual conference—offered a different explanation. The primary thing holding back more production isn't government policies, they say. It's money.

STUNG BY FRACKING Typically, a steep rise in oil prices would push investors to dump cash into more drilling. But many are still haunted by the hydraulic fracturing—or fracking—boom, which triggered so much production that supply vastly outstripped demand, and tanked prices. Between June 2014 and January 2016, the U.S. benchmark price of a barrel of oil fell from more than \$100 to around \$30.

NO GUARANTEES Oil prices soared to well above \$100. But no one knows how long the current crisis will last or what its impact on the global economy will be. A sustained war in Ukraine could mean sustained high prices, or it could drive a global recession, which would reduce demand for oil. "You can't deliver consistent market leading returns, if you're yanking around activity from month to month," said Jeff Ritenour, chief financial officer at Devon Energy, an Oklahoma City-based oil and gas company.

BIDEN'S PROMISES The Biden Administration promised to crack down on the oil and gas industry, but so far, it hasn't done much. The policies under consideration offer carrots for clean energy rather than prevent more extraction. "There is nothing that the Administration is doing to restrict it," Amos Hochstein, the State Department's point person for energy security, said.

—JUSTIN WORLAND

RAY ACEVEDO—EPA-EFE/SHUTTERSTOCK



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in the world.



Safer with Google



Afrigen staff members at work in the company's lab in Cape Town

GOOD QUESTION

What would it take for locally produced vaccines to become a reality in Africa?

MODERNA, WHICH MAKES ONE OF THE two mRNA vaccines that have changed the COVID-19 pandemic, is the first company to decide not to enforce its patent on the shot. The Massachusetts-based biotech said it would never invoke its vaccine patent in 92 low- and middle-income countries that are receiving COVID-19 vaccines through COVAX, a global project to procure and distribute the shots to nations in need.

But leaders at the World Health Organization (WHO) say the patent isn't the only problem in ensuring equitable access to vaccine technology. "It's been obvious to us for a long time, but really driven home by COVID-19, that we need to expand our ability and capacity to produce pandemic vaccines in low- and middle-income countries and regions," says Dr. Martin Friede, coordinator of the Initiative for Vaccine Research at WHO. Knowledge and expertise in vaccine development and manufacturing needs to be built at the local level, he says, so lower-resource nations aren't at the mercy of the developed world as they ask or wait for technology transfer.

In July 2021, the WHO created an mRNA vaccine technology transfer hub

in South Africa. Researchers at Afrigen, a biotech company in Cape Town that's supported by the multinational Avacare Health Group and the South African government, learned the technology and produced the first doses of a vaccine building from publicly available information on the Moderna shot. The idea behind the hub was to bring scientists with expertise in the mRNA vaccine-making process together to share their knowledge with colleagues in low- and middle-income countries who might not have access to such information.

The process would have been quicker had Moderna also cooperated in sharing its expertise, says Friede; as it stands, it will take time for Afrigen to scale up production of doses, and it won't be finished testing them for safety and efficacy and getting authorization to use them until 2024.

Recognizing the role that companies can play in ensuring more equitable distribution of vaccines, Moderna has committed to working with scientists to develop mRNA vaccines against 15 other diseases that are common in the developing world, with the idea that more locally produced shots could be available in a timely and equitable manner. —ALICE PARK

NEWS TICKER

Miss. limits discussions of race in schools

On March 14, Mississippi's Republican Governor Tate Reeves signed a bill **limiting how race can be discussed in classrooms**. The law took effect immediately. While the bill's title says it would prohibit "critical race theory," the state's superintendent of education says the theory is not taught in schools.

Idaho passes Texas-style abortion ban

On March 14, Idaho became the first state to pass a bill modeled after Texas' controversial law that **allows private citizens to enforce bans on abortions** after six weeks of pregnancy or when fetal cardiac activity is detected.

The bill heads to GOP Governor Brad Little, who signed a similar restriction last year, which was later blocked in the courts.

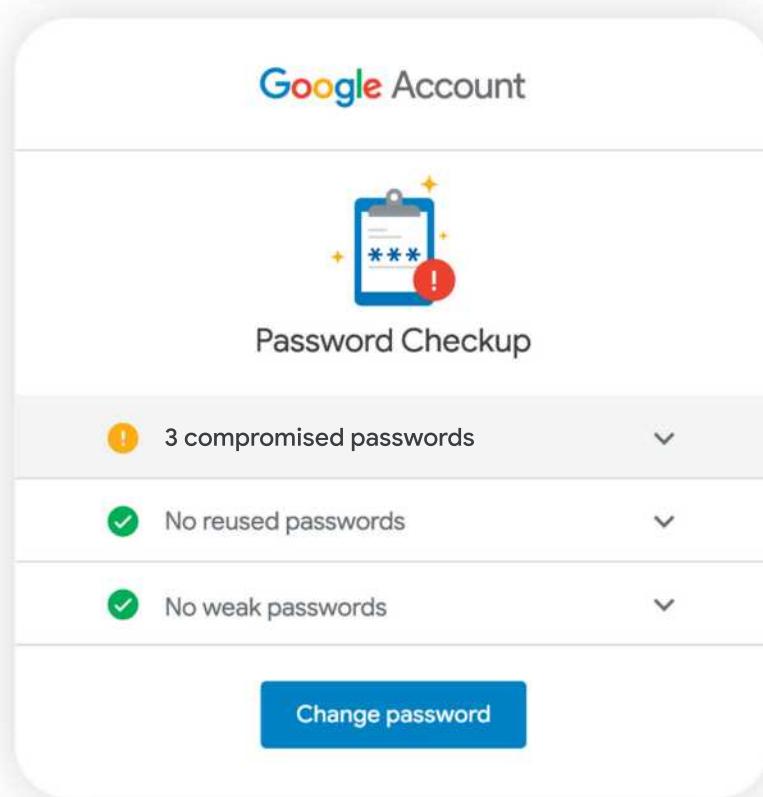
Ship stuck in Chesapeake Bay

The **giant container ship Ever Forward ran aground** on March 13, officials said, nearly a year after the *Ever Given*, operated by the same Taiwanese company, ran aground in the Suez Canal, causing global supply-chain upheaval. Unlike a year ago, the *Ever Forward* is not blocking trade routes.

TOMMY TRENCHARD—PANOS PICTURES/REDUX



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protecting your
accounts from hackers.

We keep more people safe online than anyone else with products that are
secure by default, private by design, and put you in control.



Safer with Google

g.co/safety

DIED

Emilio Delgado*Actor with impact*

BY SONIA MANZANO

EMILIO DELGADO, WHO DIED March 10 at the age of 81, played Luis, the Fix-It Shop owner on *Sesame Street* for more than four decades.

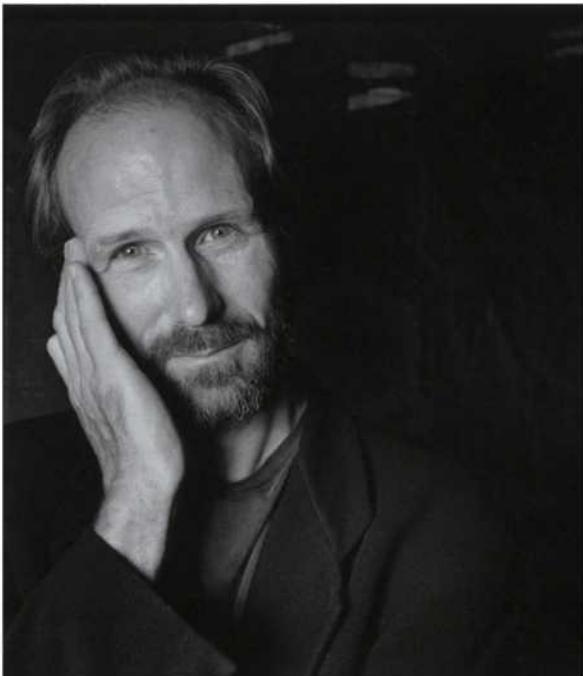
A child of the '60s and an actor happy to have a job, he could not have realized the impact he would have, especially on Latino children. My nephew, who is now in his 50s, told me that as a little boy, he wanted to grow up and become a man like Luis. How wonderful that Emilio's strength, warmth, and kindness were attractive enough for children to want to emulate.

Sesame Street always wanted the human cast members to be themselves, and in allowing Emilio to be himself they hit the jackpot.

In 1988, my character (Maria) and Luis had a widely watched onscreen wedding. At that time, Latinos on television were the butt of a joke. Our wedding presented flesh-and-blood Latinos wanting the same things out of life as other Americans.

Emilio held children in high regard, saw adults as individuals, always defended the underdog, and was eternally positive. I will miss him. —As told to SANYA MANSOOR

Manzano is an actor



Hurt: a charismatic 1980s bombshell who built a lasting career

DIED

William Hurt*A magnificent presence*

IF YOU WERE A MOVIEGOER IN THE EARLY 1980S SEEING William Hurt for the first time, you probably didn't know what hit you. In early films like Lawrence Kasdan's erotic thriller *Body Heat* (1981), in which he plays a Florida lawyer embroiled in a steamy affair that leads to murder, he was a magnificent, golden presence, his shimmering carnality tempered by boy-next-door earnestness. A Juilliard-trained performer Hurt, who died on March 13 at age 71, could shift gracefully between theater and film, he was simultaneously thoughtful and charismatic; his intelligence was a grand seduction tool.

Hurt's magnetism only intensified through the '80s: he brought shimmering dignity to his role in Héctor Babenco's 1985 *Kiss of the Spider Woman*, as Luis Molina, a gay inmate in love with his cellmate (Raul Julia) while both serve time in a Brazilian prison during that country's military dictatorship. The performance earned him an Academy Award; he was nominated three more times, for his roles in *Children of a Lesser God* (1986), *Broadcast News* (1987), and *A History of Violence* (2005). Hurt had his demons: in her 2009 autobiography *I'll Scream Later*, former girlfriend Marlee Matlin described numerous instances of abuse. The best actors can be complicated people, and Hurt, one of the finest of his era, was no exception.

— STEPHANIE ZACHAREK

BROKEN

The record for deforestation in Brazil's Amazon rain forests for the month of February—after breaking a similar record set just a month earlier—officials said March 11.

REMOVED

What is believed to be Maryland's last public Confederate statue—not including those on cemeteries and battlefields—from a courthouse lawn, on March 14.

RESCUED

A 28-year-old New York City man—twice in two days and most recently on March 3—after hiking on Arizona trails.

TESTED

Positive for COVID-19, former President Barack Obama said March 13 on Twitter, adding that he "had a scratchy throat for a couple days, but am feeling fine otherwise."

ASKED

Mississippi authorities to reverse their decision to close an investigation of Emmett Till's lynching, by his relatives and their supporters at a news conference March 11.

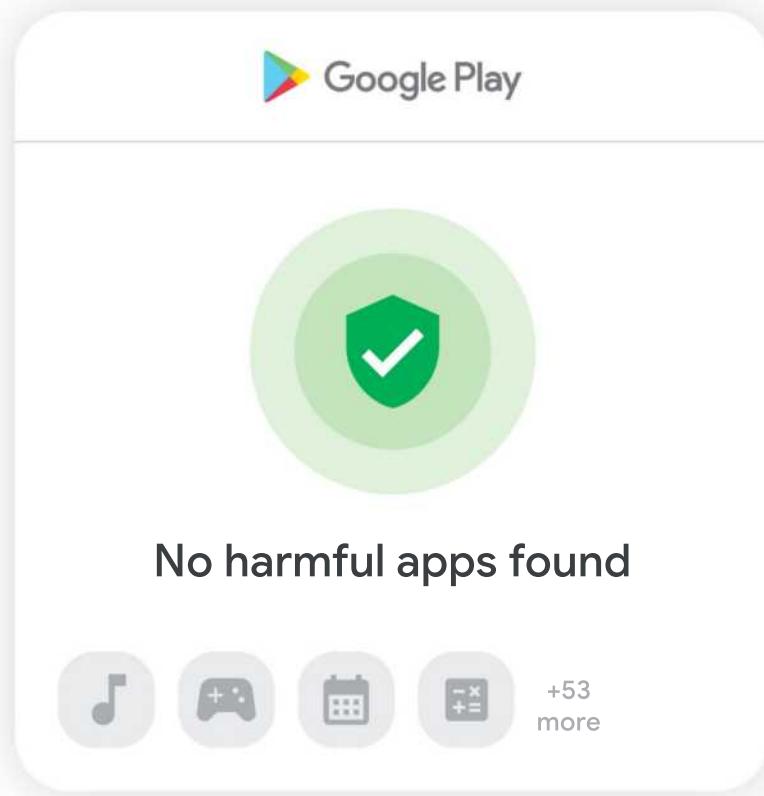
FREED

British-Iranian nationals Nazanin Zaghari-Ratcliffe and Anoosheh Ashoori, after being held in detention by Iran for a number of years. The British government said March 16 that the duo were on a plane, returning home.

HURT: JEROME DE PERUNGHI—CORBIS OUTLINE/GETTY IMAGES; DELGADO: RICHARD TERMINE—PBS/EVERETT COLLECTION



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ENERGY

Bans on Russian oil raise tough questions

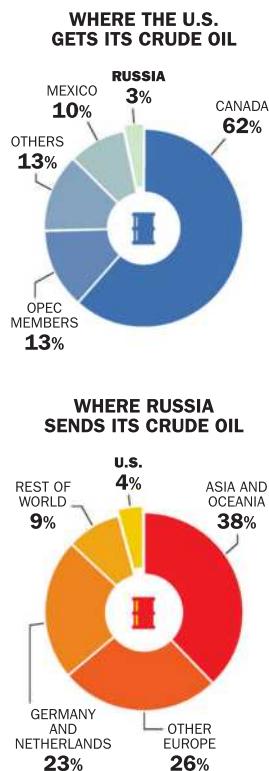
WORLD LEADERS MAY BE WORKING TO present themselves as a united front in supporting Ukraine, but when it comes to cutting off Russian oil and gas—the country's biggest exports—there's no consensus.

On March 8, President Joe Biden announced that the U.S. would pull the plug on Russian oil after pressure from both Democrats and Republicans. The U.K. similarly pledged to detach itself from Russian oil by 2023, and is exploring options to ban its gas. European nations including Germany and the Netherlands have no immediate intentions of shutting off oil pipelines, but the E.U. said it would cut gas imports from Russia by two-thirds this year.

Ultimately, no country will have the benefit of sitting on the sidelines when one nation makes a move. Particularly with crude oil, the market is too interconnected to isolate just one economy, though some nations are more vulnerable than others to supply-chain disruptions. What's less clear is just how tight supplies will get and whether governments will mitigate the pain by upping fossil-fuel production or leaning harder into green energy.

Russia is the world's third largest producer of liquid fuels, according to the U.S. Energy Information Administration. While NATO countries may want to show support, taking action is more feasible for nations like the U.S. and U.K. They got about 3% and 8% of their crude-oil imports from Russia, respectively. Germany and the Netherlands, on the other hand, rely on Russia for more than 30% of theirs. That also means the U.S. is in no position to cripple Russia's oil industry on its own, particularly if its major customers keep the pipes flowing. But the U.S. ban is not ineffective, either. The move will tighten the squeeze that Russian energy companies are feeling as multinational firms like Shell cut them off, and it could spur other nations to follow suit.

As supplies tighten, it's unclear how much price pressure countries can withstand. Some European nations have no appetite to test the limits and are treading carefully. German Chancellor Olaf Scholz noted on March 7 that Russian energy supplies are of "essential importance" to maintain services. That sentiment may change



NOTES: OTHER EUROPE CONSISTS OF EUROPEAN NATIONS IN THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. ALL FIGURES FROM 2021 AND MAY NOT EQUAL 100% BECAUSE OF ROUNDING. RUSSIA'S EXPORTS INCLUDE CONDENSATE, A NATURAL GAS LIQUID THAT ENTERS THE CRUDE-OIL STREAM AFTER PRODUCTION.

SOURCE: U.S. ENERGY INFORMATION ADMINISTRATION

as the world finds other energy sources, and some are hoping this situation helps accelerate the green transitions. But there's no way to avoid price pain in the interim.

So countries are looking to replace Russian fuel in different places. World leaders agreed to release 60 million barrels of oil from stockpiles in March, which is the equivalent of only about two weeks' worth of Russia's crude exports. The E.U. is looking for other suppliers and to reduce consumption as it weans off Russian gas. The Biden Administration is looking to countries like Saudi Arabia, where oil production is on par with Russia, as well as to Venezuela and Iran, if a nuclear deal comes to pass there—but lawmakers from both parties have criticized the possibility that in choking off Putin, the U.S. would turn toward autocratic regimes. —EMILY BARONE

WORLD

Ukraine crisis spurs Russophobia globally

IKE GAZARYAN ATTRIBUTED THE FIRST few abusive calls to his San Diego restaurant, which serves food from former Soviet republics, to kids messing around. But then, in the week after Russia invaded Ukraine, the threats seemed to get more worrisome.

"We started getting more serious calls, with people yelling and screaming at us," says Gazaryan, who is ethnically Armenian but has lived in Russia. "As if we have something to do with this war, blaming us for what the Putin regime is doing."

Since the start of the Russian invasion, some people have directed their ire toward anything they deem to be associated with Russia or its people. In some cases, these protests have seemed harmless, or even silly—for instance, the European Tree of the Year contest eliminated Russian trees from consideration. Russian cultural exports have become another target, with cancellations of performances by the Russian State Ballet of Siberia, the Royal Moscow Ballet, and the Bolshoi Ballet in the U.K. In other cases, the rhetoric has been more clearly discriminatory, as when U.S. Representative Eric Swalwell argued for "kicking every Russian student out of the U.S."

MCDONALD S./KONSTANTIN ZAVARZHEN—GETTY IMAGES



The attacks appear to indiscriminately target those from the Russian-speaking diaspora. Some victims of abuse fled political persecution in Russia and former Soviet republics themselves. Others are not Russian at all but immigrated from other parts of Eastern Europe and Central Asia, including Ukraine.

Gazaryan fled persecution in Azerbaijan as a child, settling first in Uzbekistan and later in Russia, before making the U.S. his home. He strongly empathizes with Ukrainians, in part because he can relate to their suffering. "My family knows what war is firsthand, and what it's like to leave everything and run," says Gazaryan. —TARA LAW

BUSINESS

When CEOs go to war, problems may follow

TRADITIONALLY, CORPORATIONS THAT DO business with countries that are considered international pariahs have drawn a line between matters of trade and matters of state.

Commerce among nations is supposed to be good for international relations, so those who help it along consider themselves the good guys. "We're part of the cog of capitalism that spreads investment, employment,

People visit a McDonald's restaurant in Moscow on March 9, before it closes as the company prepares to suspend operations in Russia

'We are compelled to act following Russia's unprovoked invasion of Ukraine.'

—AL KELLY, CHAIRMAN AND CEO, VISA INC.

and wealth," says Mark Weil, CEO of global business service provider TMF Group, about his company's work providing administrative services around the world, including in Russia and Ukraine.

But these calculations changed when Russia started a war. NATO countries and their Western cousins imposed financial and economic penalties at a scale unprecedented against a G-20 economy—and a large number of corporations also stopped doing business there. "We are compelled to act following Russia's unprovoked invasion of Ukraine," said Al Kelly, chairman and CEO of Visa Inc., in announcing its withdrawal from Russia. Private enterprise has become enmeshed in a geopolitical conflict with a new force, which could have a significant impact on how future wars are fought—and peace is negotiated.

The speed with which corporations acted surprised sanctions experts; in many cases, CEOs decided to exit Russia before being ordered to by any government. These withdrawals have made the sanctions more effective, experts say, but may also have a downside. "The private sector has a voice in this now and is a prime agent in the isolation of the Russian economy. It will have a say in how Russia is reintegrated if ever," says Juan Zarate, a partner at risk-compliance firm K2 Integrity. "But it also makes diplomacy a bit more unwieldy."

As the business world begins to flex its diplomatic muscles, actual statesmen may find that they have less impact and control. "Diplomats don't control the decision-making of the McDonald's board or of BP's CEO," says Zarate. Typically, the removal of sanctions is accompanied by promises of foreign investment as inducements to persuade warring nations to lay down their arms. But the private sector's priorities may not coincide with those of the statesmen; firms may decide not to reinvest in Russia.

The even longer-term consequences of private enterprises' opting to add their fuel to the conflagration of war are unknown. For CEOs, one question is whether corporate leaders have muddied future moral considerations about where to do business. "I know I'm going to get emails saying, 'I can't believe you haven't done anything to look after [this oppressed group],' " says Weil, who has decided to sever ties with Russian clients. "I'm going to stress to them, 'Don't expect me to be your ethical instrument.'" —BELINDA LUSCOMBE



REMEMBRANCE

My brother died giving voice to people in crisis

BY CRAIG RENAUD

I STUDIED ANTHROPOLOGY IN COLLEGE, AND WAS living with an Indigenous tribe in Costa Rica when I realized I wished I had a camera. At the time, my big brother Brent had fallen in love with documentary film and was interning at Jon Alpert's Downtown Community Television Center. Before long, I'd moved from Oregon to Brent's New York apartment, sleeping on a lawn chair until it broke. Then I moved to the couch.

We worked with Alpert for years and, after 9/11, often in conflict zones. Neither of us was chasing adrenaline. Our projects were always driven by characters, people who did not have a voice and found themselves in extreme situations. We worked in Haiti, in Juárez, and in a Chicago high school for kids who had been kicked out of every other school. To make *Dope Sick Love* for HBO, we took turns living for days at a time on the street with two heroin-addicted couples, ferrying in fresh camera batteries. When the National Guard from our home state of Arkansas deployed to Iraq, one of us went along and one remained with families; calls home were filmed from both perspectives.

For *Tipping Point*, a documentary series involving TIME Studios, a producer sought us out to make an episode on refugees. We had already done a film following young men migrating from Central America, and navigated what everyone assumed would be the most dangerous place to work. Then Russia invaded Ukraine, and suddenly Europe had its largest refugee crisis since the 1940s. Having given up international travel after the birth of my son, my job was now support. Brent, with no kids, just up and went.

He was in Kyiv as Russian forces circled the city and Ukrainian civilians scrambled away. On March 13,

Craig Renaud, far left, and his older brother Brent, who was killed in Ukraine on March 13, together in 2007; on a fishing trip in 1980 at Peaceful Valley Lake, Mo.

he rode with his friend, the photographer Juan Arredondo, and a translator to a bridge. They were told there were also people crossing at a farther bridge. The translator did not want to go, so Brent and Juan hitched a ride with a civilian and were on their way toward not the front but the people fleeing it when they heard the first shot.

MY PHONE RANG at 5:30 a.m. Juan kept shouting, "We've been shot!" I said, "Where's Brent?" He said, "He's been shot too. I've been pulled away. He's still there." Had he been wearing his body armor? Yes. Had he been shot in the armor or in the face? No reply. That's when I knew.

Later Juan told me he'd seen a bullet enter Brent's neck. It had come in a fusillade from the roadside, which sounds like an ambush. Putin's troops had been targeting journalists. And Brent, as the first American they killed, became a story himself.

The response has amazed me. Our family was moved by President Zelensky's message that the people of Ukraine "are mourning with you." What gives me the greatest heart, though, is how specifically and genuinely the people honoring Brent acknowledge the mission that drove him. A person who had devoted his life to telling the stories of overlooked people was slaughtered trying to reach them.

That is a story that needs to be told as well. My brother would be massively pissed if it were any other way. As I relate the contents of this article—speaking to a TIME reporter by phone from Warsaw, the first stop on the journey to collect my brother's body—a camera is trained on my face. It's held by a friend and colleague who rushed into the breach created by his death. We are going to make sure this story is seen.—As told to KARL VICK



'There's a million ways you can make a difference in your community, but for us, we want to tell the stories.'

—BRENT RENAUD,
IN A 2017 INTERVIEW

BRENT AND CRAIG RENAUD: OSCAR HIDALGO—THE NEW YORK TIMES/REDUX; COURTESY CRAIG RENAUD; BRENT RENAUD: ILYA S. SAVENOK—GETTY IMAGES FOR PEABODY AWARDS

Renaud is a filmmaker

GOLDEN GATE BRIDGE ALSO KEPT TAXES AT BAY

The Golden Gate Bridge was financed with municipal bonds.

Dubbed one of the 'Wonders of the Modern World', the Golden Gate Bridge opened to the public on May 27, 1937. At the time, it was both the longest and the tallest suspension bridge in the world, with a main span of 4,200 feet and a total height of 746 feet. It is still the tallest bridge in the United States, transporting 110,000 vehicles every day. To help raise the \$35 million it cost to build, the authorities in California issued tax-free municipal bonds.

Still going strong

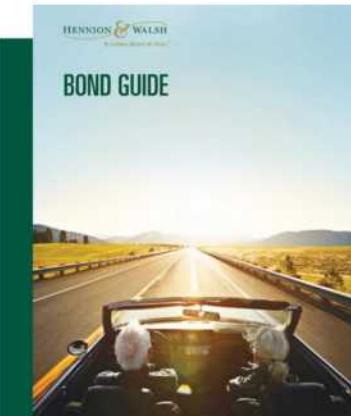
And, just like that iconic structure, municipal bonds are still going strong today as a way for investors to invest in civic projects, while earning income that's free of federal taxes and potentially state taxes.

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TECHNOLOGY

The Lithuanian 'elves' fighting Russian trolls

BY LISA ABEND/VILNIUS, LITHUANIA

ON THE DAY THAT RUSSIA LAUNCHED ITS FULL-SCALE invasion of Ukraine, Henrikas Savickis was preparing to open a new play. An actor at the National Theater in the Lithuanian city of Kaunas, the 51-year-old was caught up in dress rehearsals, but still managed to squeeze in a small contribution to the fight against Russia. After logging on to a private Facebook group seemingly devoted to Yorkshire puppies, he took up his weapon of choice: the keyboard.

The Yorkshire puppies are a cover for a large, informal community of Lithuanian citizens who, for the past eight years, have been engaged in an ongoing battle against the Russian disinformation that regularly floods Lithuanian media, social and otherwise. They number in the thousands, and although most keep their identities secret, they include bartenders, doctors, students, businesspeople, and at least one member of Parliament. And although they go by the whimsical name of "elves," they are a serious part of a broader coalition across different levels of society that have made Lithuania a leader in that other war against Russia: the information war.

They got their name, says their co-founder Ricardas Savukynas, "because elves fight trolls." They jump into action whenever a member identifies fake news or accounts that seem to be the product of Russian troll farms. By reporting the disinformation en masse to Facebook, they generate enough complaints to have it removed by the platform. (Facebook did not reply to TIME's request for comment.) The method has proved effective enough that Lithuania's Ministry of Defense has recommended it as an alternative to young men who lack military experience but are eager to defend Ukraine, according to two who spoke to TIME.

The world has awoken in the past few years to the threat of Kremlin-backed disinformation—from the manipulation of U.S. elections to the spread of antivax conspiracies to a flurry of staged videos purporting that Ukraine attacked Russia. In Lithuania, a tiny country of 2.8 million, where proximity and history have led many to believe they are next in Vladimir Putin's sight lines, those tactics are pervasive. "Propaganda is just part of our reality here in the Baltic states," says Viktor Denisenko, a journalist and communications professor at Vilnius University. "The Kremlin has been trying to influence our information space for a long time."

EXPERTS SAY IT NEVER REALLY STOPPED. Occupied by the Soviet Union for more than 45 years, Lithuania remained a target of Russian disinformation even after it declared independence in 1990. "After the collapse of the Iron Curtain, Western countries simply retired their [propaganda] specialists and put away all their knowledge in folders," says Master Sergeant Tomas Ceponis, senior specialist in the Lithuanian Ministry of Defense's Counter Hybrid Response Group. "But



Actor Henrikas Savickis checks social media to spot false news, in Kaunas, Lithuania

Russia didn't; they actually strengthened it."

More recently, those efforts have increased. According to the Lithuanian armed forces' Strategic Communications Department (STRATCOM), the number of discrete "information incidents" (where a single event—real or invented—is given a particular spin and then disseminated through various media) rose to 5,030 in 2021 from 3,412 the previous year. In January 2022, the ministry counted a record one-month total of 583. The same recurring themes underlie the disinformation: that Lithuania is not democratic but fascist; that it is a failed state run by Nazis or neo-Nazis; and that NATO has occupied it and is using it to establish outposts against Russia.

One of the people who noticed those narratives was Savukynas, 48, a Vilnius business consultant and popular blogger. Around a decade ago, he started coming across what he describes as "strange" Facebook groups that, although ostensibly dedicated to different topics—parenting, alternative medicine, veganism—posted much of the same content. "They started to say

TADAS KAZAKEVICIUS FOR TIME



'You can only fight lies with truth.'

—RICARDAS SAVUKYNAS,
BUSINESS CONSULTANT
AND BLOGGER

that our government was lying, that Soviet times were quite good, that NATO was an aggressor, that the European Union is an occupier,” Savukynas says. “And after that, they started to talk about how Putin was good and how Lithuania should become associated with Russia, and so on and so on.”

When Russia was preparing to invade and annex Crimea in 2014, Savukynas realized that the content he was seeing in Lithuania (where 5% of the population is ethnically Russian) was designed to lay the groundwork for the invasion. He decided to act. He and a group of friends started concertedly flagging fake news in the comments of online articles, and eventually set up a harmless-looking Facebook group where anyone could alert the others to propaganda circulating online, and band together to report it.

Within a short period, thousands—most of them using pseudonyms to protect themselves from trolls and potentially more serious threats—had joined that group or set up similar ones on their own. Because of their anonymity and decentralized structure, it is difficult to determine

hard numbers, but one prominent elf group counts 25,000 members. In addition to getting fake accounts shut down and fake news blocked, they also try to counter disinformation by publishing facts. “You can only fight lies with truth,” Savukynas says.

That principle drew Jurgita Sejoniene to the group. A Vilnius-based radiologist, she was appalled by the disinformation about COVID-19 she saw online in 2020, and joined the elves to combat it. For the past two years, she’s used her training as a health care professional to daily counter those lies and distortions with accurate information. She’s done it not only while raising two small daughters, but also after being elected to Parliament. “Most of my constituents do not know I’m an elf,” she says, with a mischievous smile.

She and the other elves have been busy, even as coronavirus disinformation has suddenly disappeared in favor of content on more recent geopolitical events. “In the last year, we saw enormous amounts of fake accounts like never before,” Savukynas says. “You would go to a Facebook article about Ukraine and you’d see 30 or 50 comments that are almost the same: that Ukraine is fascist; that Ukrainians kill people; that Lithuanians should improve relations with Russia; that Lithuania is occupied by NATO; and so on. And when you start checking, you realize that they’re almost all the same and that they’re almost all fake.”

That ordinary citizens have taken on this task gives the elves a certain mystique. But they’re not acting alone; a large part of Lithuania’s success in countering disinformation is that institutions in different spheres have also taken on the work. A think tank called Debunk collaborates with elves as well as analysts and media companies, and, thanks to a grant from Google’s innovation fund, researches disinformation and runs media-literacy campaigns. One of the country’s main media companies, Delfi (which is among the founders of Debunk), oversees a fact-checking newsroom called Lie Detector. A newly launched network of academics, NGOs, and members of the media, called DIGIRES, is developing an AI tool to detect disinformation. And in 2009, the Ministry of Defense founded the Counter Hybrid Response Group to monitor and combat propaganda and disinformation directed toward Lithuanians. From early in its history, the group declassified its findings so legislators could act on them. “Lithuania is more resistant to hostile disinformation, but I always stress that this is not because we have a different DNA or a silver bullet,” says Ceponis. “One reason is because we do our homework.”

Lithuanians have the motivation of history behind them. “Every family in Lithuania was touched by Russia’s occupation,” says Dominyka Daskeviciute, an analyst in the armed forces’ STRATCOM. “We very well know what their means are, how they do things. That’s why we are resilient.”

Last fall, a heightened flow of disinformation making “historical” arguments for why an independent Ukraine should not exist made it clear that something was coming. Daskeviciute says that when Putin gave a speech saying that Ukraine does not have a historical reason to exist, it was clear an invasion was imminent. “Everything,” she says, “happens in the information environment first.” □

The Prime Minister of Moldova, Natalia Gavrilita, fears her country is Putin's next target

BY CHARLIE CAMPBELL/CHISINAU, MOLDOVA

NATALIA GAVRILITA KNOWS SHE'S IN A TIGHT spot. It is after all the job of Moldova's Prime Minister to project an air of control, an easy calm, the sense that everything will work out fine. But the humanitarian fallout from Russia's invasion of Ukraine is fraying the seams of her nation, Europe's poorest by some metrics. So as we wrap up our interview, chatting before her nation's tricolor flag, she double-checks herself.

"Perhaps I should have been stronger on the need for help," she muses aloud. "Because we need green corridors [taking refugees to third countries], we need assistance, we need expertise, we need help to deal with economic concerns. We are small, and so panic can quickly unbalance the economy."

Russian President Vladimir Putin's invasion of Ukraine has sent more than 3 million refugees hurrying to neighboring countries, upended Europe's security architecture, and revived fears of nuclear war. But in any rowdy neighborhood, the smallest suffer most. And they don't come much smaller than landlocked Moldova, population 2.6 million—less than Chicago's.

Still, when TIME sat down with Gavrilita on March 8, the plucky nation had already welcomed at least 270,000 refugees from besieged Ukraine, which envelops Moldova across three compass points, with Romania to the west. And despite a GDP per capita somewhere between those of Guatemala and Jordan, Moldova opened its hearts and homes to those fleeing—with locals ferrying soup and medical supplies to the border, or standing ready with a smile and a hug. "It has been a mobilization of the entire society," Gavrilita says proudly. "But we are very rapidly reaching our capacities."

With that in mind, U.S. Secretary of State Antony Blinken arrived in Moldova two days earlier to show support and promise \$18 million over the next few years to "strengthen and diversify" Moldova's energy sector. "Energy security is actually critical to maintaining one's sovereignty and independence," Blinken said.

So is keeping Russian tanks at bay, though on that point Washington is more reticent. In his State of the Union address, President Joe Biden vowed to defend "every inch" of NATO territory, but added that "our forces are not going to Europe

GAVRILITA QUICK FACTS

Social warrior

From 2015 to 2019, she led the Global Innovation Fund, a nonprofit investor that serves disadvantaged populations.

A new tradition

Gavrilita served as Finance Minister in Maia Sandu's short-lived government in 2019, returning as Prime Minister in August 2021—the third woman to serve in that role in Moldova.

Languages spoken

Gavrilita is fluent in Romanian, Russian, English, French, and Spanish.

to fight [for] Ukraine." Neither Ukraine nor Moldova is a member of NATO.

"Moldovans must be very nervous," says Daniel Fried, a former Assistant Secretary of State and U.S. ambassador to Poland. "Biden drew a hard security line, and Moldova is on the wrong side of it."

THE ANXIETY IS PALPABLE. On the foggy first morning of Russia's invasion, Feb. 24, locals in Moldova's low-slung capital could hear artillery fire from the street. The country's airspace closed. Then on March 1 a strong Putin ally, Belarusian President Alexander Lukashenko, gave an extraordinary televised address detailing the Kremlin's invasion plan on a huge map that appeared to include Moldova for occupation. Gavrilita summoned the Belarus ambassador and was told "the map was a misunderstanding," she says. "Of course, we do not believe this is a satisfactory answer."

As the fighting draws closer, Moldovans across the social and political spectrum are wondering whether they could be next. "If Russia feels there is a weakness, they will exploit it," says Igor Munteanu, a former Moldovan MP and ambassador to the U.S. "Moldova is on the front line to be the next victim of this war."

Staving off conquest would make a vivid, albeit vaguely medieval, addition to Gavrilita's résumé. After graduating with a degree in law from Moldova State University, she got a master's in public policy at Harvard before taking various development posts across Eastern Europe, Asia, and Africa.

Since she took office, Moldova's torpid economy, not war, has been her focus. In 2019, around 246,000 Moldovans were working or ready to live abroad on a temporary basis, some 27% of the total labor force and one of the highest rates in the world. Remittances accounted for \$1.9 billion, or 16% of GDP. But a 2014 Deep and Comprehensive Free Trade Area agreement, which reduces tariffs and smooths customs procedures with the E.U. before formally joining the bloc, helped the nation set down roots as an auto-manufacturing and IT hub.

Putin's adventurism now casts a pall



over the whole of Eastern Europe. Moldovans who can trace ancestry to neighboring Romania can apply for dual nationality, making a goodly share eligible to work across the bloc. (The Prime Minister numbers among them.) So Gavrilita's economic plans now face the twin pressures of absorbing hundreds of thousands of refugees and—if instability persists—the prospect of a domestic workforce seeking jobs elsewhere.

On March 3, as war raged next door, Moldova officially applied to join the E.U. It's a risky move, given that Ukraine's flirting with the bloc was perhaps a trigger for Putin's invasion. Gavrilita says E.U. ascension was "a logical next step," but admits the desire was "hastened" by the crisis. Gauging Putin's reaction in light of recent events is tricky—and Moldova spends just 0.4% of GDP on defense.

Like Switzerland, Moldova has rooted its security in constitutionally enshrined neutrality. But like Ukraine, it spent decades as part of the Soviet Union, the breakup of which Putin calls the "greatest geopolitical catastrophe" of our time. In fact, Russian troops are already in Moldova, some 1,700 of them in a breakaway province

loyal to the Kremlin called Transdniestria.

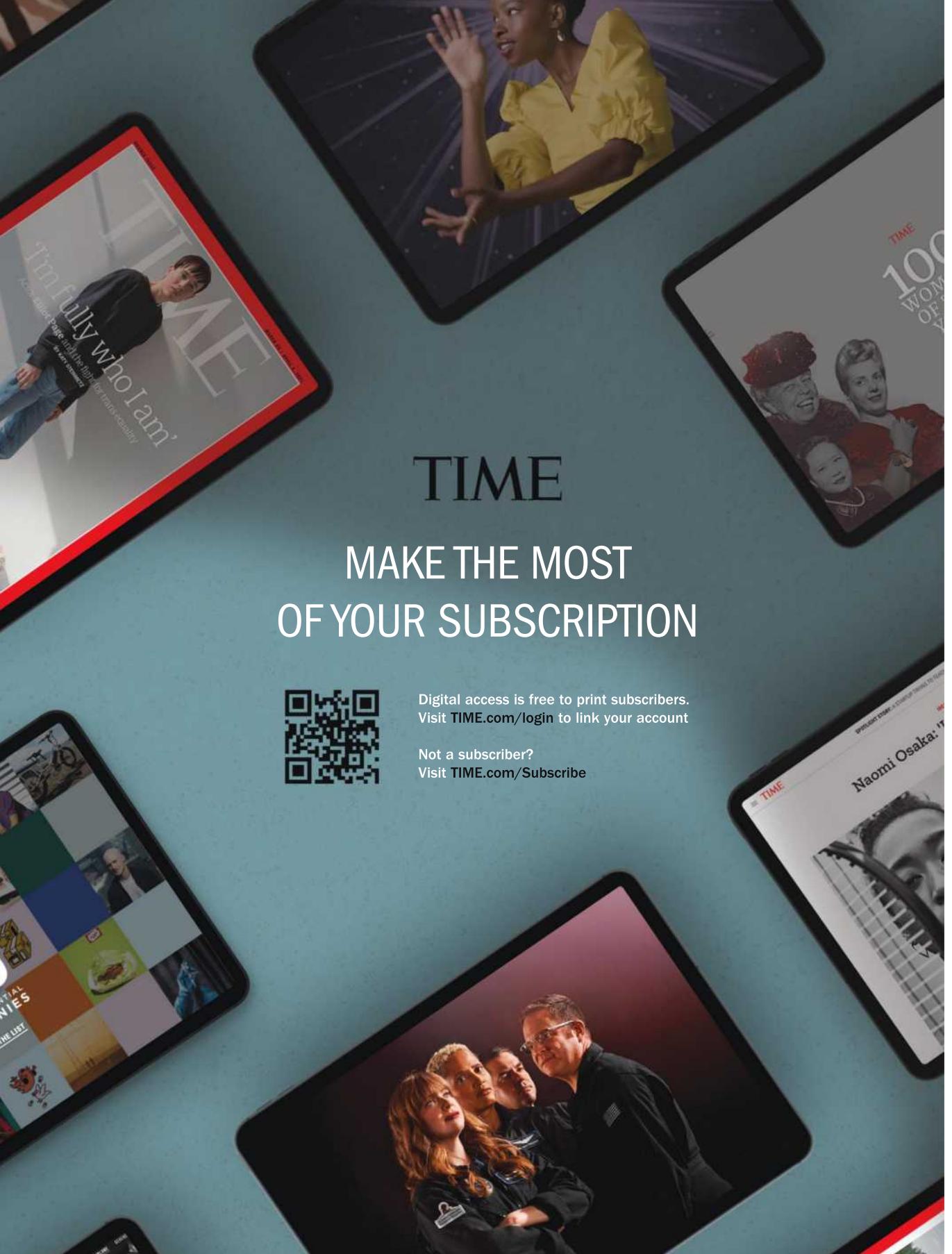
So narrow is the tightrope Gavrilita must walk that Moldova, while condemning Putin's invasion and offering humanitarian assistance to Ukrainians, has stopped short of joining sanctions on Russia. "Our economic, energy, and social resilience does not allow us to undertake such steps, particularly with this war currently going on in our vicinity," she says.

One battle Gavrilita can wage is against the "intensification of disinformation and fake news." Moscow fills local media with false reports of Ukrainian refugee misdeeds and specious justification for Putin's invasion. Since many Moldovans habitually tune in to Russian TV channels (mainly for their higher-production soaps), this propaganda filters through, despite the best efforts of the free press.

But along with refugees, words are primarily what Moldova has at the moment. "We expect everybody to respect our neutral status, and for the international community to support this," Gavrilita says. "And to help Moldova in this request to remain neutral." —With reporting by LESLIE DICKSTEIN/NEW YORK □

'Panic can quickly unbalance the economy.'

NATALIA GAVRILITA



TIME

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The View

ECONOMY

TIME TO ACT ON INFLATION

BY LAWRENCE H. SUMMERS

During the 1960s and '70s, it took a dozen years for a toxic cocktail of excessive fiscal stimulus, misguided monetary policy focused on symptoms rather than causes, and bad luck on the supply side to generate stagflation (a mix of high inflation and a stagnant economy) to develop. Stagflation and political dysfunction corroded trust in government and brought down the presidencies of Ford and Carter. ▶

INSIDE

WHY CHINA WON'T INTERVENE TO STOP THE INVASION OF UKRAINE

THE WESTERNERS WHO FOUGHT FOR INDIAN INDEPENDENCE

WHAT IT'S LIKE TO BE A FLORIDA TEEN WHO CAN'T SAY GAY

History has sped up over time, and in a little more than a year, policy errors like those of the 1960s and '70s, along with bad luck, have brought the U.S. to the brink of stagflation. Income support payments to households and businesses in 2021 far exceeded any reasonable estimate of income reductions that resulted from COVID-19. The Federal Reserve, in ways reminiscent of the 1970s, proclaimed inflation was transitory and isolated to a few sectors even as labor shortages became unprecedentedly severe and pervasive. And now the Ukraine crisis is leading to huge increases in food and energy prices. It is now likely inflation will continue to accelerate for at least several more months as commodity price hikes work through the system. Then it may recede, but not in all likelihood anywhere near the Fed's 2% target.

With inflation now running above 7%, it is not surprising that almost three times as many Americans think the country is on the wrong track as they think it is on the right track.

Small businesses are more likely to cite inflation as their principal worry than at any time since the beginning of President Reagan's disinflation in the 1980s. The Dollar Store has become the \$1.25 Store as consumers are seeing the worst decline in decades in the purchasing power of their wages.

Unfortunately, there are no easy and painless ways of ensuring that the economy enjoys a soft landing. It was delusional even before recent food and oil price explosions to believe, given labor shortages and wages accelerating, that inflation would melt away. Hope is not a strategy. While there are certainly areas where enhanced antitrust action is warranted, scapegoating corporate greed for inflation is preposterous in the view of almost all serious economists. If there is a clear lesson from the 1970s, it is that Nixon's price controls were a disaster that exacerbated the buildup in inflation by reducing the pressure for monetary restriction.

The urgent prerequisite for success in achieving a soft landing is a clear recognition by both the Biden Administration and the Fed that the economy's current level of demand is unsustainable and has been for some time. We now



As food prices rise, a shopper walks through a grocery store in Washington on March 13

need not to celebrate our sugar high but to diet. The more we allow current excesses in both financial markets and the real economy to build up, the more painful the ultimate adjustment will be.

I WELCOME THE FED'S MOVES to phase out quantitative easing and raise interest rates. But they are insufficient. The Fed has not explained how, with hundreds of economists on staff and almost every employer in the country reporting cost increases they were passing on, it managed to underestimate 2021 inflation by a factor of 3. Without such an explanation, it is hard to be confident that they now have things under control.

Nor has the Fed signaled an intention to abandon the operating framework that brought us to this point by ruling out monetary tightening until it was completely clear that the economy was overheating.

The Fed is the most important actor with respect to inflation. But Administration policy is crucial too. Unfortunately, the Administration often emphasizes ideas that are good on the merits but will have negligible effects on inflation for years, like beginning antitrust actions in a few industries or

building new infrastructure. Worse, it advances ideas that in terms of inflation are counterproductive, like Buy America policies that mandate shifts from lower- to higher-cost suppliers. As another example, if the Keystone pipeline had not been rejected, it's probable that it would be providing more oil than will be lost to the embargo.

A more constructive agenda would focus on cost reduction for the benefit of consumers by letting market forces work. Retiring Justice Stephen Breyer's major contribution to U.S. policy was his work with Senator Edward Kennedy to deregulate airlines. Why not reduce shipping costs by repealing the obsolete Jones Act? At a time when housing costs are soaring, why not eliminate restrictions on lumber imports from Canada? More broadly, tariff reductions directly operate to reduce prices for consumers and to make exporters more competitive by holding down their input costs.

Some policy problems are intractable. Not inflation. We know what must be done to reduce it. It's time to act.

Summers, a professor at and a former president of Harvard University, was U.S. Treasury Secretary from 1999 to 2001

STORE: STEPHANIE REYNOLDS—AFP/GETTY IMAGES; XI: HUANG JINGWEN—XINHUA/GETTY IMAGES

THE RISK REPORT BY IAN BREMMER

Will China try to stop Russia?



EUROPEAN AND U.S. diplomats have worked hard to win help from China, a country powerful enough and close

enough to Russia, they hope, to change Vladimir Putin's plans. On March 8, China's President Xi Jinping held a video call with France's Emmanuel Macron and Germany's Olaf Scholz to talk about the war, fueling hopes that Xi will become more actively involved in brokering a deal to end the fighting.

We shouldn't get our hopes up.

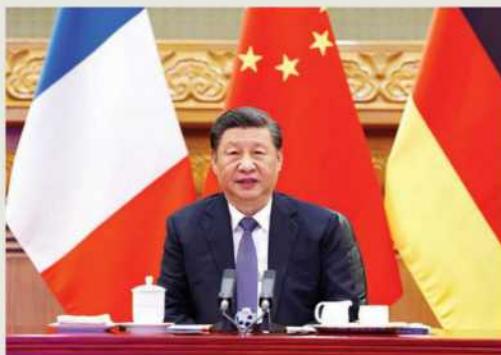
There's no doubt that Russia's war is bad for Beijing. China imports more oil than any other country on earth, and the conflict in Ukraine has pushed prices to their highest levels since 2008. China needs energy, metals, and minerals to fuel its economy, and agricultural products to feed its people. All these commodities have become much more expensive for China and everyone else.

President Xi also acknowledged recently that Western sanctions "will affect global finance, energy, transportation, and the stability of supply chains, and dampen the global economy that is already ravaged by the pandemic." By publicly blaming sanctions for the upheaval, he's careful not to hold Putin accountable.

The invasion is also damaging China's international reputation. Xi understands that many Europeans and Americans are ready to tag China as Russia's accomplice. On the eve of the Winter Olympic Games in China, Putin and Xi met and made a big show of their emerging "friendship," which their joint statement claimed had "no limits." Two weeks later, Russia invaded Ukraine.

Finally, Russia's war in Ukraine

has also shifted geopolitics to China's disadvantage. In recent years, the emerging giant has benefited greatly from disagreements between Europeans and Americans about what sort of world they want to build and how best to protect it. Three decades after the Cold War's end, many in the West, including the previous U.S. President, have questioned NATO's purpose and value. That has lessened the risk for China that Western leaders might expand NATO's mission into Asia or work with China's Asian rivals to build a NATO knockoff. The war in Ukraine has instantly created unity between



President Xi Jinping attends a video summit on Ukraine on March 8

Europe and America and given NATO a clearer purpose. In all these ways, a quick end to Russia's war would be very good for China.

BUT CHINA'S MOTIVES are mixed. While Putin has worked tirelessly in recent years to destabilize Russia's less cooperative neighbors and to redraw post-Cold War boundaries, the international status quo has worked very much to China's advantage. China's future depends on decent relations with the West. Unlike Russia, China has benefited mightily from relative global stability and

positive commercial relations with Europe and America.

Xi also knows that Russia is a much less valuable commercial partner. In 2021, China's trade with Russia topped out at \$147 billion. Compare that with \$756 billion with the U.S. and \$828 billion with the E.U. U.S. and European companies have also served as a source of invaluable investment and have provided access to vitally important new technologies that China still needs.

Yet China's supreme leader also has good reason to build a friendship with Putin. A sharp turn over the past decade in Washington's attitude toward China has convinced many in Beijing that America is determined to stunt China's growth.

In addition, China could use a like-minded and powerful friend. For years, its only truly reliable ally has been North Korea. Russia is a much more valuable sidekick. More to the point, Xi and Putin share a common grand ambition: to end American hegemony.

China's mixed motives have been apparent in Beijing's choices since the war started. Russian officials said earlier this week that China has refused to supply Russian airlines with key parts that America's Boeing and Europe's Airbus will no longer provide. But state-dominated media coverage in China has been overtly pro-Russian, and China's foreign ministry has publicly backed Russia's false claims that the U.S. is supporting an illegal bioweapons program inside Ukraine.

For now, China will say soothing things about how cooler heads must prevail to stop the war in Ukraine and the West's economic assault on Russia. Xi will try to undermine European suspicions of his Russian sympathies by agreeing with them on the importance of diplomacy. But while he sees America and Europe as commercial partners of necessity, in Putin he sees a true fellow traveler. □



WORLD

How Putin is beating the West at deterrence

BY JOHN BOLTON

DETERRENCE IS WORKING IN THE UKRAINE CRISIS, JUST not for the right side. In this tragedy's most catastrophic blunder, the U.S. and its allies failed to deter Russia from invading. President Joe Biden's plan to create deterrence relied almost exclusively on threats that would be executed only after Russian forces crossed Ukraine's borders. Unfortunately, the West's credibility in threatening after-the-fact punishments was shredded by its earlier failures to impose stringent sanctions following the Kremlin's assaults on Georgia in 2008 and Ukraine in 2014.

Even beyond this yawning credibility gap, Biden's total deterrence package was palpably inadequate. Most seriously, he said in early December 2021, and repeatedly thereafter, that U.S. military force was off the table. This was an unforced, unilateral concession, with no Russian reciprocity sought or given. Biden could simply have said nothing, hiding his intentions, and let the ambiguity weigh on Putin's mind. Instead, he gave Putin a freebie.

That wasn't all. No effort was made to inflict harm on Russia preinvasion. Had appreciable costs been imposed before Moscow's forces crossed an international border—damages felt in real time—they might have changed Putin's cost-benefit calculus. For example, there was no push to halt the Nord Stream 2 gas pipeline, let alone economically cripple Russia's broader energy sector, unless and until all Russian forces were withdrawn from European countries which did not consent to their presence, not just Ukraine, but also Moldova, Georgia, and others. Russian

Putin is getting much of what he wants from NATO for free

financial assets, including those of prominent oligarchs, could have been seized or frozen until Russia's military buildup on Ukraine's borders was reversed, and the troops returned to their regular barracks. Sanctions work best when they are massive, swift, and ruthlessly implemented. In the Ukraine case, that didn't happen before—or after—Russia invaded.

America and NATO could have deployed more forces to Ukraine to train and assist Ukraine's military. Considerably more weapons and ammunition could have been shipped to Ukraine at a far more accelerated pace than was actually undertaken.

None of this happened. Instead, counterproductively, White House officials spoke frequently about imposing negative consequences for a "further invasion" of Ukraine, thinking themselves quite clever in not ignoring the 2014 attack. Ironically, however, their rhetorical flourish did just that, revealing critical deficiencies in their thinking, and confirming to Putin that there was no risk Russia's actions in 2014 would be reversed. Opponents of raising Russia's preinvasion costs said so doing would actually provoke a Russian attack, as if that isn't exactly what happened anyway.

WESTERN DETERRENCE FAILED, but now Russian deterrence is enjoying unfortunately spectacular success. Building on Biden's earlier voluntary rejection of U.S. military involvement, Russia has convinced the West that even a whisper of NATO military action in Ukraine would bring disastrous consequences. Putin's directive enhancing the alert status of Russia's nuclear forces brought on something approaching panic in the West, although there is no publicly available evidence that Russia's forces have operationally changed anything.

Desperate Ukrainian requests for a NATO no-fly zone over Ukraine have been flatly rejected by Secretary of State Antony Blinken, who said, "The only thing worse than a war that's contained to Ukraine is one that escalates even further and goes beyond it."

This logic is false, a classic non sequitur. It rests on the tacit, but

ILLUSTRATION BY PETE REYNOLDS FOR TIME

manifestly incorrect, premise that even one hostile encounter between Russian and Western forces will escalate immediately to all-out, possibly nuclear, war. Obviously, there are risks in any NATO military role. But it is utterly wrong to say, because there are some risks, that every risk leads inexorably to massive escalation, much less that the West should therefore take no military action. There is ample distance between Step Alpha and Step Omega.

Clearly, however, once again, Putin is getting much of what he wants from NATO for free. He threatens, he blusters, he uses the word *nuclear*, and the West wilts. It is the very paradigm of effective deterrence. There are undoubtedly hard and dangerous choices to be made, but total military quiescence also imposes costs, strategic and humanitarian, which are now unfolding.

Predictably, hesitant Westerners are fearful of giving Russia a “pretext” for attacking NATO members. If Moscow needs a pretext, it has one already. Washington has long, and quite rightly, provided intelligence to Ukraine at a “frenetic” pace. Further “pretexts” include the White House’s boasting to favored media outlets about the massive provision of antitank weapons and cyberwarfare assistance.

Europe and America are indulging in considerable self-satisfaction about the economic sanctions deployed against Russia. But we should not feel serene that, although our deterrence broke down and Ukraine is being devastated, Russia is suffering severe punishment. The purpose of deterrence strategy is to prevent the conflict entirely, and there Washington failed badly. Worse, Russia’s prospects of prevailing against Ukraine are enhanced by its successful deterrence against NATO’s acting in ways that could effectively counter its aggression. It is nothing to celebrate.

Bolton was the national security adviser in 2018–19 for President Donald Trump

TECHNOLOGY

Everyone is still waiting for the cyberwar

BY JOSEPHINE WOLFF

IN THE SHORT AND RAPIDLY evolving history of cyberconflict, perhaps nothing has been established with greater certainty and more widely accepted than the idea that Russia has significant cybercapabilities and isn’t afraid to use them—especially on Ukraine. In 2015, Russian government hackers breached the Ukrainian power grid, leading to widespread outages. In 2017, Russia deployed the notorious NotPetya malware via Ukrainian accounting software, and the virus quickly spread across the globe, costing businesses billions of dollars in damage and disruption. In the months leading up to the NotPetya attacks, many people speculated that Ukraine served as a sort of “testing ground” for Russia’s cyberwar capabilities and that those capabilities were only growing in their sophistication and reach.

As tensions escalated between Russia and Ukraine, many people were expecting the conflict to have significant cybercomponents. What is surprising is that—so far, at least—the devastating Russian cyberattacks everyone has been expecting have yet to materialize. There’s no guarantee, of course, that a large-scale cyberattack on Ukraine’s electrical grid or global banks isn’t just around the corner. Russia has proven before that it has few compunctions about targeting critical infrastructure and causing considerable collateral damage through acts of cyberaggression.

But as the invasion continues with few signs of any sophisticated cyberconflict, it seems less and less likely that Russia has significant cy-

bercapabilities in reserve, ready to deploy if needed. Instead, it begins to look like Russia’s much vaunted cybercapabilities have been neglected in recent years, in favor of developing less expensive, less effective cyberweapons that cause less widespread damage and are considerably easier to contain and defend against. For instance, many of the cyberattacks directed at Ukraine over the past month have been relatively basic distributed denial-of-service attacks, in which hackers bombard Ukrainian government websites and servers with so much online traffic that those servers cannot respond to legitimate users and are forced offline for some period of time. Denial-of-service attacks can be effective for short-term disruptions, but they’re hardly a new or impressive cybercapability—in fact,

they’re what Russia used to target Estonia in 2007.

Somewhat more worryingly, Russia has also allegedly used wiper malware to delete data held by Ukrainian government agencies, and Microsoft has also reportedly detected wiper programs likely from Russia and shared that information with the U.S. government as well as other countries. NotPetya was a form of wiper malware and its ability to delete data caused massive damage, so the discovery of new Russian wipers is certainly cause for concern. But unlike NotPetya, the wiper programs that have been the focus of the latest wave of alerts—including the FoxBlade program identified by Microsoft—have shown little ability to spread

Russia’s cybercapabilities have been neglected in recent years

quickly via common, difficult-to-patch vulnerabilities like the EternalBlue vulnerability in Microsoft Windows that NotPetya exploited back in 2017.

It's likely that the combined efforts of Microsoft, the U.S., and many other countries and companies to ramp up cyberdefenses, both in and outside of Ukraine, has helped curb the damage caused by these efforts. But if Russia really had on hand a stockpile of previously undetected vulnerabilities and sophisticated malware designed to exploit them, these lines of defense simply would not be enough to prevent some significant damage and disruption. Updating critical infrastructure networks and systems is slow, expensive, complicated work, and it's impossible that every potential target has been hardened to the point where it is no longer vulnerable to Russian cyberattacks—unless those cyberattacks were never all that impressive to begin with.

MANY OF THE early theories for why Russia might have voluntarily abstained from more serious cyberattacks look increasingly implausible as the conflict continues. For instance, one explanation for why Russia left Ukrainian electricity distribution and communication networks intact was that Putin wanted the rest of the world to see Russia's swift, decisive victory in Ukraine via a steady stream of images and videos that might have been hampered by such an attack. But as it becomes clear that no swift, decisive victory is forthcoming, it makes less sense that Russia would continue to leave that infrastructure untouched unless they were truly unable to take it out. This interpretation seems further supported by the Russian decision to strike a TV tower in Kyiv,

rather than trying to disrupt media and communications systems more effectively and less violently via cybercapabilities.

Given Russia's past willingness to deploy cyberattacks with far-reaching, devastating consequences, it would be a mistake to count out their cybercapabilities just because they have so far proven unimpressive. And it's all but impossible to prove the absence of cyberweapons in a nation's arsenal. But the longer the conflict goes on without any signs of sophisticated cybersabotage, the more plausible it becomes that the once formidable Russian hackers are no longer playing a central role in the country's military operations—whether be-

cause they no longer have the resources they once did to purchase and develop tools for computer intrusion and exploitation, or because the government can no longer attract and retain technical talent, or simply because Russia has decided that cyber-

Cyber- attacks are not effective to achieve Russia's goals

attacks, for all the damage they can do, are not an effective means of achieving its larger goals.

Even if Russia has no particularly sophisticated cyberweapons to fall back on right now, that doesn't mean they won't go on to develop some new ones in the future. But the current lack of any significant cyberconflict is an important reminder of how little we actually know about any country's cybercapabilities. Many of our beliefs about which countries have the most impressive hacking tools and about Russia's cyberdominance are based on incidents several years in the past—and an awful lot can change in just a few years.

Wolff is an associate professor of cybersecurity policy at the Fletcher School at Tufts University



WORLD

How to end the war

BY MICHAEL O'HANLON

AS TRAGIC AS THINGS ALREADY are in Ukraine, they will likely get even worse in the days and weeks to come. Vladimir Putin deserves every bit of punishment this war may exact on him, on the battlefield, and on Russia's economy. But the people of Ukraine do not, nor do most of the Russian people. We should therefore not be content with a U.S.-Western policy that simply imposes pain on Putin for pain's sake, since it may do little to mitigate the consequences of this conflict. The current sanctions should serve as part of a strategy that pursues the least bad possible outcome to this needless war.

Although the war appears to be zero-sum in nature, based on Putin's aims and the Ukrainian people's refusal to accept de facto Russian rule, there is one possible dimension

ILLUSTRATION BY PETE REYNOLDS FOR TIME



Putin is poised to rule over a stagnant Russia for perhaps the rest of his days

where compromise may be possible: the idea of Ukraine's membership in NATO. That possibility was first promised by NATO at its summit in 2008, though with no timetable nor interim security guarantee; it was reaffirmed in the Nov. 10, 2021, U.S.-Ukraine Charter that, for all its good intentions and lofty rhetoric, is beginning to look like a major mistake. The moral responsibility for this war is all Vladimir Putin's. But Western policy contributed to creating the strategic and psychological circumstances that Putin then exploited. We need to rethink.

The core of any possible deal would be to create a cease-fire and then the withdrawal from Ukraine of Russian forces—while foreclosing the possibility of future NATO membership for Ukraine, provided that its security can be ensured by other means. These arrangements could be written into the Ukrainian constitution, and into an understanding that NATO reached with Moscow. President Volodymyr Zelensky would have to take the lead on proposing these terms, but the U.S. should encourage him.

The reasons that we can and should be flexible on the issue of Ukraine's NATO membership are threefold: first, Ukraine's joining NATO was never a good idea, given how incendiary that prospect is for many Russians (not just Putin) and therefore how counterproductive to the goal of stabilizing Europe; second, it was not going to happen anytime soon even before the Russian invasion, since there has never been a timetable for it; third, it certainly is not possible now with Russian troops sitting on Ukrainian soil.

But forgoing NATO membership is all that could possibly be asked of Ukraine. Otherwise, to make the deal acceptable,

Russia would have to reaffirm Ukraine's sovereignty, return the Donbas region to Kyiv, accept monitors on Ukrainian soil, and acknowledge that Ukraine could join any other organizations to which it was invited including perhaps the E.U. Crimea would have to be finessed, given its history and Russian sensibilities.

Russia would also have to join us in guaranteeing the future security of Ukraine. Why would Moscow's promise be trustworthy this time? And why would Putin consider the terms proposed here? The difference would be that this time, there would be no future prospect of Ukraine's joining the alliance that had defeated the Soviet Union in the Cold War. With NATO membership no longer in the air, Russia could claim it had stabilized the security order of Eastern Europe in a way that was not possible in 1994. If Moscow subsequently violated its commitments, our promise not to consider future NATO membership for Ukraine would also dissolve. With this agreement, Putin would begin to get his economy back—otherwise, he is poised to rule over a stagnant Russia for perhaps the rest of his days.

Under this approach, as Russian troops withdrew (with monitoring on the ground by the Organization for Security and Co-operation in Europe), the U.S. as well as allies would end their lethal military assistance shipments to the Ukrainian armed forces. As noted, some sanctions on Russia would also be suspended, then lifted.

For those who would consider this policy too kind to Putin, that's understandable: he deserves no succor. But the peoples of Ukraine and even Russia should not suffer for Putin's sins any more than they already have. And this arrangement, like President John F. Kennedy's handling of the Cuban missile crisis in which he made minor concessions to get major payoffs, would rightly prioritize the peace as well as the security and sovereignty of Ukraine.

O'Hanlon holds the Philip H. Knight Chair in Defense and Strategy at the Brookings Institution



The Coronavirus Brief By Jamie Ducharme

HEALTH CORRESPONDENT

The Atlantic's Ed Yong recently wrote a piece marveling at our collective ability to accept the astronomical number of deaths associated with COVID-19: more than 967,000 in the U.S., and 6 million worldwide. "As tragedy becomes routine," Yong writes, "excess deaths feel less excessive."

Inured to COVID-19 deaths as we may now be, the actual toll is likely even higher than the official statistics show. A modeling study recently published in the Lancet estimates that **COVID-19 has caused three times as many deaths as the official global tally reflects—about 18.2 million in total.**

Not all these deaths were a direct result of the virus, but the indirect toll of the pandemic has been substantial. Hospitals have been overburdened with patients, people have been wary of seeking care out of fear of infection, routine vaccination campaigns have slowed in many parts of the world, and isolation has prevented some people from getting treatment for addiction or mental-health issues. All these factors likely contributed to higher-than-average death rates.

"The majority of these 18.2 million people would not have died but for the pandemic," one of the study's authors told my colleague Jeffrey Kluger.

After two years of pandemic life, it's surprisingly easy to become numb to such shocking statements. But it's worth remembering that even as many people's personal risk levels drop because of vaccinations and past COVID-19 exposures, the virus continues to take lives around the world, in all sorts of ways.



For everything you need to know about COVID-19, subscribe at time.com/coronavirus



A full moon rises behind the U.S. Capitol in Washington on Nov. 29, 2020



Space TIME By Jeffrey Kluger

EDITOR AT LARGE

ON ITS FACE, 1966 WAS A GOOD year to be a consumer. A gallon of milk would set you back just 42¢. A gallon of gas—which today is topping \$5 in some places—went for 31¢. And what did it cost to finance the greatest space program in the history of the world—a space program that put boots on the moon in 1969? That cost taxpayers \$5.93 billion in 1966, which represents the high-water mark of NASA annual funding. Of course, inflation plays a role too. That same 42¢ gallon of milk goes for \$3.68 in 2022 dollars. NASA's \$5.93 billion annual allowance, similarly, would translate to \$51.66 billion this year.

That generous funding is worth contemplating, as Congress recently completed work on an omnibus spending bill that allocates NASA \$24 billion, or less than half of what the space agency was getting back in its golden era.

The details of the spending bill reveal a lot about why it has been half a century since human beings last landed on the moon. In 2020, NASA requested \$3.4 billion to build its Human Landing System (HLS)—a 21st century lunar module to carry astronauts down to the surface of the moon from lunar orbit. Congress responded with a check for

just \$850 million. This year NASA requested \$1.195 billion—and got it. That's good as far as it goes, but remains less than half of what's needed to build the ship for real.

Then too, there's the SLS (the 21st century's Saturn V moon rocket), which is budgeted at \$2.6 billion for 2022, a funding level that allows for launching one rocket per year. Back in the Apollo days, 11 Saturn Vs were launched from 1968 to 1972. Similarly, the Orion spacecraft—the modern-day version of the Apollo orbiter—was budgeted at just \$1.4 billion this year. Orion has been in development in one form or another since 2004 and has never carried a crew.

The government has its spending priorities, and if the decision has been made that space is a lower-tier enterprise than it was in 1966, fine. But please, no more promises of moon landings in 2024 or even 2025 or 2026 if you're not going to cut the checks to make the missions possible. You can either talk about going to the moon or you can spend the money and go. The choice Washington is making is regrettably clear.



For the latest out-of-this-world news, sign up for TIME's space newsletter at time.com/space-newsletter

CAPTION: GRAEME SLOAN—SIPA USA/AP; BESANT: COURTESY THE THEOSOPHICAL SOCIETY

WORLD

The Westerners who helped fight for India's independence

BY RAMACHANDRA GUHA

FOR WESTERN HISTORIANS, THE NEWS OF DEMOCRATICALLY minded volunteers from other countries enlisting to fight with the Ukrainians against their Russian invaders might bring to mind the creation of the International Brigades during the Spanish Civil War. But there may be some Asian resonances too. I am thinking in particular of the remarkable but sadly forgotten story of the British and American fighters for India's freedom. From the late 19th century onward, a series of exemplary individuals disavowed their citizenship of powerful white imperialist nations to live with and struggle alongside the subordinated peoples of the Indian subcontinent.

In India itself, these rebels against the Raj are only dimly remembered, mostly through landmarks that carry their names. When, back in 1995, two nativist parties came to power in the state of Maharashtra, one of their first acts was to rename the state capital, then commonly known as Bombay, as Mumbai, and many other landmarks followed.

Only a few among Bombay's great landmarks escaped this purge. They included a key arterial road through the heart of the city, which is still officially known as the Dr. Annie Besant Road, and a lovely shaded park opposite the gorgeous building built in the early 19th century that houses the Asiatic Society, known as the Horniman Circle. Even the nativists dared not tamper with these names, for they honored foreigners who had truly become Indian.

Annie Besant is a name that might still be vaguely familiar to some historically minded readers of TIME. Three-quarters Irish, a socialist and suffragette in her British youth, she embraced in her 40s the then popular creed known as Theosophy, and moved to India, where she helped establish girls' schools and a major university before becoming a leader of the Indian Home Rule movement. In 1917, Besant was chosen the first female President of the Indian National Congress.

The Englishman B.G. Horniman remains unknown to most Indians, yet in his day he was a considerable figure, the editor of a major newspaper, the *Bombay Chronicle*, which strongly supported Gandhi and the freedom struggle. Horniman was a radical who campaigned for the rights of workers and peasants, and also established the first trade union for journalists in India.

People like Horniman and Besant complicate the popular narrative of nationalism, which features brave Indian men and women resisting racist and oppressive British men and women. Later this year, India will celebrate the 75th anniversary of its independence from colonial rule. There would

have been much chest-thumping anyway—but now, under Prime Minister Narendra Modi, it will take on a hypernationalistic and even xenophobic tone, with much bragging about how Indians alone, and perhaps Hindus most especially, have enabled the past, present, and future glories of our country. It is here it behooves the historian to recall those exemplary foreigners who were renegades to their race, their nation, and even their religion.

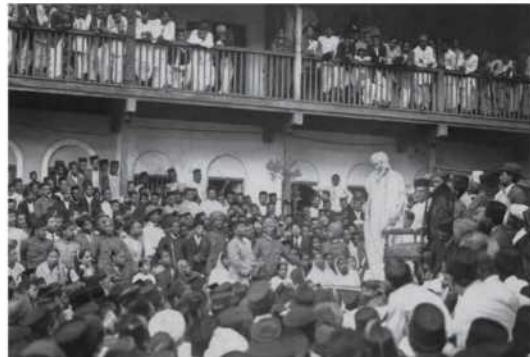
I've mentioned two rebels against the Raj, yet there were others too who were no less remarkable. Consider Madeleine Slade, who worked with Gandhi before becoming a pioneering environmentalist. She was the daughter of a British admiral who came to India in 1925; changing her name to Mira, she spent long periods in the jails of the Raj because of her identification with the freedom movement.

The stories of these daring and at times reckless boundary crossers need to be better known in India. And in other lands too. For the lives and doings of these individuals constitute a morality tale for the world we currently live in. This is a world governed by paranoia and nationalist xenophobia, with the rise of jingoism

in country after country, and a corresponding contempt for ideas and individuals that emanate from outside the borders of one's nation. Modi and the Rashtriya Swayamsevak Sangh in India, Donald Trump and the white supremacists in America, Boris Johnson and the Brexiteers in England, Vladimir Putin and his revanchist regime in Russia—all see themselves as uniquely blessed by history and by God. No foreigner, they believe, can teach them anything. The stories of Besant, Horniman, and company tell us otherwise.

The stories of these boundary crossers need to be better known in India

Guha is the author of *Rebels Against the Raj: Western Fighters for India's Freedom*



NATION

What happens when you can't say gay

BY KRISTEN ARNETT

GROWING UP, I NEVER KEPT A DIARY. THERE WERE NO journals hidden beneath my twin mattress, no spiral-bound collection of ruffled notebooks stuffed with private confidences. I was a voracious reader who devoured books in secret, in defiance of my strict evangelical parents, but when it came to my personal feelings, I allowed nothing of myself to migrate onto the page. Writing felt treacherous, a way to accidentally reveal too much. The few times that I did manage to pen any of my feelings, I immediately shredded everything, crumpled papers stuffed at the bottom of the garbage can, hidden beneath scraps of the previous night's dinner.

Those scribblings were too unruly, I thought at the time, unwilling to let any of it live outside the privacy of my head. Regardless, my hopes and fears sometimes erupted from the watched pot of my brain, boiling over to reveal truths I was desperate to hide. A swirl of images spit and hissed steam beneath the lid: friends changing out of wet bathing suits after a pool party, the heart-shaped sweat mark on a girl's back during gym class on an especially sweltering Central Florida afternoon, the sun tracing shiny golden tinsel into a woman's plaited hair. The memories flickered neon red at the edges, warning of danger. There was something unacceptable about them. Something scary.

I know now why I couldn't write them down. My words were too gay.

As an adult, I can see that the smothering of the queerness that lived inside me led to long, tumultuous years of depression and misery. So much of that overwhelming despair could have been abated by the simple act of voicing the unsaid thing. All those times I cried myself sick and prayed for death, I needed the words. Whenever I sliced at my skin, or when I pulled the hair from my head in order to feel something other than the self-loathing of my secret burden, I needed that frustratingly inaccessible language. If only I were allowed a sentence. Even a word. If I could tell someone, anyone, without fear of repercussion, then I'd have found relief. I'm gay, I would have said. And the immediate follow-up: I'm gay and I'm scared.

It was fear that kept me silent. Because I knew that the things I felt were not acceptable. Not to my parents or my friends, and certainly not in Orlando. I found places online where I could hide, small hubs of support. But there was none of that relief in high school in the late '90s. The few teens I knew who had the label "gay" attached to them suffered through continuous shame and abuse. Most of them fled after graduating, out of Central Florida to anywhere with an existing LGBTQ+ community. Young people, already faced with the stress and anxiety of coming out, knew that the additional obstacles placed in front of them by the edicts of our conservative state meant they wouldn't be able

to thrive. It took years of stewing in anguish for me to finally come out. It took finding the words. Those words led me to queer community, allowing me to understand that I wasn't alone. Only then did the fear begin to dissipate.

IT'S BEEN MORE THAN 20 YEARS since I graduated high school, yet the repression of LGBTQ+ youth in Florida remains much the same. With the passage of the Parental Rights in Education bill—more commonly (and accurately) called the "Don't Say Gay" bill—which bans public schools from teaching kindergartners through third-graders about sexual orientation or gender identity or "in a manner that is not age-appropriate or developmentally appropriate for students," and allows parents to sue the school districts for violations—the state is trapped in the same cycle of wordlessness, with queer and trans people unable to speak the truth of our lives. It is a blanket meant not to comfort, but to stifle and to smother. It wants to eradicate us by denying our voices. The young people affected by this are in the same position I was in as a teenager. They are left with nowhere to turn, denied the



ILLUSTRATION BY CECILIA CASTELLI FOR TIME



If there is no support for our queer and trans teens, then there is no hope for Florida's future

language necessary to their continued survival and growth.

Though Central Florida is home to many queer people, there are only a handful of LGBTQ+-designated establishments. Last year the nonprofit Come Out With Pride in Orlando held one of its biggest festivals yet, but the community struggles to find space and funding and room to grow. We're offered Gay Days, Pride-themed Mickey Mouse ears, a parade float. We're told that the little we get has to be enough to last, because we won't be given more. The new legislation tells educators not to say gay, not to acknowledge the lived experiences of our queer and trans children, but those people who work to silence us will offer up their thoughts and prayers after a mass shooting kills and injures dozens at one of our only gay nightclubs.

Disney CEO Bob Chapek initially refused to condemn the bill, claiming that "our diverse stories are our corporate statements," and yet the corporation has spoken in other ways about its priorities—donating to some of the bill's backers, an action that would harm its own extensive pool of LGBTQ+ employees. Backlash from

staff was immediate, and many went online to voice their anger at the decision. Chapek reached out to Governor Ron DeSantis to express "disappointment and concern" over the bill only after a significant amount of pressure was applied from the community. He later apologized for his failure to speak out and said Disney would pause political donations in Florida. Meanwhile, employees of Pixar, a subsidiary of Disney, have accused the company of censoring same-sex affection in its movies.

IT IS A DISCONNECT of morality; a space where the people who most need assistance are shunted to the side, left voiceless. We have been provided conflicting stories—you are accepted and loved, but you cannot speak about it, ever—and are expected to believe that these narratives can exist simultaneously.

We know that they cannot.

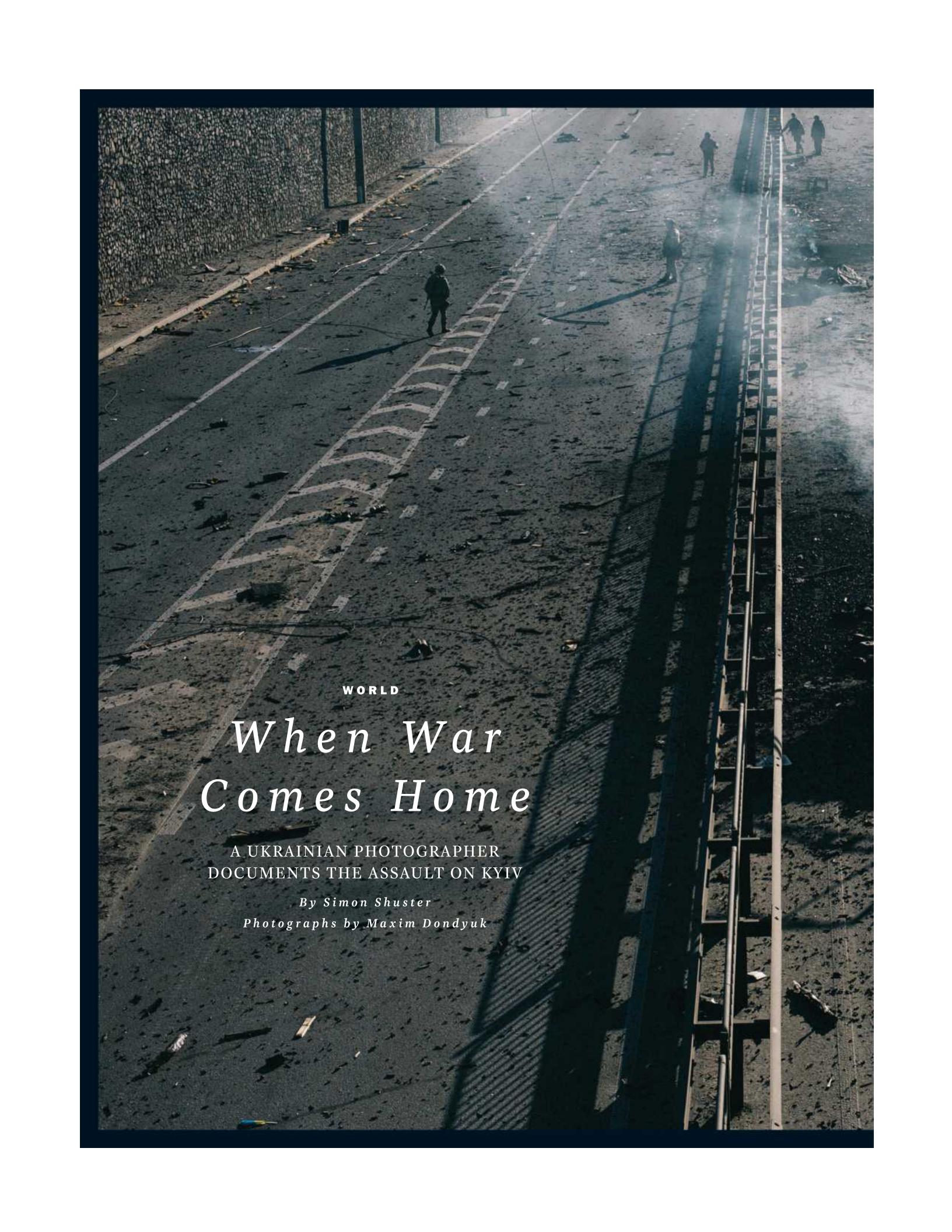
There is no hope in trusting corporations who would take our money and give us rainbow-hued T-shirts instead of investing in our community. It is one thing to tweet the word gay in a measure of actionless solidarity; it is another thing entirely to put in the work of supporting queer communities. It's those small spaces, the underfunded nonprofits in Orlando, that are doing the real, lasting labor. Zebra Coalition in Central Florida has worked tirelessly for years to help LGBTQ+ youth, working to combat teen homelessness and providing crucial access to mental-health care and education. They do this all on a shoestring budget, while Disney, with its billions, has made it abundantly clear that we're supposed to take the facsimile of a possibly queer cartoon character and feel supported.

What I do know: if there is no support for our queer and trans teens, then there is no hope for Florida's future. Our community will suffer. Where there is no safety for our youth, there is no safety at all.

As a writer, I think about communication a lot. How we think and speak and act. I dig my fingers into the meat of text and massage it, poking at the gristle and fat, seeking to somehow tenderize it. To be tender, I think, means to be vulnerable. And there is wild vulnerability in speaking the truth, regardless of our fear; a blessing to open our mouths and speak the hard thing into existence. I think back on the closeted lesbian teenager I used to be, crying and frightened, alone with my silence, and I want tenderness for her. I want it for every queer and trans youth. I want it for Florida, my community, my home. To love a place that refuses to love you back is a heavy burden to bear. But this place is mine, which means it is queer too. How could it not be? I have helped make it. Our LGBTQ+ community has shaped it.

If I say the words aloud, I am doing the harder work. The tender, vulnerable work. The loving work. I'm gay, I say, but now I follow it with something that's not fear. It's outrage. It's a call to action, one that means throwing out the disingenuous narratives that have made Florida complicit in denying our voices. We're gay and we're still here, Florida. Even if you choose not to hear us.

Arnett is the author of the novel With Teeth

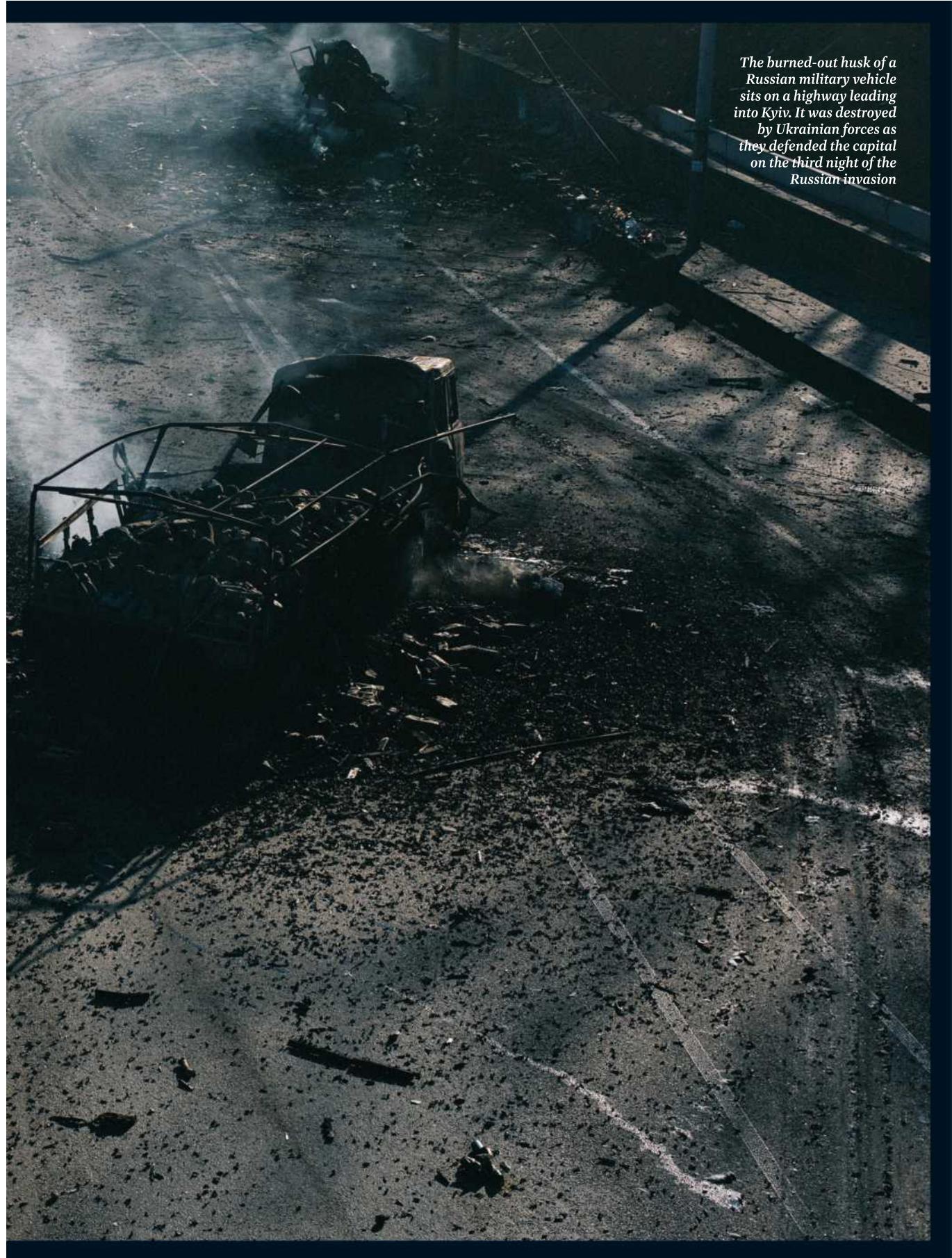
A wide-angle, aerial photograph of a city street, likely Kyiv, showing significant destruction. The road is covered in debris, including broken asphalt and metal fragments. Several people are visible walking along the street, which has multiple lanes and a central median. The surrounding area appears to be a mix of urban and industrial structures.

WORLD

When War Comes Home

A UKRAINIAN PHOTOGRAPHER
DOCUMENTS THE ASSAULT ON KYIV

*By Simon Shuster
Photographs by Maxim Dondyuk*



The burned-out husk of a Russian military vehicle sits on a highway leading into Kyiv. It was destroyed by Ukrainian forces as they defended the capital on the third night of the Russian invasion

I

IN THE SECONDS BEFORE IMPACT, MORTARS whistled as they fall, making a loud and almost plaintive sound Maxim Dondyuk will never forget. He will not forget the sting of their shrapnel, which felt like a hot knife in his arm, or the sight of the women and children he photographed during the shelling near Kyiv on March 6. He hopes the people who see his photos will not be able to forget them either. “I don’t stay here and do this because I am a masochist,” Dondyuk, who is Ukrainian, says by phone from the center of Kyiv. “I do it because sometimes a photo can change people, change societies.” With luck, he says, it might help stop a war.

When this war started in late February, Dondyuk was in Kyiv as Russian forces rushed to encircle the city, dropping bombs and firing artillery while tanks advanced from the north. Civilians tried to flee or take shelter in the subway system. At the city’s main hospital for children, Dondyuk found the patients crowded into the basement while the doctors waited for the wounded to arrive.

The first one was a young boy, no older than 7, whose parents and sister had just been killed. Emergency workers carried him into the ward and told the doctors that the family’s car had been riddled with bullets near the heart of the Ukrainian capital. The boy was the only survivor. The emergency workers did not know his name, they said, because his documents were probably in the wreckage. The doctors registered him as “Unknown No. 1,” and performed emergency surgery.

Pacing the ward outside the child’s room, Dondyuk found the head physician and asked for permission to photograph the boy. “I told him that the Russian people need to see this,” Dondyuk recalls. “When we show them the children killed by Russian bombs, they will imagine their own children. Our children are the same. Our cities look the same. They will see themselves in us. They will



feel it.” The doctors relented, and that night Dondyuk took a photo of the boy, whose name, reporters later learned, was Semyon. He was still in critical condition at the time. He died soon after.

It was one of the moments when Dondyuk broke down. Over the past eight years, he has photographed many aspects of the war between Russia and Ukraine. He has seen and documented it from both sides of the front. For Dondyuk, 38, the story was always personal, but never more than over the past few weeks. His mother has been forced to flee the nation as a refugee. His father lives in a town under Russian military occupation. “My city, where I lived for years, is being destroyed,” Dondyuk says of Kyiv. “I’m not coming at this from afar. This is my pain. This is my country.”

BY THE SECOND WEEK of the war, he says, the initial phase of panic in the capital subsided. Trenches and checkpoints appeared in residential neighborhoods, next to schools and playgrounds, as Ukrainians prepared to fight the Russian troops from street to street. Many people fled, but many others stayed to help, transforming the city into a wartime metropolis—far emptier, more somber, but full of purpose and resolve. Those who could not volunteer to fight have spent their time helping those who did, cooking meals, filling sandbags, tending bonfires, delivering supplies.

The worst of the carnage has so far been confined to the city’s northern suburbs, which is where Dondyuk was wounded on March 6. That morning he set out by car to the suburb of Irpin, along with two other photographers. To stall the Russian advance, Ukrainian forces had blown up a bridge that





leads south from that town into Kyiv, leaving only a small walkway over a river, just wide enough for one or two people to cross at a time.

As the photographers arrived, they saw a couple of vans near the bridge, waiting to take civilians to safety as they made it over. Many of those crossing were elderly. Others had babies in strollers and pets under their arms. A group of Ukrainian soldiers stood nearby. Dondyuk had stopped to take their photographs when they heard the first mortar incoming. It was the start of an assault that would last for around two hours, targeting the only pathway for civilians to flee Irpin.

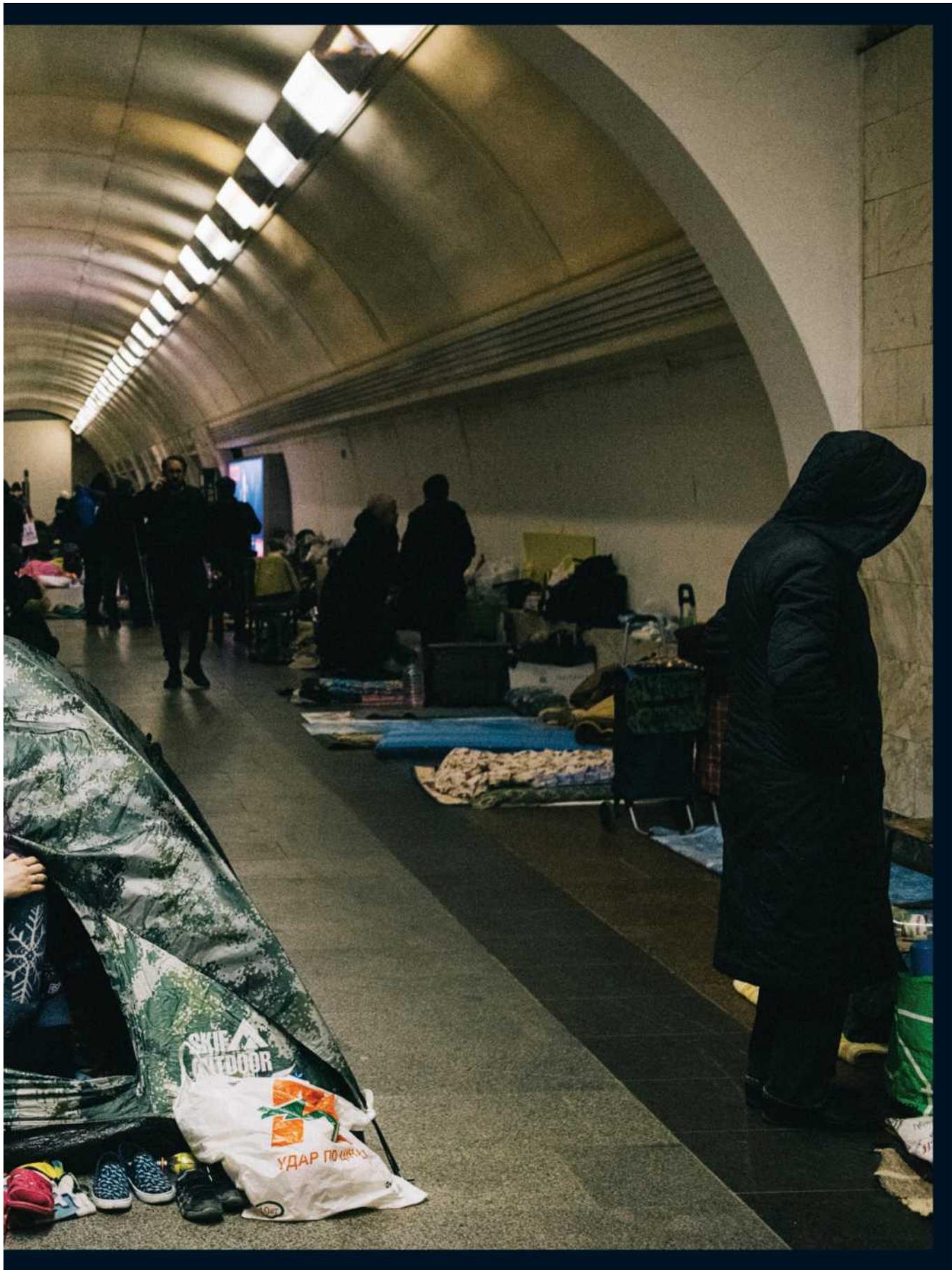
The soldiers at the bridge fell back as the bombing continued. But Dondyuk and his two

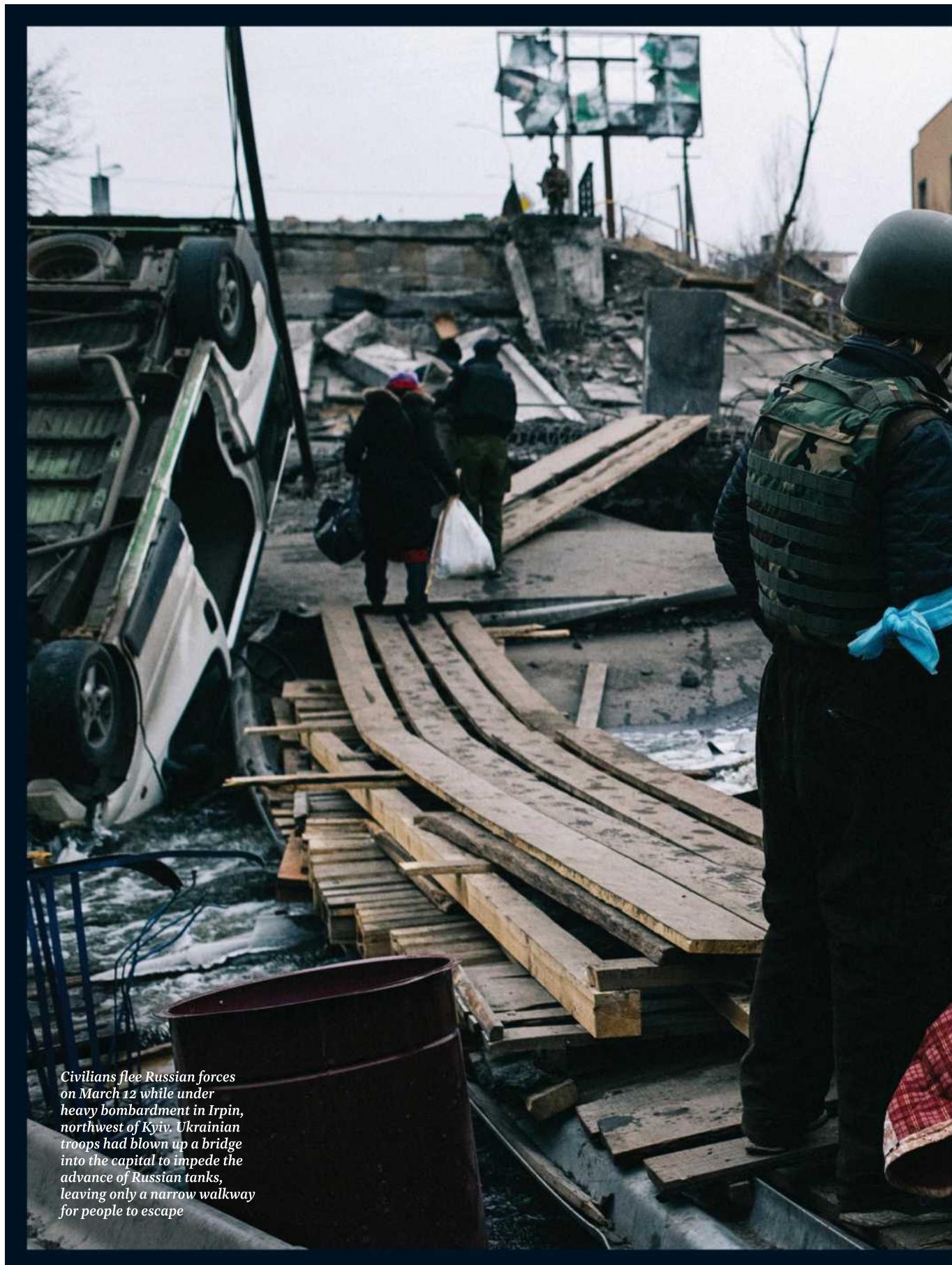
The first patient to arrive at the main children's hospital in Kyiv after the Russian invasion was a young boy named Semyon. His family's car had come under heavy fire, killing his parents and his sister. The boy later died

colleagues stayed to document the scene, retreating only after a piece of shrapnel hit him in the shoulder, ripping away a piece of flesh. Scores of civilians were injured or killed in the attack. Yet they kept streaming across the bridge even as the bombs were falling. "They could see the mortars ahead of them. They could see the bodies," says Dondyuk. "But whatever they were running away from, it must have been worse." —With reporting by NIK POPLI □

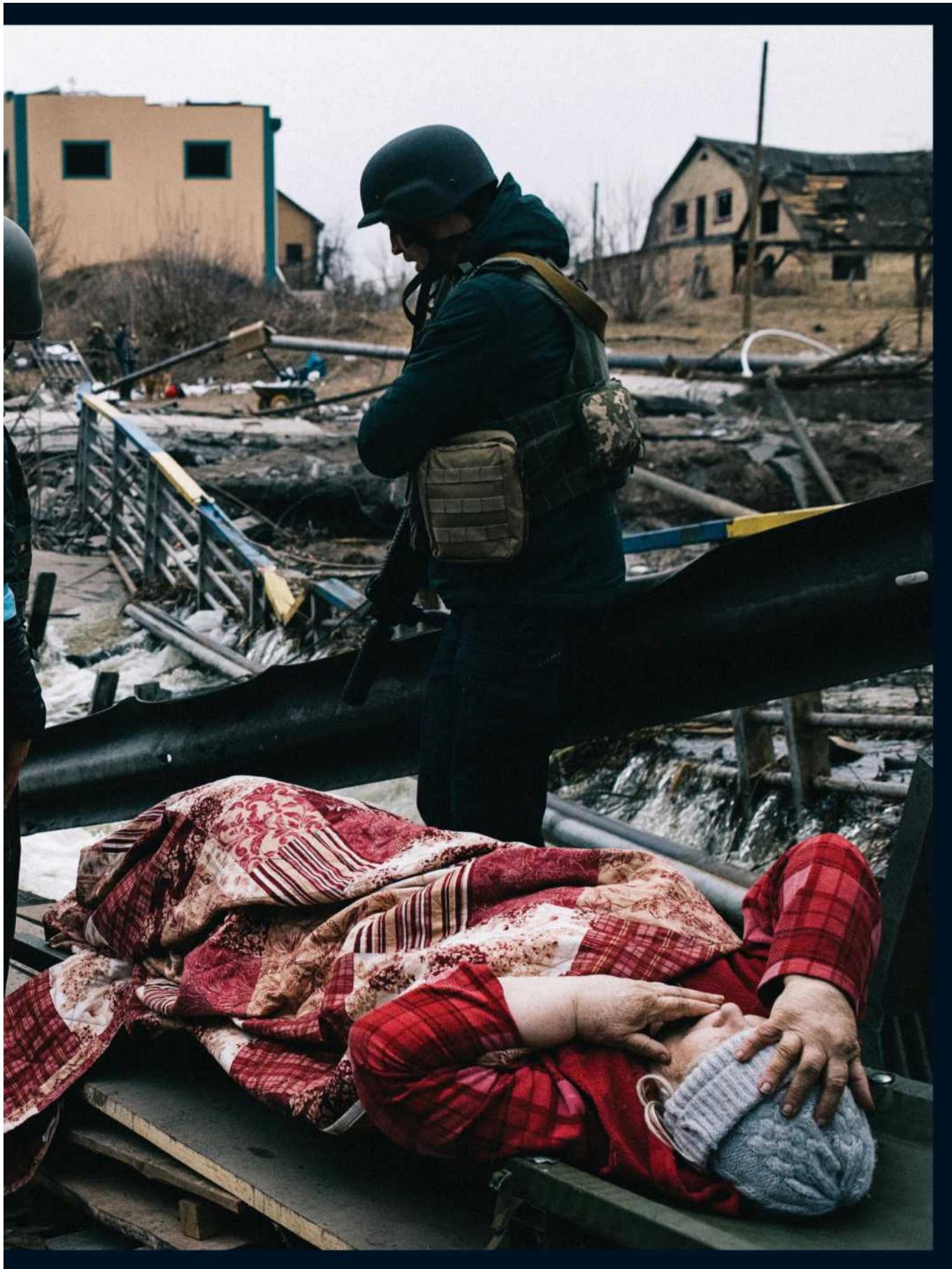
A woman seeks shelter from Russian artillery and aerial bombardment in Kyiv's subway system on March 2. Thousands like her have retreated underground, and some have not left the tunnels since the fighting began







Civilians flee Russian forces on March 12 while under heavy bombardment in Irpin, northwest of Kyiv. Ukrainian troops had blown up a bridge into the capital to impede the advance of Russian tanks, leaving only a narrow walkway for people to escape



WORLD



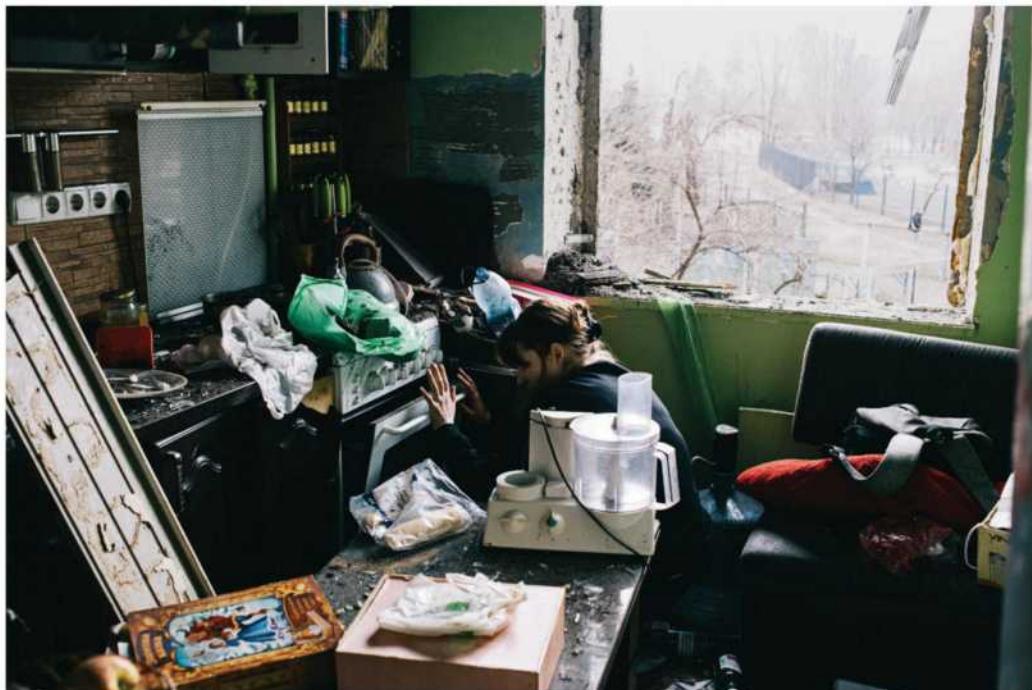
At a hospital in Brovary, two volunteer fighters recover from wounds sustained while helping defend the city from a Russian assault



Ukrainian civilians run for cover from incoming Russian mortar and artillery fire in the town of Irpin, near Kyiv



Debris litters the streets of Brovary, days after a deadly Russian rocket attack on Ukrainian military units left vehicles and buildings gutted and destroyed



A woman salvages what remains in her apartment, after a Russian rocket damaged her building in Kyiv



A Russian soldier lies dead on a railroad track in Irpin, northwest of Kyiv, on March 12. Ukrainian forces have repelled wave after wave of Russian attacks on the town, a gateway to the capital.



A Mother's Return

UKRAINIAN WOMEN ARE TRYING TO RETRIEVE
THEIR CHILDREN FROM A WAR ZONE

By Amie Ferris-Rotman/Lviv

IN THE CITY OF LVIV IN WESTERN UKRAINE, ALISA Kosheleva walks the cobbled streets, waiting, almost afraid to blink. She wears a zip-up hoodie, T-shirt, and cropped gray sweatpants emblazoned with an image of Mickey Mouse, despite the fact that it's 40°F (4°C) outside. Light snow falls on her red hair.

Her casual look belies her turmoil: a fresh wound as old as time, a mother separated from her child during a war. The 32-year-old can't decide what is worse: waiting for news when there is none, or trying to gather information from the photos and videos that make it out of her hometown of Mariupol, now besieged and slowly starving without supplies. "Being with my son is my one and only wish," she says.

In mid-February, Kosheleva, a crypto project manager, left Mariupol to visit Barcelona. It was her first vacation in three years, and her first time traveling outside of Ukraine. It wasn't an easy decision to leave behind Kirill, her 9-year-old son, but he was with his father and grandmother. She shows me photos of Kirill on her phone, a smile briefly flickering across her face. When she was in Barcelona, they chatted by video call almost every day. She showed him the waves and the setting sun. Her boy, in turn, proudly held up a medal from his first taekwondo competition.

But on Feb. 24, toward the end of her trip, Russia launched a full-scale assault on Ukraine, and Kosheleva scrambled to get home to Mariupol. Now, almost three weeks on, she has made it only as far as Lviv, a large city near the border with Poland that has become a safe haven for Ukrainians fleeing violence. "Everyone has talked me out of going farther," she says, days after I first met her on board a train from Poland to Ukraine.

Some 3 million Ukrainians, almost all women and children, have fled their country since the Russian invasion began, according to the U.N. It's the

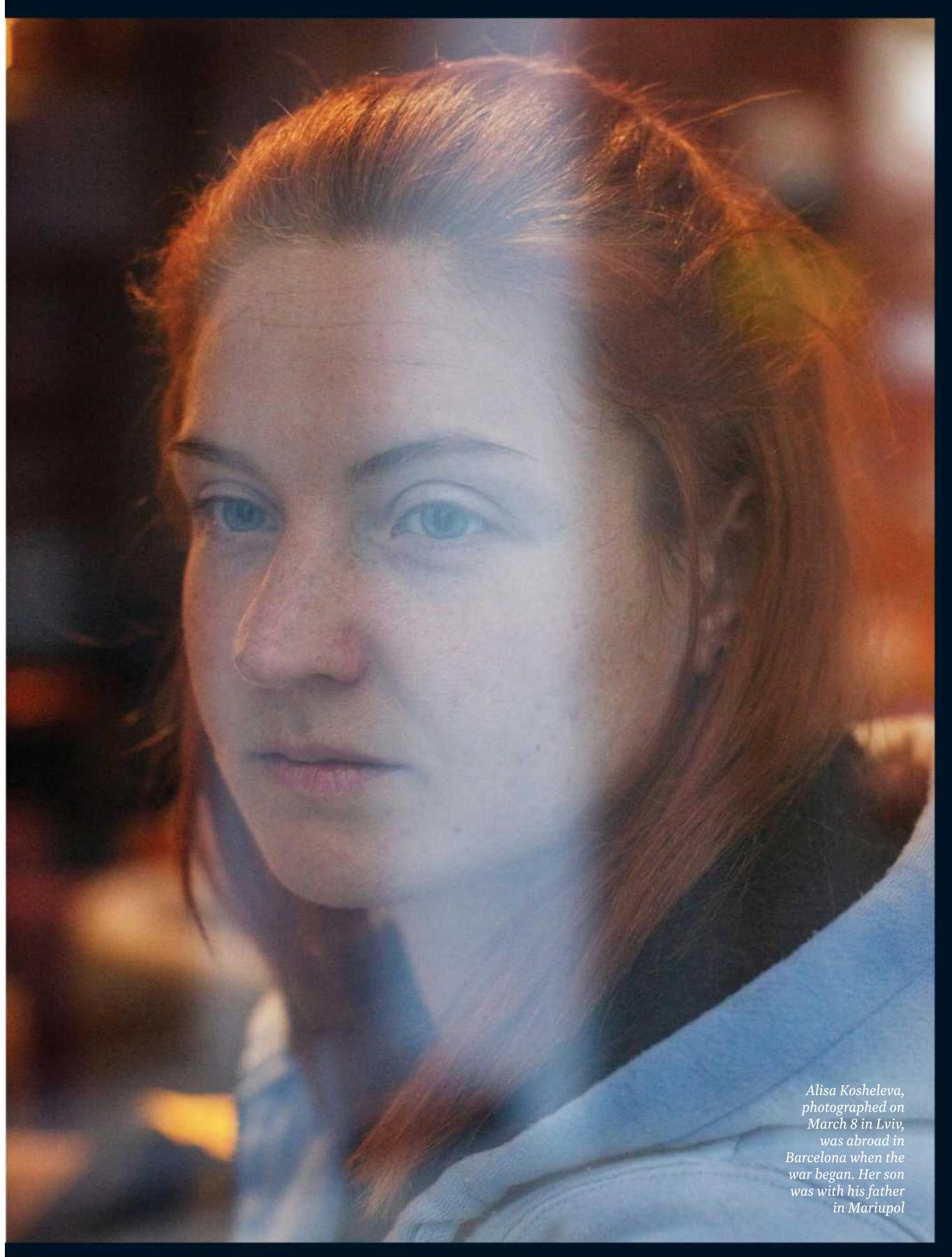
largest exodus in Europe since World War II, and the number is expected to sharply rise. An additional 2 million people are estimated to be displaced within the nation.

The war has highlighted traditional gender stereotypes in Ukraine, where men are widely shamed if they do not fight. Although there is no enforced conscription, most men ages 18 to 60 are barred from leaving the country. Women are encouraged by the state to make their families a priority.

But as those fleeing the fighting squeeze onto trains, buses, and cars heading west, a smaller contingent is rushing home from abroad and into the line of fire. At least 260,000 Ukrainians have returned since the invasion began, according to the Ukrainian border guard, mostly men joining the fight against Russia. But around 1 in 5 are women—some of whom are also fighting or joining the war effort. The vast majority, however, are returning to their families. They are the grandmothers looking after the children of sons in the Ukrainian army; the daughters who will wait out the war with elderly parents; the sisters lending a hand to their brothers' partners; and mothers, like Kosheleva, who hope to reunite with their children.

When Kosheleva spoke to her son on March 2, she was in Poland on her way back to Ukraine. "I told him, 'Don't worry, I am coming to you,'" she says. The next day, there was no signal, and six days later, she still hadn't heard from him. "I can't sleep. My body knows it must rest for a few hours, but I'm also thinking, 'What if the message goes through this time? What if a connection appears?'"

THREE DAYS EARLIER, in the Polish town of Przemysl on the border with Ukraine, streams of war-weary women and children disembarked from the morning train and made their way down the ramps. They passed a smaller line of people



Alisa Kosheleva,
photographed on
March 8 in Lviv,
was abroad in
Barcelona when the
war began. Her son
was with his father
in Mariupol

going in the opposite direction, into Ukraine. The latter group included Ukrainian men returning to defend their country; foreign fighters responding to President Volodymyr Zelensky's call for an international legion; humanitarians hauling bundles of aid; and dozens of mothers, faces framed by fur, stamping their feet in the cold. Over several days, I spoke with more than 10 of them, women who were desperate to retrieve their children—or simply be closer to them.

"What mother wouldn't do this?" asks Natali Khmel, 33, who traveled for three days from Jerusalem, where she has resided for the past four years since her divorce. Her children, 14-year-old Artyom and 10-year-old Anastasia, lived in her native Kyiv with their father. Russian airstrikes had recently bombarded small towns encircling the Ukrainian capital, killing scores of civilians, including families fleeing in their cars.

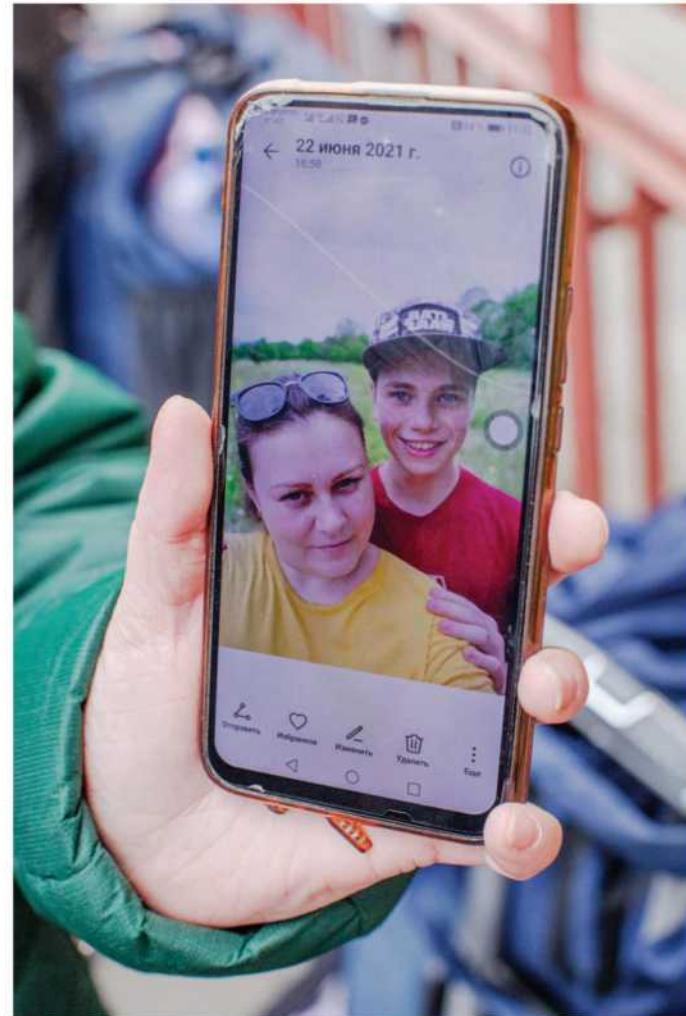
Khmel's children were sleeping in their school's bomb shelter. She methodically checked social media for updates on her planned route to Kyiv: a road blown up here, a train targeted there. "I don't even care how I reach them, I'll go on foot if I have to," she tells me as we shiver in line for the train. She has six months left to go on her physiotherapy course in Israel, but gave it up for her personal rescue mission. "My kids told me, 'Mom, don't even think about coming.' But I have no other choice. I simply must be with them."

Nearby, Anna Abramosova sips steaming tea out of a little cup. Last summer, the 35-year-old former veterinarian left the eastern Donbas region to work in an Amazon warehouse in Poland to pack boxes bound for Germany. She is one of the hundreds of thousands of Ukrainian women who go abroad each year to support their families.

Abramosova left Ukraine for her two teenage sons; now they are the reason for her return. "They need their mother," she says. This wasn't their first experience with conflict; their small town of Druzhkivka borders the region of Donetsk, where Ukrainian forces have been locked in a nearly eight-year conflict with Russia-backed separatists. But this time felt different. "If we get bombed, so be it. I will have done my best for them," Abramosova says.

The Polish border guards open the gates, and a line of people rush through passport control and onto the platform. The mothers board the train, a frisson of nervous excitement sweeping through them. "Let's do this!" cries Abramosova. The train jerks forward and begins its crawl past Polish farms and industrial parks.

The train is half full and filthy, scattered with empty food cartons, used toilet paper, and the occasional mound of cat litter. Its sole toilet is covered in human waste and has no running water; plastic bottles of urine dot the carriage floors.



Kosheleva, alone in her anguish, gazes out of the window, her hands cradling her cell phone. She watches as two trains packed with women and children pass by in the opposite direction. Inside, mothers jostle for room while their kids blow hot air onto the windows, drawing patterns with their little fingers. Some giggle and form peace signs with their hands.

Kosheleva can think of nothing but Kirill, about what he must be seeing. She takes comfort in knowing there is a shelter next door to the home of her ex-husband Mikhail that he and Kirill can use, rather than an ordinary basement, "where there's no air and you can't breathe."

A few hours into the journey, Abramosova gets word from a friend that a Russian artillery strike destroyed her neighbor's house overnight. She goes over to the space between the carriages to smoke a cigarette, holding up her phone to show me a photo of a pile of rubble. "All will be OK, all will be OK,"

Anna Abramosova shows a photo of herself with one of her teenage sons, on March 1, ahead of returning to eastern Ukraine



Abramosova, 35, at the train station in Przemysl, Poland.

She works in an Amazon warehouse in Poland, sending money back home

she repeats like a mantra, her green eyes wide.

Soon, the wheat fields of Ukraine come into view, and the train slows before stopping at the border. Ukrainian guards check its passengers and cargo, telling foreign fighters where to enlist. But after entering Ukraine, the train stops again, this time for hours. Passengers are told to catch a commuter train that has pulled into the station two platforms over. Dragging their luggage behind them, the mothers stumble into the local train. There is mostly laughter and happy tears. "Welcome to Ukraine!" Khmel cries in English. "Where's the duty free?"

But as the train weaves its way through threadbare towns, the mood on board darkens. The faces of the men returning home to fight grow longer. Talk of war is incessant among the local passengers, who are gathered in small groups around phones to watch the latest videos and news from the front.

Abramosova starts to question her decision to not tell her boys—Nikita, 16, and Vanya, 14—that she was coming home. She wanted to surprise them, telling them not to leave home as a care package from Poland was arriving. "I suppose that's what I am," she says, suddenly sounding vulnerable.

IT IS PAST NIGHTFALL when the train pulls into the station in Lviv, ending a 10-hour journey that in peacetime would have taken just over two. Most mothers scatter into the darkness, hoping to catch night trains going east.

Twenty-four hours later, Khmel managed to retrieve her children from Kyiv. "I took them out as quickly as possible," she says from Chernivtsi in southwestern Ukraine, before sending me a smiling selfie with Anastasia, curled up together in bed, their black hair in matching ponytails. Soon the three of them will travel to Romania, where she will apply for their Israeli residencies.

Abramosova made it to her town in Donbas, taking trains and cars across the width of Ukraine, passing Russian tanks on the way, air-raid sirens ringing in their ears. "I'm never leaving home again," Abramosova says from her apartment, where she and a girlfriend are celebrating their reunion over vodka. "My boys, my boys!" she gushes to me on a video call, pinching her son Vanya's gangly arms. "Look at this one!" she says. "Soon he'll be ready for the Ukrainian army!"

Stuck in a hostel in Lviv, Kosheleva waited for news. Her mother, who is in Dnipro in central Ukraine, persuaded her to sit tight. When we speak on March 10, she tells me the information out of Mariupol is unbearable. There are bodies of civilians lying on the streets, and Russian forces bombed a maternity hospital a day earlier.

According to Ukrainian officials, at least 2,500 civilians have been killed there. The city of half a million is under constant Russian shelling, with no power, heat, water, or communications. People have started to bury their dead in mass graves, and inhabitants are melting snow to survive. On March 14, more than 160 cars left Mariupol in what appeared to be the first successful attempt at evacuating civilians to Zaporizhzhia, a city about 140 miles to its west. The road to safety is perilous and mined, but a trickle of people are making it out. Kosheleva believes Kirill is in the convoy.

After two weeks of total silence, Kosheleva finally got through to her ex-husband's phone on March 16. Through a crackly line, she also heard Kirill's voice. "You can't even imagine how happy I am," she says, moments after boarding a train heading east. "It's too early to talk about them being in the clear, but they're getting closer." —With reporting by SIMMONE SHAH/NEW YORK □

T H E
P R I N C E
O F
C R Y P T O
H A S
C O N C E R N S

Vitalik Buterin's fight for
the future of Ethereum

By Andrew R. Chow/Denver

►
BUTERIN,
PHOTOGRAPHED
IN DENVER
ON FEB. 21





PHOTOGRAPHS BY BENJAMIN RASMUSSEN FOR TIME

▼

IN A FEW MINUTES, ELECTRONIC MUSIC WILL start pulsing, stuffed animals will be flung through the air, women will emerge spinning Technicolor hula hoops, and a mechanical bull will rev into action, bucking off one delighted rider after another. It's the closing party of ETHDenver, a week-long cryptocurrency conference dedicated to the blockchain Ethereum. Lines have stretched around the block for days. Now, on this Sunday night in February, the giddy energy is peaking.

But as the crowd pushes inside, a wiry man with elfin features is sprinting out of the venue, past astonished selfie takers and venture capitalists. Some call out, imploring him to stay; others even chase him down the street, on foot and on scooters. Yet the man outruns them all, disappearing into the privacy of his hotel lobby, alone.

Vitalik Buterin, the most influential person in crypto, didn't come to Denver to party. He doesn't drink or particularly enjoy crowds. Not that there isn't plenty for the 28-year-old creator of Ethereum to celebrate. Nine years ago, Buterin dreamed up Ethereum as a way to leverage the blockchain technology underlying Bitcoin for all sorts of uses beyond currency. Since then, it has emerged as the bedrock layer of what advocates say will be a new, open-source, decentralized internet. Ether, the platform's native currency, has become the second biggest cryptocurrency behind Bitcoin, powering a trillion-dollar ecosystem that rivals Visa in terms of the money it moves. Ethereum has brought thousands of unbanked people around the world into financial systems, allowed capital to flow unencumbered across borders, and provided the infrastructure for entrepreneurs to build all sorts of new products, from payment systems to prediction markets, digital swap meets to medical-research hubs.

But even as crypto has soared in value and volume, Buterin has watched the world he created evolve with a mixture of pride and dread. Ethereum has made a handful of white men unfathomably rich, pumped pollutants into the air, and emerged as a vehicle for tax evasion, money laundering, and mind-boggling scams. "Crypto itself has a lot of

dystopian potential if implemented wrong," the Russian-born Canadian explains the morning after the party in an 80-minute interview in his hotel room.

Buterin worries about the dangers to overeager investors, the soaring transaction fees, and the shameless displays of wealth that have come to dominate public perception of crypto. "The peril is you have these \$3 million monkeys and it becomes a different kind of gambling," he says, referring to the Bored Ape Yacht Club, an überpopular **NFT** collection of garish primate cartoons that has become a digital-age status symbol for millionaires including Jimmy Fallon and Paris Hilton, and which have traded for more than \$1 million a pop. "There definitely are lots of people that are just buying yachts and Lambos."

Buterin hopes Ethereum will become the launchpad for all sorts of sociopolitical experimentation: fairer voting systems, urban planning, universal basic income, public-works projects. Above all, he wants the platform to be a counterweight to authoritarian governments and to upend Silicon Valley's stranglehold over our digital lives. But he acknowledges that his vision for the transformative power of Ethereum is at risk of being overtaken by greed. And so he has reluctantly begun to take on a bigger public role in shaping its future. "If we don't exercise our voice, the only things that get built are the things that are immediately profitable," he says, reedy voice rising and falling as he fidgets his hands and sticks his toes between the cushions of a lumpy gray couch. "And those are often far from what's actually the best for the world."

The irony is that despite all of Buterin's cachet, he may not have the ability to prevent Ethereum from veering off course. That's because he designed it as a decentralized platform, responsive not only to his own vision but also to the will of its builders, investors, and ever sprawling community. Buterin is not the formal leader of Ethereum. And he fundamentally rejects the idea that anyone should hold unilateral power over its future.

Which has left Buterin reliant on the limited tools of soft power: writing blog posts, giving interviews, conducting research, speaking at conferences where many attendees just want to bask in the glow of their newfound riches. "I've been yelling a lot, and sometimes that yelling does feel like howling into the wind," he says, his eyes darting across the room. Whether or not his approach works (and how much sway Buterin has over his own brainchild) may be the difference between a future in which Ethereum becomes the basis of a new era of digital life, and one in which it's just another instrument of financial speculation—credit-default swaps with a utopian patina.

THREE DAYS AFTER the music stops at ETHDenver, Buterin's attention turns across the world, back to



BUTERIN DONS
SHIBA INU
PAJAMA PANTS
ONSTAGE AT
ETHDENVER

**NFT
(NONFUNGIBLE
TOKEN)**
A digital asset,
such as an
image, song, or
trading card, that
can be bought
and sold on a
crypto platform

the region where he was born. In the war launched by Russian President Vladimir Putin, cryptocurrency almost immediately became a tool of Ukrainian resistance. More than \$100 million in crypto was raised in the invasion's first three weeks for the Ukrainian government and NGOs. Cryptocurrency has also provided a lifeline for some fleeing Ukrainians whose banks are inaccessible. At the same time, regulators worry that it will be used by Russian oligarchs to evade sanctions.

Buterin has sprung into action too, matching hundreds of thousands of dollars in grants toward relief efforts and publicly lambasting Putin's decision to invade. "One silver lining of the situation in the last three weeks is that it has reminded a lot of people in the crypto space that ultimately the goal of crypto is not to play games with million-dollar pictures of monkeys, it's to do things that accomplish meaningful effects in the real world," Buterin wrote in an email to TIME on March 14.

His outspoken advocacy marks a change for a leader who has been slow to find his political voice. "One of the decisions I made in 2022 is to try to be more risk-taking and less neutral," Buterin says. "I would rather Ethereum offend some people than turn into something that stands for nothing."

HOW TO SEND MONEY ON ETHEREUM

Ethereum runs on the technology of the blockchain, a tamperproof ledger whose security is safeguarded by a group of community watchdogs as opposed to a centralized authority. Here's a brief primer on how a transaction works:



1. Victor wants to send \$5 to Jen. He converts USD into Ether using a cryptocurrency exchange like Coinbase, and initiates a transaction from his wallet to Jen's



2. The transaction is recorded inside a new "block." The Ethereum network is made up of millions of these blocks, which contain time-stamped packages of data



3. Blocks are verified as correct by a mechanism called Proof of Work, in which "miners" solve complex computer equations and earn financial rewards



4. This year, Ethereum plans to transition to a Proof of Stake system, in which a network of "validators" approve the blocks. They lose money if they act in bad faith



5. Jen now has \$5 in Ether from Victor, and an unalterable record exists of their transaction



6. Ethereum allows for not just monetary swaps but also all sorts of other transactions, including contracts, voting systems, and sales of works of digital art

The war is personal to Buterin, who has both Russian and Ukrainian ancestry. He was born outside Moscow in 1994 to two computer scientists, Dmitry Buterin and Natalia Ameline, a few years after the fall of the Soviet Union. Monetary and social systems had collapsed; his mother's parents lost their life savings amid rising inflation. "Growing up in the USSR, I didn't realize most of the stuff I'd been told in school that was good, like communism, was all propaganda," explains Dmitry. "So I wanted Vitalik to question conventions and beliefs, and he grew up very independent as a thinker."

The family initially lived in a university dorm room with a shared bathroom. There were no disposable diapers available, so his parents washed his by hand. Vitalik grew up with a turbulent, teeming mind. Dmitry says Vitalik learned how to read before he could sleep through the night, and was slow to form sentences compared with his peers. "Because his mind was going so fast," Dmitry recalls, "it was actually hard for him to express himself verbally for some time."

Instead, Vitalik gravitated to the clarity of numbers. At 4, he inherited his parents' old IBM computer and started playing around with Excel spreadsheets. At 7, he could recite more than a hundred digits of pi, and would shout out math equations to pass the time. By 12, he was coding inside Microsoft Office Suite. The precocious child's isolation from his peers had been exacerbated by a move to Toronto in 2000, the same year Putin was first elected. His father characterizes Vitalik's Canadian upbringing as "lucky and naive." Vitalik himself uses the words "lonely and disconnected."

In 2011, Dmitry introduced Vitalik to Bitcoin, which had been created in the wake of the 2008 financial crisis. After seeing the collapse of financial systems in both Russia and the U.S., Dmitry was intrigued by the idea of an alternative global money

source that was uncontrolled by authorities. Vitalik soon began writing articles exploring the new technology for the magazine Bitcoin Weekly, for which he earned 5 bitcoins a pop (back then, some \$4; today, it would be worth about \$200,000).

Even as a teenager, Vitalik Buterin proved to be a pithy writer, able to articulate complex ideas about cryptocurrency and its underlying technology in clear prose. At 18, he co-founded *Bitcoin Magazine* and became its lead writer, earning a following both in Toronto and abroad. "A lot of people think of him as a typical techie engineer," says Nathan Schneider, a media-studies professor at the University of Colorado, Boulder, who first interviewed Buterin in

2014. "But a core of his practice even more so is observation and writing—and that helped him see a cohesive vision that others weren't seeing yet."

As Buterin learned more about the blockchain technology on which Bitcoin was built, he began to believe using it purely for currency was a waste. The blockchain, he thought, could serve as an efficient method for securing all sorts of assets: web applications, organizations, financial derivatives, nonpredatory loan programs, even wills. Each of these could be operated by "smart contracts," code that could be programmed to carry out transactions without the need for intermediaries. A decentralized version of the rideshare industry, for example, could be built to send money directly from passengers to drivers, without Uber swiping a cut of the proceeds.

In 2013, Buterin dropped out of college and wrote a 36-page white paper laying out his vision for Ethereum: a new open-source blockchain on which programmers could build any sort of application they wished. (Buterin swiped the name from a Wikipedia list of elements from science fiction.) He sent it to friends in the Bitcoin community, who passed it around. Soon a handful of programmers

BUTERIN WRITES TREATISES ON VOTING, PUBLIC GOODS, AND CITY PLANNING

SMART CONTRACT
A digital agreement that automatically executes actions when predetermined conditions are met

and businessmen around the world sought out Buterin in hopes of helping him bring it to life. Within months, a group of eight men who would become known as Ethereum's founders were sharing a three-story Airbnb in Switzerland, writing code and wooing investors.

While some of the other founders mixed work and play—watching *Game of Thrones*, persuading friends to bring over beer in exchange for Ether IOUs—Buterin mostly kept to himself, coding away on his laptop. Over time, it became apparent that the group had very different plans for the nascent technology. Buterin wanted a decentralized open platform on which anyone could build anything. Others wanted to use the technology to create a business. One idea was to build the crypto equivalent to Google, in which Ethereum would use customer data to sell targeted ads. The men also squabbled over power and titles. One co-founder, Charles Hoskinson, appointed himself CEO—a designation that was of no interest to Buterin, who joked his title would be C-3PO, after the droid from *Star Wars*.

The ensuing conflicts left Buterin with culture shock. In the space of a few months, he had gone from a cloistered life of writing code and technical articles to a that of a decision-maker grappling with bloated egos and power struggles. His vision for Ethereum hung in the balance. “The biggest divide was definitely that a lot of these people cared about making money. For me, that was totally not my goal,” says Buterin, whose net worth is at least \$800 million, according to public records on the blockchain whose accuracy was confirmed by a spokesperson. “There were even times at the beginning where I was negotiating down the percentages of the Ether distribution that both myself and the other top-level founders would get, in order to be more egalitarian. That did make them upset.”

Buterin says the other founders tried to take advantage of his naiveté to push through their own ideas about how Ethereum should run. “People used my fear of regulators against me,” he recalls, “saying that we should have a for-profit entity because it’s so much simpler legally than making a nonprofit.” As tensions rose, the group implored Buterin to make a decision. In June 2014, he asked Hoskinson and Amir Chetrit, two co-founders who were pushing Ethereum to become a business, to leave the group. He then set in motion the creation of the Ethereum Foundation (EF), a nonprofit established to safeguard Ethereum’s infrastructure

BUTERIN ON HIS IBM, TOP, AND WITH HIS FATHER DMITRY



QUADRATIC VOTING
A voting system that measures not just what you want but how much you want it

and fund research and development projects.

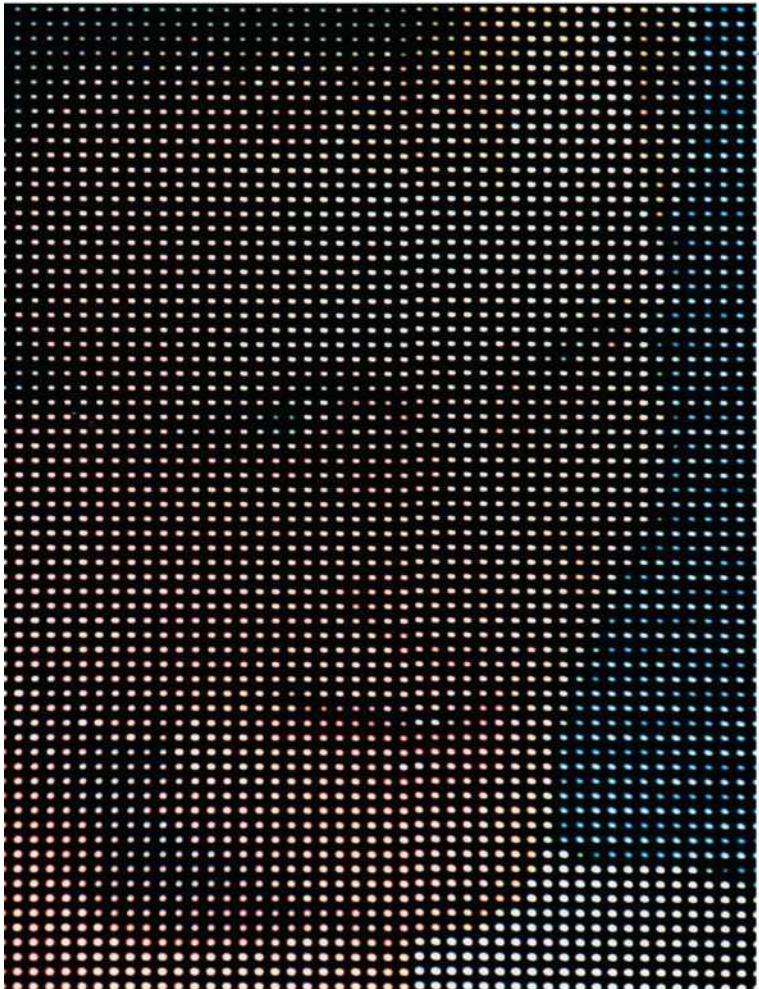
One by one, all the other founders peeled off over the next few years to pursue their own projects, either in tandem with Ethereum or as direct competitors. Some of them remain critical of Buterin’s approach. “In the dichotomy between centralization and anarchy, Ethereum seems to be going toward anarchy,” says Hoskinson, who now leads his own blockchain, Cardano. “We think there’s a middle ground to create some sort of blockchain-based governance system.”

With the founders splintered, Buterin emerged as Ethereum’s philosophical leader. He had a seat on the EF board and the clout to shape industry trends and move markets with his public pronouncements. He even became known as “V God” in China. But he didn’t exactly step into the power vacuum. “He’s not good at bossing people around,” says Aya Miyaguchi, the executive director of the EF. “From a social-navigation perspective, he was immature. He’s probably still conflict-averse,” says Danny Ryan, a lead researcher at the EF. Buterin calls his struggle to inhabit the role of an organizational leader “my curse for the first few years at Ethereum.”

IT’S NOT HARD to see why. Buterin still does not present stereotypical leadership qualities when you meet him. He sniffs and stutters through his sentences, walks stiffly, and struggles to hold eye contact. He puts almost no effort into his clothing, mostly wearing Uniqlo tees or garments gifted to him by friends. His disheveled appearance has made him an easy target on social media: he recently shared insults from online hecklers who said he looked like a “Bond villain” or an “alien crackhead.”

Yet almost everyone who has a full conversation with Buterin comes away starry-eyed. Buterin is wryly funny and almost wholly devoid of pretension or ego. He’s an unabashed geek whose eyes spark when he alights upon one of his favorite concepts, whether it be **quadratic voting** or the governance system futarchy. Just as Ethereum is designed to be an everything machine, Buterin is an everything thinker, fluent in disciplines ranging from sociological theory to advanced calculus to land-tax history. (He’s currently using Duolingo to learn his fifth and sixth languages.) He doesn’t talk down to people, and he eschews a security detail. “An emotional part of me says that once you start going down that way, *professionalizing* is just another word for losing your soul,” he says.

CHILDHOOD PHOTOS COURTESY DMITRY BUTERIN



BUTERIN, SEEN
THROUGH A
MONITOR AT
ETHDENVER

Alexis Ohanian, the co-founder of Reddit and a major crypto investor, says being around Buterin gives him “a similar vibe to when I first got to know Sir Tim Berners-Lee,” the inventor of the World Wide Web. “He’s very thoughtful and unassuming,” Ohanian says, “and he’s giving the world some of the most powerful Legos it’s ever seen.”

For years, Buterin has been grappling with how much power to exercise in Ethereum’s decentralized ecosystem. The first major test came in 2016, when a newly created Ethereum-based fundraising body called the **DAO** was hacked for \$60 million, which amounted at the time to more than 4% of all Ether in circulation. The hack tested the crypto community’s values: if they truly believed no central authority should override the code governing smart contracts, then thousands of investors would simply have to eat the loss—which could, in turn, encourage more hackers. On the other hand, if Buterin chose to reverse the hack using a maneuver called a hard fork, he would be wielding the same kind of central authority as the financial systems he sought to replace.

Buterin took a middle ground. He consulted with

DAO
(DECENTRALIZED
AUTONOMOUS
ORGANIZATION)
A digital organiza-
tion whose rules
are often written
and enforced
through smart
contracts

other Ethereum leaders, wrote blog posts advocating for the hard fork, and watched as the community voted overwhelmingly in favor of that option via forums and petitions. When Ethereum developers created the fork, users and miners had the option to stick with the hacked version of the blockchain. But they overwhelmingly chose the forked version, and Ethereum quickly recovered in value.

To Buterin, the DAO hack epitomized the promise of a decentralized approach to governance. “Leadership has to rely much more on soft power and less on hard power, so leaders have to actually take into account the feelings of the community and treat them with respect,” he says. “Leadership positions aren’t fixed, so if leaders stop performing, the world forgets about them. And the converse is that it’s very easy for new leaders to rise up.”

OVER THE PAST FEW YEARS, countless leaders have risen up in Ethereum, building all kinds of products, tokens, and subcultures. There was the ICO boom of 2017, in which venture capitalists raised billions of dollars for blockchain projects. There was DeFi summer in 2020, in which new trading mechanisms and derivative structures sent money whizzing around the world at hyperspeed. And there was last year’s explosion of NFTs: tradeable digital goods, like profile pictures, art collections, and sports cards, that skyrocketed in value.

Skeptics have derided the utility of NFTs, in which billion-dollar economies have been built upon the perceived digital ownership of simple images that can easily be copied and pasted. But they have rapidly become one of the most utilized components of the Ethereum ecosystem. In January, the NFT trading platform OpenSea hit a record \$5 billion in monthly sales.

Buterin didn’t predict the rise of NFTs, and has watched the phenomenon with a mixture of interest and anxiety. On one hand, they have helped to turbocharge the price of Ether, which has increased more than tenfold in value over the past two years. (Disclosure: I own less than \$1,300 worth of Ether, which I purchased in 2021.) But their volume has overwhelmed the network, leading to a steep rise in congestion fees, in which, for instance, bidders trying to secure a rare NFT pay hundreds of dollars extra to make sure their transactions are expedited.

The fees have undermined some of Buterin’s favorite projects on the blockchain. Take Proof of Humanity, which awards a universal basic income—currently about \$40 per month—to anyone who signs up. Depending on the week, the network’s congestion fees can make pulling money out of your wallet to pay for basic needs prohibitively expensive. “With fees being the way they are today,” Buterin says, “it really gets to the point where the financial derivatives and the gambley

stuff start pricing out some of the cool stuff.”

Inequities have crept into crypto in other ways, including a stark lack of gender and racial diversity. “It hasn’t been among the things I’ve put a lot of intellectual effort into,” Buterin admits of gender parity. “The ecosystem does need to improve there.” He’s scornful of the dominance of **coin voting**, a voting process for DAOs that Buterin feels is just a new version of plutocracy, one in which wealthy venture capitalists can make self-interested decisions with little resistance. “It’s become a de facto standard, which is a dystopia I’ve been seeing unfolding over the last few years,” he says.

These problems have sparked a backlash both inside and outside the blockchain community. As crypto rockets toward the mainstream, its esoteric jargon, idiosyncratic culture, and financial excesses have been met with widespread disdain. Meanwhile, frustrated users are decamping to newer blockchains like Solana and BNB Chain, driven by the prospect of lower transaction fees, alternative building tools, or different philosophical values.

Buterin understands why people are moving away from Ethereum. Unlike virtually any other leader in a trillion-dollar industry, he says he’s fine with it—especially given that Ethereum’s current problems stem from the fact that it has too many users. (Losing immense riches doesn’t faze him much, either: last year, he dumped \$6 billion worth of Shiba Inu tokens that were gifted to him, explaining that he wanted to give some to charity, help maintain the meme coin’s value, and surrender his role as a “locus of power.”)

In the meantime, he and the EF—which holds almost a billion dollars worth of Ether in reserve, a representative confirmed—are taking several approaches to improve the ecosystem. Last year, they handed out \$27 million to Ethereum-based projects, up from \$7.7 million in 2019, to recipients including smart-contract developers and an educational conference in Lagos.

The EF research team is also working on two crucial technical updates. The first is known as the “merge,” which converts Ethereum from Proof of Work, a form of blockchain verification, to Proof of Stake, which the EF says will reduce Ethereum’s energy usage by more than 99% and make the network more secure. Buterin has been stumping for Proof of Stake since Ethereum’s founding, but repeated delays have turned implementation into a *Waiting for Godot*-style drama. At ETHDenver, the EF researcher Danny Ryan declared that the merge would happen within the next six months, unless “something insanely catastrophic” happens. The same day, Buterin encouraged companies worried about the environmental impact to delay using Ethereum until the merge is completed—even if it “gets delayed until 2025.”



CONFERENCE-GOERS LINE UP TO ASK BUTERIN QUESTIONS AFTER HIS KEYNOTE

COIN VOTING
A governance system in which voting power is proportional to your stake in the organization

SHARDING
A technique in which data processing is dispersed into small chunks, making the network faster

After the merge, Buterin hopes to scale the technology. The most crucial tool in doing so is **sharding**, which Buterin says will lead to faster execution times and eventually lower fees to around a nickel. But as the EF works on sharding, users are already flocking to centralized blockchains and platforms that run faster and work better.

In January, Moxie Marlinspike, co-founder of the messaging app Signal, wrote a widely read critique noting that despite its collectivist mantras, so-called web3 was already coalescing around centralized platforms. As he often does when faced with legitimate criticism, Buterin responded with a thoughtful, detailed post on Reddit. “The properly authenticated decentralized blockchain world is coming, and is much closer to being here than many people think,” he wrote. “I see no technical reason why the future needs to look like the status quo today.”

Buterin is aware that crypto’s utopian promises sound stale to many, and calls the race to implement sharding in the face of competition a “ticking time bomb.” “If we don’t have sharding fast enough, then people might just start migrating to more centralized solutions,” he says. “And if after all that stuff happens and it still centralizes, then yes, there’s a much stronger argument that there’s a big problem.”

AS THE TECHNICAL KINKS get worked out, Buterin has turned his attention toward larger sociopolitical issues he thinks the blockchain might solve. On his blog and on Twitter, you’ll find treatises



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on housing; on voting systems; on the best way to distribute public goods; on city building and longevity research. While Buterin spent much of the pandemic living in Singapore, he increasingly lives as a digital nomad, writing dispatches from the road.

Those who know Buterin well have noticed a philosophical shift over the years. “He’s gone on a journey from being more sympathetic to anarcho-capitalist thinking to Georgist-type thinking,” says Glen Weyl, an economist who is one of his close collaborators, referring to a theory that holds the value of the commons should belong equally to all members of society. One of Buterin’s recent posts calls for the creation of a new type of NFT, based not on monetary value but on participation and identity. For instance, the allocation of votes in an organization might be determined by the commitment an individual has shown to the group, as opposed to the number of tokens they own. “NFTs can represent much more of who you are and not just what you can afford,” he writes.

While Buterin’s blog is one of his main tools of public persuasion, his posts aren’t meant to be decrees, but rather intellectual explorations that invite debate. Buterin often dissects the flaws of obscure ideas he once wrote effusively about, like Harberger taxes. His blog is a model for how a leader can work through complex ideas with transparency and rigor, exposing the messy process of intellectual growth for all to see, and perhaps learn from.

Some of Buterin’s more radical ideas can provoke alarm. In January, he caused a minor outrage on

▲
ETHDENVER
ATTENDEE
BRENT BURDICK
CHECKS HIS
PHONE IN AN NFT
GALLERY ROOM

Twitter by advocating for synthetic wombs, which he argued could reduce the pay gap between men and women. He predicts there’s a decent chance someone born today will live to be 3,000, and takes the antidiabetes medication Metformin in the hope of slowing his body’s aging, despite mixed studies on the drug’s efficacy.

As governmental bodies prepare to wade into crypto—in March, President Biden signed an Executive Order seeking a federal plan for regulating digital assets—Buterin has increasingly been sought out by politicians. At ETHDenver, he held a private conversation with Colorado Governor Jared Polis, a Democrat who supports cryptocurrencies. Buterin is anxious about crypto’s political valence in the U.S., where Republicans have generally been more eager to embrace it. “There’s definitely signs that are making it seem like crypto is on the verge of becoming a right-leaning thing,” Buterin says. “If it does happen, we’ll sacrifice a lot of the potential it has to offer.”

To Buterin, the worst-case scenario for the future of crypto is that blockchain technology ends up concentrated in the hands of dictatorial governments. He is unhappy with El Salvador’s rollout of Bitcoin as legal tender, which has been riddled with identity theft and volatility. The prospect of governments using the technology to crack down on dissent is one reason Buterin is adamant about crypto remaining decentralized. He sees the technology as the most powerful equalizer to surveillance technology deployed by governments (like China’s) and powerful companies (like Meta) alike.

If Mark Zuckerberg shouldn’t have the power to make epoch-changing decisions or control users’ data for profit, Buterin believes, then neither should he—even if that limits his ability to shape the future of his creation, sends some people to other blockchains, or allows others to use his platform in unsavory ways. “I would love to have an ecosystem that has lots of good crazy and bad crazy,” Buterin says. “Bad crazy is when there’s just huge amounts of money being drained and all it’s doing is subsidizing the hacker industry. Good crazy is when there’s tech work and research and development and public goods coming out of the other end. So there’s this battle. And we have to be intentional, and make sure more of the right things happen.” —With reporting by NIK POPLI and MARIAH ESPADA/WASHINGTON □

POLITICS

SUNRISE, SUNSET

THE DOCTOR COULDN'T UNDERSTAND why Kidus Girma wouldn't just eat the sandwich. It was October 2021, and Girma, 26, was starving. He hadn't eaten anything solid in four days. His vision was blurred, his heart rate was elevated, and his blood-glucose levels were becoming potentially deadly. He could barely sit up, much less stand. As he struggled to explain to the befuddled medical professionals surrounding him that he was on a hunger strike to protest the Biden Administration's lack of action on climate change, he began to realize his cause was failing.

"I had felt like, maybe if I really push my limits, that's how we win," Girma reflected in a recent interview. "I believe that less now."

Ten days later, the hunger strike was over, but the climate crisis was no closer to being solved. The White House hadn't responded; billions in proposed climate spending remained stuck in limbo in the Senate. And Girma and his fellow activists, having done everything in their power to force change, were left wondering what went wrong.

Girma is a member of the Sunrise Movement, a six-year-old youth climate

A controversial
climate
group
rethinks its
approach
to creating
change in a
new political
moment

BY MOLLY
BALL

PHOTOGRAPH
BY SAGE SZKABARNICKI
STUART FOR TIME

organization that has shot to prominence in its short existence. Conceived by environmentalists hoping to inject their cause with people power, and launched into the seething desperation of the early Trump era, Sunrise has been celebrated in the liberal press and feted by top Democrats. It boasts millions in funding from donors and foundations, hundreds of "hubs" across the country, and thousands of volunteers. The group pressured Democratic presidential candidates to embrace their sweeping climate agenda, helping popularize the idea of a Green New Deal for climate and jobs. "They've brought new energy and new ambition to the climate community and made a big impact in a short period of time," says Eric Pooley, senior vice president of the Environmental Defense Fund.

What they haven't managed to do is win. Since Democrats took control of the White House and Congress last year, Sunrise has focused its efforts on getting major climate legislation enacted at the federal level. The Administration included \$550 billion in climate spending in the Build Back Better package that was to be the linchpin of



President Biden's agenda, and Sunrise pushed hard to get the bill passed. But despite its best efforts, that historic investment now appears dead as the midterm elections loom. If the November vote results in Democrats losing the House or Senate as most observers predict, major climate legislation is unlikely until at least 2025.

Some critics charge that Sunrise's recent activism has been more hindrance than help. The group came out against last fall's bipartisan infrastructure bill, calling it the "Exxon Plan," even though it contained hundreds of millions of dollars in funding for things like renewable energy and environmental cleanup. Its actions usually target Democrats: chants of "Biden, you coward, fight for us!"; pursuing Senator Kyrsten Sinema to the Boston Marathon; hounding Sineema's Democratic colleague Joe Manchin at the yacht where he lives in D.C. At the same time, Sunrise has demanded allies take up unpopular positions unrelated to climate, including Palestinian liberation and defunding the police.

Fellow travelers on the left have balked at the group's radical politics and confrontational tactics. Center-left writer Matt Yglesias called its attacks on Democrats a "total failure to read the political situation," while the socialist magazine *Jacobin* chided the group for being out of touch with the working-class people it claims to be advocating for. Though few are eager to risk the group's ire for saying so, many professional Democrats believe Sunrise has splintered the environmental movement, alienating potential allies and hurting the image of the broader cause. "There is a usefulness generally to having a left flank," says a veteran environmental advocate who has worked both inside and outside government. "But by imposing these strict litmus tests, they create a lot of unhelpful division within the environmental community when we need to be all working in the same direction. And the extremism of the way they come at it is the reason that even a lot of moderate, thoughtful people are annoyed with environmentalists."

For Sunrise, the failure to enact federal climate legislation has prompted a kind of identity crisis—a painful process of sifting through the wreckage and

trying to chart a way forward, recognizing that the strategy of the past six years hasn't delivered results. "It was deeply devastating, honestly, to see the way [Build Back Better] stalled out," Sunrise's 28-year-old executive director Varshini Prakash tells TIME. "It's like, we voted, we marched, we striked, you know? There were, like, 16-year-olds doing phone banks. What more do we need to do to win?"

The group has spent the past year engaged in a process of collective soul-searching, surveying its members, and holding high-level strategy discussions, trying to generate a new blueprint for a world in which the Green New Deal, its original animating ideal, is a remote possibility at best. The idea, Prakash says, is to "dig in and figure out what we can do differently and better moving forward," and to "shift our strategy

sets in, the activist left now faces a collective reckoning: Why didn't all that people power result in policy change? Was all the marching and shouting little more than a self-reinforcing liberal echo chamber? And if that's not the way to make change happen, what is?

ON A FRIDAY in February, the Sunrise Movement's brain trust gathered to chart the organization's future. Seven flickering rectangles on a Zoom screen offered seven little windows into the lives of the young and apartment-bound: cluttered floating shelves topped with Bernie posters, barred windows topped with crooked plastic blinds. "The vibe today is, like, let's get down to business," says the meeting's leader, Stevie O'Hanlon, a bespectacled white Pennsylvanian who uses they/them pronouns. "We're very close, and my orientation is that we should just try and drive to a decision."

Working from a shared Google Doc, the seven activists considered the arguments for and against the potential paths forward for Sunrise, speaking a rapid-fire shared patois of youth slang and nonprofit jargon. Should they focus on another federal push, this time trying to get the Biden Administration to use Executive action? (Pro: would unite the movement across the country. Con: could fail and further demoralize the troops.) Should they designate certain chapter "hubs" as priority locations to push local governments to take action? (Pro: would give members focus. Con: might lead nonpriority chapters to feel overlooked.) Once refined, the arguments and options will be put out to the group's members, who will weigh in with an online vote this summer.

Sunrise grew out of a process like this one. From the start, it was a carefully planned, strategic effort. In 2016, Prakash had just graduated from the University of Massachusetts, Amherst, where she'd helped lead a successful three-year campaign to pressure the school's administration to divest from fossil-fuel companies, the first major public university to do so. She'd cared about the environment since watching *An Inconvenient Truth* as a teenager, but it was the thrill of the campaign—including a weeklong sit-in at which

'WHAT MORE DO WE NEED TO DO TO WIN?'

Varshini Prakash,
Sunrise executive director

in response to a new political moment."

Sunrise isn't the only progressive organization at a crossroads. The Trump years were a golden age of liberal activism, as political events drove unprecedented numbers of Americans into the streets. Once an act of rebellion, protest has become so mainstream that CBS last year announced a reality TV competition called *The Activist*, hosted by Usher, Priyanka Chopra Jonas, and Julianne Hough—a beyond-parody rendering of activism as little more than chic posturing. (The show was canceled amid an outcry, and its creators apologized for seeking to pit causes against one another.) From the Women's March to Black Lives Matter to March for Our Lives, many of the movements that flourished during the Trump presidency have faded in the years since. As the Resistance sputters and reality



Kidus Girma, 26, went on a hunger strike for climate change last year

ANJALI PINTO FOR TIME

34 people were arrested—that got her hooked. “I learned everything about how to feel powerful and have agency in your life,” Prakash says. “Life feels big and meaningless sometimes; you see all this pain all around you. Organizing gave me a sense of power—a sense that ordinary people could come together and do extraordinary things.”

Hoping to turn her passion into a career and her cause into a movement,

Prakash and a dozen like-minded friends applied that year to a D.C. “movement incubator,” founded by veterans of Occupy Wall Street. The incubator, called Momentum, trains activists to map out their organization’s structure, strategy, and principles long before they hit the streets. By doing what they call “front loading,” the theory goes, activists can avoid the infighting and aimlessness that often afflicts social movements. The current planning effort is a second front-loading process—a sort of Sunrise 2.0 reboot. “We did a lot to change the politics of the issue, but ultimately it wasn’t enough to win the real legislative and policy changes we wanted to see, and that’s why we need a new plan for the next few years,” says Sunrise’s campaign director, Deirdre Shelly.

The planning process reflects the professionalization of today’s activists, who can draw on a burgeoning academic literature of the theory and practice of movement building. It also has led some critics to charge that Sunrise isn’t authentically “grassroots,” but rather just another grant-funded project stood up by professional environmentalists. The group’s early funding came largely from two liberal foundations, the Rockefeller Family Fund and Wallace Global Fund, and it now boasts an annual budget of \$15 million. “Sunrise hopes the media falls for its image of itself as a youth-led grassroots activism for the Green New Deal, springing up naturally,” Scott Walter, president of the conservative Capital Research Center, told the *Daily Signal*. “In fact, the group is a creature of the professional left.”

Manufactured or not, a youth movement for climate action was exactly what environmentalists believed they needed in the wake of the climate fight’s last big legislative failure. In 2009, a bill to create a cap-and-trade system to limit carbon emissions squeaked through the House of Representatives—the first major legislation to address climate change ever to pass a chamber of Congress. But when the bill died in the Democrat-led Senate, intense recriminations ensued. Environmentalists had poured hundreds of millions of dollars into the push for cap-and-trade, drawing on carefully calibrated arguments and ad campaigns positioning



it as a broadly palatable, pro-business initiative. With the world on fire, they couldn't afford to fail again.

In 2013, the Harvard political scientist Theda Skocpol published a 145-page academic paper analyzing the cap-and-trade bill's failure. Environmentalists, she concluded, had focused too much on the inside game and neglected to build robust support among the public. Her description of the effort was scathing: "Powerful and very economically secure people look down on the American multitudes with a kind of bemused amazement," she wrote, "and try to find poll results about public attitudes to wave in front of policymakers." It was no wonder they'd wilted in the face of corporate antagonism and a GOP energized by the Tea Party. "The political tide can be turned over the next decade only by the creation of a climate-change politics that includes broad popular mobilization on

▲
Members of Sunrise create a mural at a protest outside Nancy Pelosi's San Francisco home in June 2021

the center left," Skocpol concluded.

Sunrise's formation was shaped by the idea that climate policy needed ground troops to succeed: "There were certain roles in the movement ecosystem that weren't being filled," Prakash says, so the group was "specifically tailored" to supply what its leaders saw as the "missing piece." Meanwhile, armed with Skocpol's insights, which had landed like a grenade in the world of environmental advocacy, progressives were eager to encourage mobilizations like the nascent Sunrise effort.

THE TIMING WAS FORTUITOUS in other ways. Donald Trump's election in 2016 sent liberals to the barricades.

Then, in 2018, a 15-year-old Swedish girl named Greta Thunberg began leading a "climate strike" that swelled into massive protests around the world. That June, a 28-year-old activist named Alexandria Ocasio-Cortez stunned the political world with an upset primary victory over a veteran Democratic lawmaker in New York City, after campaigning on a little-known environment-and-jobs plan called the Green New Deal.

Sunrise's early attempts to draw attention were a smashing success. In November 2018, the group staged a sit-in in House Speaker Nancy Pelosi's office to demand that Democrats prioritize climate with their newly won majority. Ocasio-Cortez, who had yet to be sworn in, joined the effort, which drew reams of press coverage. Pelosi agreed on the spot to create a special climate committee in the next Congress.

In 2019, a group of young activists confronted California Senator Dianne



Feinstein, who chided them for presuming to tell an experienced pol what to do. The videotaped encounter was a perfect tableau of sympathetic young idealists up against an imperious, condescending Democratic establishment. In the resulting *Saturday Night Live* parody, Feinstein, played by Cecily Strong, lectures a group of adorable kids: “I don’t come into your first-grade classroom and knock the Elmer’s glue out of your mouth, do I? So why don’t you stay in your lane and step the f—ck off?”

Major publications published glowing profiles of Sunrise, Prakash was featured on lists of rising leaders, and the Democratic candidates jockeying for the 2020 presidential nomination groveled for the group’s endorsement. It went to Bernie Sanders—one of 20 candidates to come out in support of the Green New Deal. Biden was not among them, but he still campaigned on a platform that made climate a top priority

▲
Sunrise activists
demonstrate outside the
White House in June 2021

and promised policies of unprecedented scope to address it. Sunrise claimed victory for elevating the issue and moving it to the top of the Democratic agenda.

Yet since Trump left office, the group has struggled to find its footing. Many of its recent actions, such as a September protest at the Capitol at which 13 people were arrested, have been sparsely attended and received scant coverage. Even the hunger strike failed to go viral. Last fall, Sunrise’s D.C. hub boycotted a voting-rights rally because it included pro-Israel Jewish groups, leading to accusations of antisemitism that caused even Ocasio-Cortez to distance herself.

Sunrise’s focus on “moral action” to heighten the stakes of conflict, and

its militancy toward fellow Democrats, strike many in the party as unhelpful; what’s really stopping climate legislation, they argue, is Republican opposition. Far from being chagrined by the young climate activists at his houseboat, Manchin seemed to relish the opportunity to appeal to his conservative constituents by stiff-arming the activist left.

OTHER TRUMP-ERA MOVEMENTS have experienced similar struggles. The eponymous organization behind the Women’s March devolved into feuding over leadership disputes and accusations of antisemitism, and is now all but defunct. Time’s Up, founded in the wake of the #MeToo movement against sexual harassment, faces similar turmoil amid charges it prioritized powerful allies, like former New York governor Andrew Cuomo, over abuse victims. The national Black Lives Matter organization received

nearly \$90 million in donations in the wake of 2020's massive racial-justice protests, but its founders are now at odds over accusations of profiteering. Meanwhile, the major cause the movement championed has stalled: federal police-reform legislation is officially dead, and many elected Democrats, leery of being associated with calls for defunding the police, have shied away from the issue. Public opposition to Black Lives Matter is higher now than it was in 2019.

Fights over tactics and tensions between radicals and incrementalists are perennial features of social movements, says Omar Wasow, a political scientist at Pomona College who studies protests. Public protest—the right of the people to petition the government directly—is a hallowed tradition built into the Constitution. Smartphone footage and social media have made it easier than ever for activists to document injustices and stage attention-getting confrontations with the powerful, driving public attention to issues and shaping the national agenda. And while it's easy for critics to deride so-called hashtag activism as mere virtue signaling, Wasow points out that protest is performance. "All politics is in some ways a form of theater," he says, "and every activist is engaged in a strategic effort to get attention for their cause."

If nothing else, Sunrise contends it has succeeded at this. Stevie O'Hanlon, the Sunrise staffer, recalls going through an early training session around the time of the group's founding that included a slide showing climate change was voters' 21st most important issue. "We needed to close the urgency gap, because people thought of climate change as an issue in the future, not today," they say. Today, polling shows climate as a top issue for Democrats, and a prominent though lesser priority for the public as a whole.

"The climate movement has won on the problem," O'Hanlon says. "The next task is, How do we win on the solution? How do we actually build support in the public around the solution of the Green New Deal? We have to build the political muscle to be able to show up in a more powerful way around the next big climate policy fight."



▲
Varshini Prakash, 28, founded Sunrise to fill a gap she saw in the climate movement

FOR SUNRISE, THE WAY FORWARD may be to focus on tangible local action and small-scale victories—like getting more left-wing Democrats elected to Congress. On Feb. 23, Sunrise volunteers from around the country gathered for a "virtual phone bank" for Jessica Cisneros, a Texas congressional candidate in the March 1 Democratic primary. "If you're here because you want to get hype about electing Green New Deal champions like Jessica Cisneros," says the session's leader, a San Antonio—

based organizer named Paris Moran whose center-parted long black hair evokes Ocasio-Cortez's, "you're in the right place!"

Cisneros, a 28-year-old immigration lawyer, is seeking to oust Representative Henry Cuellar, a long-serving moderate Democrat. She first ran for the Laredo-based congressional seat in 2020, promising to champion Medicare for All and link up with the so-called Squad of far-left Democrats, which has grown to include six members of the 222-member caucus. But Cuellar contends that his conservative stances on social issues are more in step with his overwhelmingly Latino district. In the 2020 primary, Cuellar defeated Cisneros by 1.5 percentage points.

This year, Cisneros hopes her enhanced name recognition, as well as a mysterious recent FBI raid of Cuellar's home and office, will push her over the edge. "I'm taking on Big Oil's favorite Democrat, all these big corporate special interests' favorite Democrat, someone who's been in office longer than I've been alive!" Cisneros exhorts the group. The Zoom tally on the bottom of the screen shows 85 participants, many of whom have put their pronouns in their screen names and posted acknowledgments of Indigenous land in the chat. "Last time, we debunked so many myths that said change wasn't possible," she says. "This time around, we're finishing what we started!"

Sunrise says its members made more than 700,000 calls for Cisneros in the days leading up to the primary. Yet she fell short again, coming in second to Cuellar by 767 votes and earning fewer votes than in 2020. Since neither candidate received a majority, the two will face off again in a May runoff.

Sunrise officials warn that Democrats risk losing the youth vote to disillusionment and despair if they don't act fast on climate. "It's really hard for us in the midterms to go back to our base and say, 'Vote for Democrats! I know you worked really hard last time and thought maybe they would do something; they didn't, sorry, but can you please just vote for them again?'" says Shelly, the campaign director.

More and more of Sunrise's local chapters are looking for alternatives

to federal action, pushing climate policy in their city councils, county commissions, and state legislatures, where a small group of passionate and determined people stand a better chance of turning the tide. The hub in Portland has thrown its weight behind a municipal public-transit initiative. High school and college students are looking for new ways to push their educational institutions to act. "People feel really excited about taking this fight beyond Congress to our communities," Prakash says.

Yet for all its soul-searching, one thing Sunrise does not appear to be reconsidering is the philosophy that has drawn so much criticism—its core tactic of moral confrontation, primarily targeting Democrats. Veekas Ashoka, who co-leads the group's New York City hub, calls Senator Chuck Schumer, the Democratic majority leader, "the most responsive politician in leadership in D.C.," and credits him with making a Civilian Climate Corps a major element of Build Back Better. Sunrise is on weekly strategy calls with Schumer's office. Still, on March 14, Sunrise NYC protested outside Schumer's Brooklyn home.

Perhaps the remnants of the Resistance will quietly peter out, overcome by public backlash. Perhaps groups like Sunrise will pay the price for these tactics, and their activists will grow into a generation of the disillusioned, their idealism blasted to pieces by an implacably broken system. Or perhaps they will be moved to do the work that matters in their own communities, leading to a flourishing of local involvement and a newly engaged citizenry. "We're all really screwed if we don't solve the climate crisis, but it's also really scary for

the future of democracy," Prakash says. "What creates the breeding ground for authoritarianism is people believing that our institutions cannot create material changes in their lives."

For now, activists take comfort in small victories. "After BBB was put on ice, there was a lot of despair and a feeling like it's all over," says Girma, the hunger striker, who's gone from volunteer to full-time staffer at Sunrise. After his hunger strike ended, Girma and others began "bird-dogging" Manchin, the West Virginia Senator whose objections tanked the BBB legislation. They followed him from his D.C. houseboat to a parking garage, where they discovered that he drove a Maserati—a revelation that generated a fresh viral wave of anger. They didn't get Manchin's vote, but, Girma notes with satisfaction, "After our action, he stopped driving his Maserati."

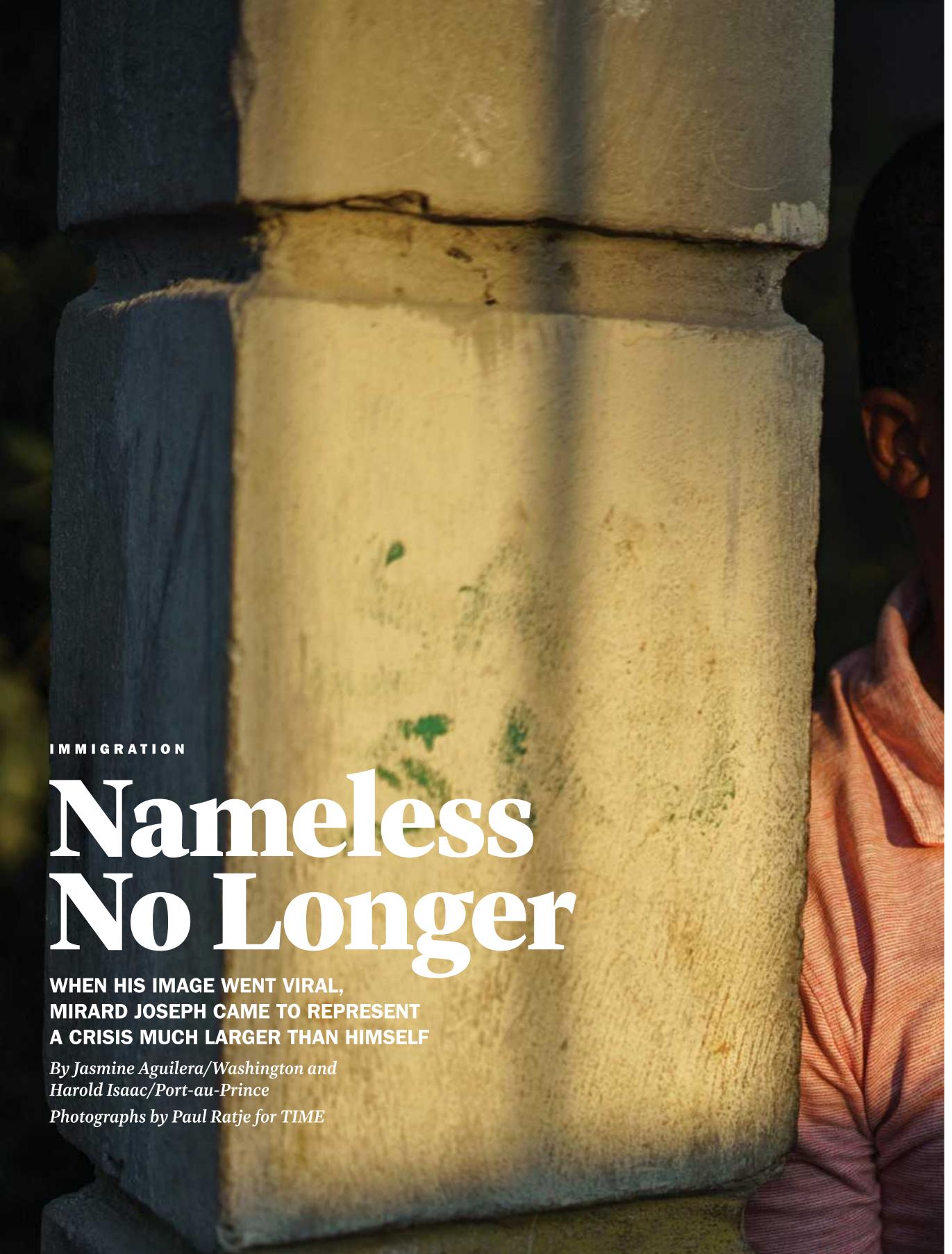
In the wake of the bill's failure, Girma thought hard about what he was doing and why. He thought back to the doctor with the sandwich. After he'd gotten a bag of IV fluids and revived somewhat, he remembered, he had a long conversation with her, and she ended up wishing him luck. Maybe, he decided, organizing was about moments like that—intimate, human interactions, not pompous politicians or bills in Congress.

"It's really fun and ageist for people in the media and corporate establishment to disregard young people's ideals and conviction," he says. "In this moment it feels like we may not win this bill, but I still draw incredible comfort and conviction from knowing who I am and what I'm building."

My conversations with Sunrise staffers and volunteers tended to come back to this sense of fellow feeling: the gratification of being part of something bigger than themselves. Activism, they suggested, had become its own reward, offering a sense of belonging and commitment. "As a person I'm really small, and before that might have made me feel ineffective," Girma says. "But now I see that a lot of small people add up to something big, and I feel big in my smallness." They hadn't gotten the Green New Deal, but at least they'd gotten that.—With reporting by LESLIE DICKSTEIN and MARIAH ESPADA □

'THE GOAL IS NOT
LEGISLATION. IT'S
CHANGING WHAT IS
POLITICALLY POSSIBLE.'

Kidus Girma,
Sunrise staffer



IMMIGRATION

Nameless No Longer

**WHEN HIS IMAGE WENT VIRAL,
MIRARD JOSEPH CAME TO REPRESENT
A CRISIS MUCH LARGER THAN HIMSELF**

By Jasmine Aguilera/Washington and

Harold Isaac/Port-au-Prince

Photographs by Paul Ratje for TIME



Joseph, photographed in Port-au-Prince, Haiti, on Jan. 23, was expelled from the U.S. in September after attempting to seek asylum in Del Rio, Texas, with his wife Madeleine Prosperc and baby daughter



The world first saw Mirard Joseph on one of the worst days of his life.

On Sept. 19, 2021, he came to embody the plight of thousands of Haitian migrants after an image taken that day of his attempt to escape a U.S. Border Patrol (USBP) agent on horseback in Del Rio, Texas, spread across the internet and was broadcast on every major news network. While Joseph ran, clinging to plastic bags filled with food, the agent wrenched his shirt. The horse's rein seemed to coil like a whip.

The image, captured by New Mexico- and Texas-based photojournalist Paul Ratje, stoked national debate over migration at the U.S.-Mexico border, enduring racism in American institutions, and the unique experience that Black immigrants face. Joseph, along with his wife Madeleine Prosperc and their daughter, who just turned 2, had been living with some 15,000 other mostly Haitian migrants in makeshift tents in Del Rio.

Many Americans saw Ratje's photo as evidence of the country's broken immigration system. Others, including the NAACP and Vice President Kamala Harris, argued that it evoked an ugly history of slavery. In the days after the incident, President Joe Biden condemned the USBP's use of horses in the arrests, and U.S. Customs and Border Protection launched an internal investigation into the Del Rio horse patrol. "We—our entire nation—saw horrifying images that do not reflect who we are, who we aspire to be, or the integrity and values of our truly heroic

personnel in the Department of Homeland Security," Secretary of Homeland Security Alejandro Mayorkas said, adding that the images "painfully conjured up the worst elements of our nation's ongoing battle against systemic racism."

Federal agents in Del Rio were reportedly furious at the Biden Administration's reaction. Many USBP supporters defended the scene captured in Ratje's photo, arguing that the agent was doing his job. Ratje weighed in too, saying he couldn't confirm if the agent had used the rein as a whip—a comment that, amid the controversy, took on a life of its own in conservative media outlets. "I was portrayed as ... giving [the agents] a pass," he says.

On Dec. 20, 11 Haitian migrants, including Joseph and Prosperc, filed suit against the U.S. government, claiming that they had been treated unlawfully by being denied an opportunity to seek asylum in Del Rio. Joseph and Prosperc, according to their lawyers, felt unsafe in Chile, and feared kidnapping if they returned to Haiti. Joseph also claims, per court documents, that a border agent "lashed at" him.

Meanwhile, Ratje could not shake the thought that his image omitted any detail about the man at the center of it. In an era of global migration, the subject of his photo had been essentially erased—co-opted by a set of diverging political narratives much larger than any one person. "I don't think that migrants see themselves as migrants,"



Ratje says. "They see themselves as human beings." It's the rest of us who "have this idea of migrants, and we dehumanize them that way."

In the days after he took the photo, Ratje set out to find his subject, walking the length of the tent city and giving out his contact information to anyone who would take it. Months later, in December, Ratje's phone rang. A quiet Haitian Creole speaker was on the line. It was Joseph.

In December and January, Ratje traveled twice to Port-au-Prince to meet



Joseph in person. For Joseph, meeting Ratje—in his first interview since the photo was taken—was an opportunity to tell his story on his own terms. For Ratje, it was a chance to layer the humanity of an individual onto an image that has come to represent a global plight.

IN THE DAYS after his now infamous struggle with the USBP agent, Joseph, Prosperc, and their toddler were detained. A few days later, U.S. border officials loaded them onto a plane bound for Haiti. Joseph was chained by his wrists,

waist, and feet; Prosperc was shackled too, but allowed to carry their baby.

When they landed, friends and family showed Joseph the photograph, which had been reproduced in countless articles, and asked if it was him. Reluctantly, Joseph admitted it was. “I had tears in my eyes,” he says in Haitian Creole. Naturally shy, he was embarrassed by the ordeal. “It’s the worst humiliation I have endured in my life,” he says. “The horse humiliation and the cuffs.”

Raised in Saint-Louis du Nord, a small coastal city in northern Haiti,

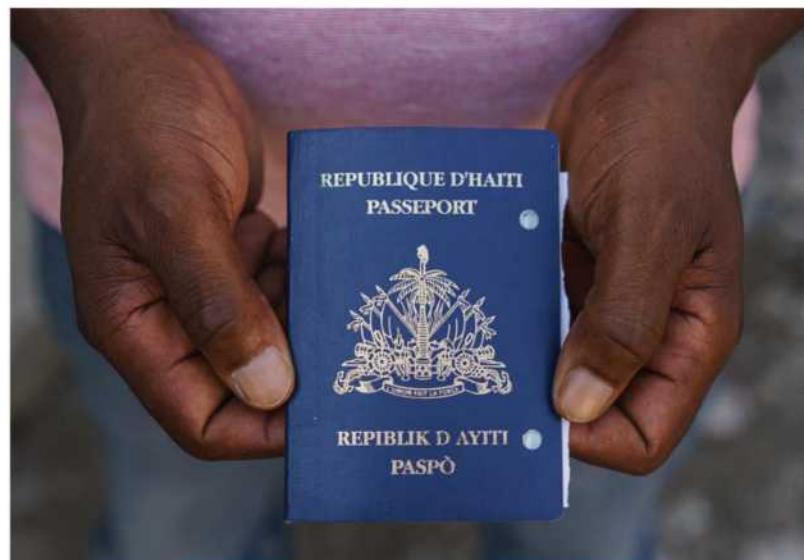
When Joseph was forcibly returned to Haiti in September 2021, he and Prosperc had not set foot in the country in more than four years. His wife has since returned to Chile, and Joseph is living with three other families in a small compound known as a lakou

Joseph says he's spent his life avoiding violence. He grew up playing soccer in the streets, where he became a lifelong fan of the Spanish team Real Madrid. Now 42, the father of six, he still slips away whenever he can to watch soccer or the Los Angeles Lakers, his neck bent over his phone, a quiet smile tripping across his normally reserved face.

Like millions of other Haitians, Joseph has never had much, and in recent years poverty has worsened. In 2010, the island was devastated by a massive earthquake, then a wave of pile-on problems: homelessness, hunger, cholera outbreaks, spikes in violence. In July, President Jovenel Moïse was assassinated, plunging the nation into political uncertainty; a month later, another massive earthquake tore through. These conditions, both environmental and political, have driven what is now one of the largest emigration flows in the western hemisphere, according to the Migration Policy Institute. Since 2010, nearly 650,000 Haitians have left home; many have landed in Brazil, Chile, and other Latin American countries. Joseph and Prosperc joined this diaspora in 2017, traveling to Chile, where Joseph found work—and almost lost a finger—at a propeller factory. Their daughter was born there.

In 2021, in the wake of the COVID-19 pandemic, global economies constricted, jobs dried up, and many countries' visa requirements became more stringent. Thousands of Haitians were again forced to migrate, and this time many headed for the U.S.-Mexico border. Joseph and Prosperc traveled with their baby overland from Chile through the Darién Gap, a treacherous expanse of jungle between Colombia and Panama that kills dozens of people every year, per the International Organization for Migration (IOM).

In September, when Joseph and his family finally arrived in Del Rio, they had no idea of the political and bureaucratic barricade that awaited them. In 2020, the U.S. had invoked an obscure public-health rule, Title 42, that allows U.S. immigration officials to expel anyone crossing the border, even if they intend to seek asylum. Under those rules, most migrants are expelled to Mexico, but Haitians are sent all the way back to

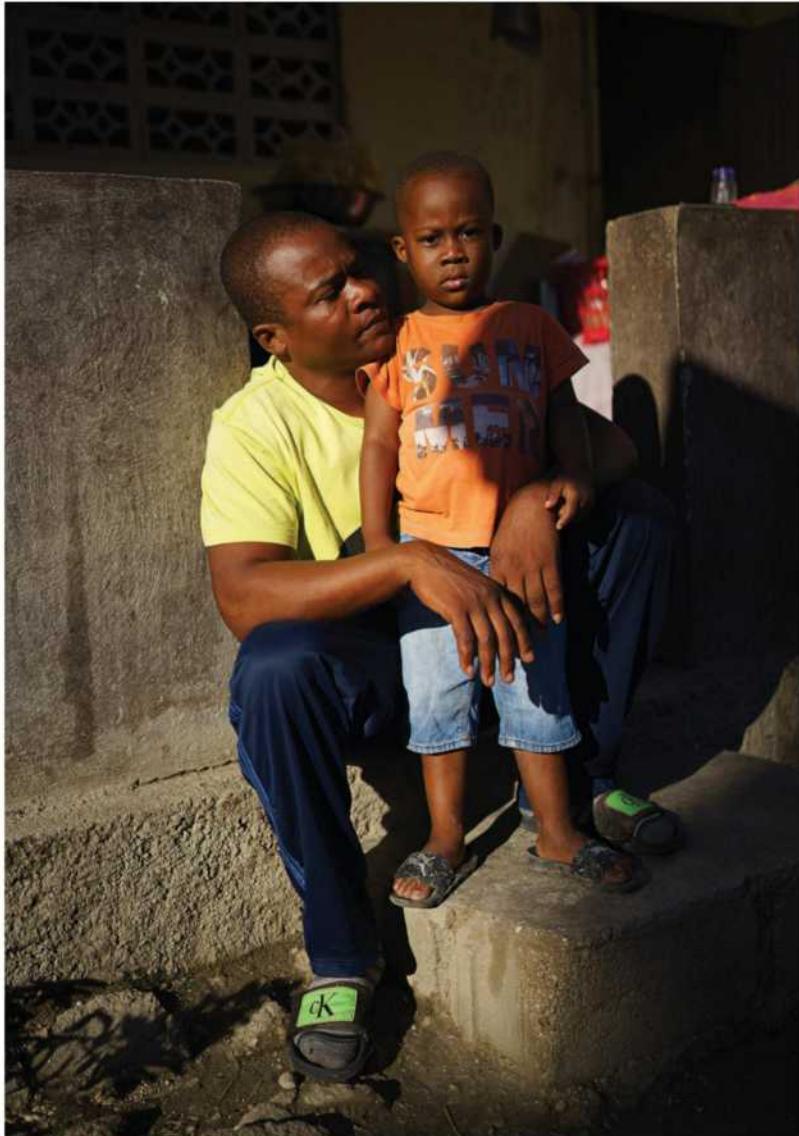


their home country. Between Sept. 19 and Feb. 26, more than 18,000 Haitians were expelled from the U.S. and returned to Haiti, according to IOM.

In the days before Ratje took his now famous photo, Joseph and his family had been sleeping on cardboard on the ground in dusty Del Rio, and their baby developed a respiratory and gastrointestinal illness, according to court documents. The documents also state

Top: Haitian migrants leave Toussaint Louverture International Airport after being expelled from the U.S. by plane on Dec. 27

Joseph, who displays his passport, joined 11 other Haitian migrants in December in filing suit against the U.S.



Joseph with his 3-year-old son, Prince Honey Joseph. If Joseph and Prosperc had the means, they would return to the U.S. to apply for asylum “right this second,” according to court documents

that the U.S. government was providing food, but not enough—just bread and bottled water. “I’ve never seen anything like the situation in Del Rio,” says Ratje, who had been photographing the conditions of the encampment on assignment for Agence France-Presse. Unlike other camps along the U.S.-Mexico border, this one was on U.S. soil.

On the day his photograph was taken, Joseph had taken the short trip from

Del Rio to Ciudad Acuña, on the Mexican side of the border, to buy food for his family. He was attempting to return to Del Rio when the border agents galloping in “nearly trampled him,” per court documents. For Joseph, the encounter recalled memories of living in fear of violence in Haiti. “It’s as if [the agent] had something personal with me,” he says.

That this brutal experience made Joseph an accidental celebrity has worn on him. Sometimes, he says, if someone recognizes him from the photograph, he’ll deny it’s him, just to avoid the conversation. But other times, Joseph has sought out the chance to share his story, glad to reclaim at least some agency in the painful ordeal.

RATJE’S PHOTOGRAPH is hardly the first to ignite debate over migration. Consider the image of Alan Kurdi, the Syrian toddler whose tiny, lifeless body washed up on the shore of Turkey in 2015. Or the photograph of Óscar Alberto Martínez Ramírez and his daughter, Angie Valeria, who were shown facedown in muddy water after drowning trying to cross the Rio Grande in 2019. Those bleak images also sparked international debate about the movement and treatment of desperate people. But such conversations are almost always once removed. They unfold as a public discussion over politics or the nuances of policy. If they touch at all on our ethical obligations to one another, only rarely do they take in more of an individual’s life than his or her status as a migrant.

By finding Joseph, Ratje was trying to prevent that pattern from repeating. “As photographers, it’s important to show these things that are going on,” he says, “but we need to also look at the effect that they have on the people who are in these pictures. I didn’t want [Joseph] to just be another one of these people who we call migrants who disappear into the shadows.”

On the day Ratje had arranged to meet his former subject in Port-au-Prince, Joseph wore his best clothes. The last time Ratje had captured his image, he’d been treated like a criminal. This time, Joseph wanted to be seen for the man he is, a human being with dignity.

—With reporting by JULIA ZORTHIAN/
NEW YORK □

A Castaway Nation

HAITIAN AMERICANS SAY THE BIDEN ADMINISTRATION HAS TURNED ITS BACK ON THE BELEAGUERED COUNTRY

By Vera Bergengruen

IT TAKES A LOT TO FAZE MARLEINE Bastien. After growing up under the brutal dictatorship of François Duvalier, she left Port-au-Prince for Miami in 1981. The 62-year-old thought she had seen it all in her four decades working with the city's Haitian community as a social worker—until now.

Every day feels like a new low in the yellow stucco building that houses her advocacy organization in Miami's Little Haiti neighborhood. "It's like the community is suffering from a collective trauma," she says. "We have members coming in and telling us, 'I cannot sleep; I cannot stand even watching the news.'" Families already struggling under financial strains are setting aside money in case relatives in Haiti are kidnapped and need to pay ransom. "I never heard that before," she says.

The Haitian American diaspora is used to unsettling news from the island. But in the past six months, Haiti has not only endured the assassination of a sitting President, a constitutional crisis, and repeated attempts on the acting Prime Minister's life, but also a devastating earthquake that killed thousands. Powerful gangs have stepped into the void; they now control more than half of the nation, by some estimates.

Haitian Americans say they are helplessly watching these horrors play out on the screens of their phones. "There's the constant pressure from family members who are scared to death, calling people here asking for help," says Bastien. "And you just feel trapped."

As a candidate courting the Haitian American vote in 2020, Joe Biden was a vocal critic of then President Donald Trump's Haiti policies, accusing him of "abandoning the Haitian people while

the country's political crisis is paralyzing that nation." But critics say that so far, Biden has done little different. His Administration has continued to employ a Trump-era public-health law, Title 42, that uses the coronavirus pandemic as a justification to deport Haitians back to a country many describe as a war zone where those fleeing may face persecution.

After the assassination of President Jovenel Moïse in July, initiatives to transition the country to a new government have stalled amid a fierce power struggle aggravated by the pervasive gang violence. Haitian groups and international observers say the ongoing deportations are only adding to the instability and violence. So far more than 17,000 Haitians have been deported under Biden, straining limited resources amid food insecurity, a ruined economy, and a health care system "on the brink of collapse," according to human-rights groups.

Haitian American activists in Miami say they are frustrated with U.S. officials, who they say are offering empty expressions of support instead of acting to stem the illegal flow of weapons from the U.S. that are arming the

gangs, or changing discriminatory immigration policies toward Haitians. "If it were any other nation, Haiti would be on the news daily," Bastien says. "This is a country under siege, yet you don't read about it daily in the newspaper. And it's right here. It's 90 minutes from here."

ON JULY 7, world leaders reacted with shock when President Moïse was assassinated in the bedroom of his private residence by Colombian mercenaries.

After condemning the "heinous" act, Biden dispatched a presidential delegation to pay its respects at his funeral. It included the newly announced U.S. special envoy to the country, Daniel Foote. A veteran career diplomat, Foote had been tasked with supporting efforts to hold "free and fair presidential and legislative elections." But he soon found himself in an impossible situation, he says in an interview with TIME. The U.S. had long ignored warnings that the political situation was unraveling under Moïse, who had been ruling by decree for a year. Now, the Biden Administration was pushing for democratic elections to take place amid a rapidly deteriorating security situation.

"[The U.S.] doesn't seem to really care about Haiti until there's a humanitarian disaster on an unprecedented scale, but we're looking at a slow-motion one developing right in front of our very eyes," says Foote. The U.S. has backed the interim government set up by Prime Minister Ariel Henry, who took over after Moïse's assassination and has reportedly been linked to the plot. Foote thought Washington's support was a mistake, repeating previous failed U.S. foreign policy efforts to prop up members of Haiti's political elite. "It was so clear that that guy has no mandate and Haiti has no future under him," he says.

As this political crisis was unfolding, as many as 15,000 Haitian migrants were congregating in Del Rio, Texas, hoping to file asylum claims. Earlier in 2021, the Biden Administration had allowed an increasing number of Haitian asylum seekers to enter the country and extended temporary protected status to some undocumented Haitians living in the U.S.

But as these inconsistently applied border policies fueled rumors that spread quickly through social media,

'Every single one of [the Biden Administration's] promises was broken.'

—NANA GYAMFI, BLACK ALLIANCE FOR JUST IMMIGRATION



encouraging more Haitians to come to the border, the Biden Administration decided to crack down. In September, U.S. authorities used Title 42 to expel Haitians from the U.S. before they could file asylum claims. These actions were condemned by legal experts who said the Biden Administration's use of Title 42 violates U.S. and international law.

FOR HAITIAN AMERICANS, who had largely supported Biden when he ran on the promise of repealing Trump's immigration policies, it felt like a betrayal. "That's a hell of a ramp-up," says Nana Gyamfi, the executive director of Black Alliance for Just Immigration. "[Biden] made promises about protecting people—not separating their families, not expelling them to a country that has been designated as too dangerous to deport people to. Every single one of those promises was broken."

Officials within the Biden Administration were divided on whether it was ethical to expel people back to dangerous, even deadly, political and environmental circumstances in Haiti. Foote,

Haitians often face different immigration rules in the U.S. from people of other nationalities

the envoy in Haiti, was firmly in the camp that it was not ethical, but he felt that his protests were falling on deaf ears in Washington. On Sept. 22, two months after his appointment, Foote decided to send a message by resigning in protest of the "inhumane, counterproductive" decision to deport Haitian refugees, which would only "fuel further desperation and crime" and trigger more migration to the U.S.

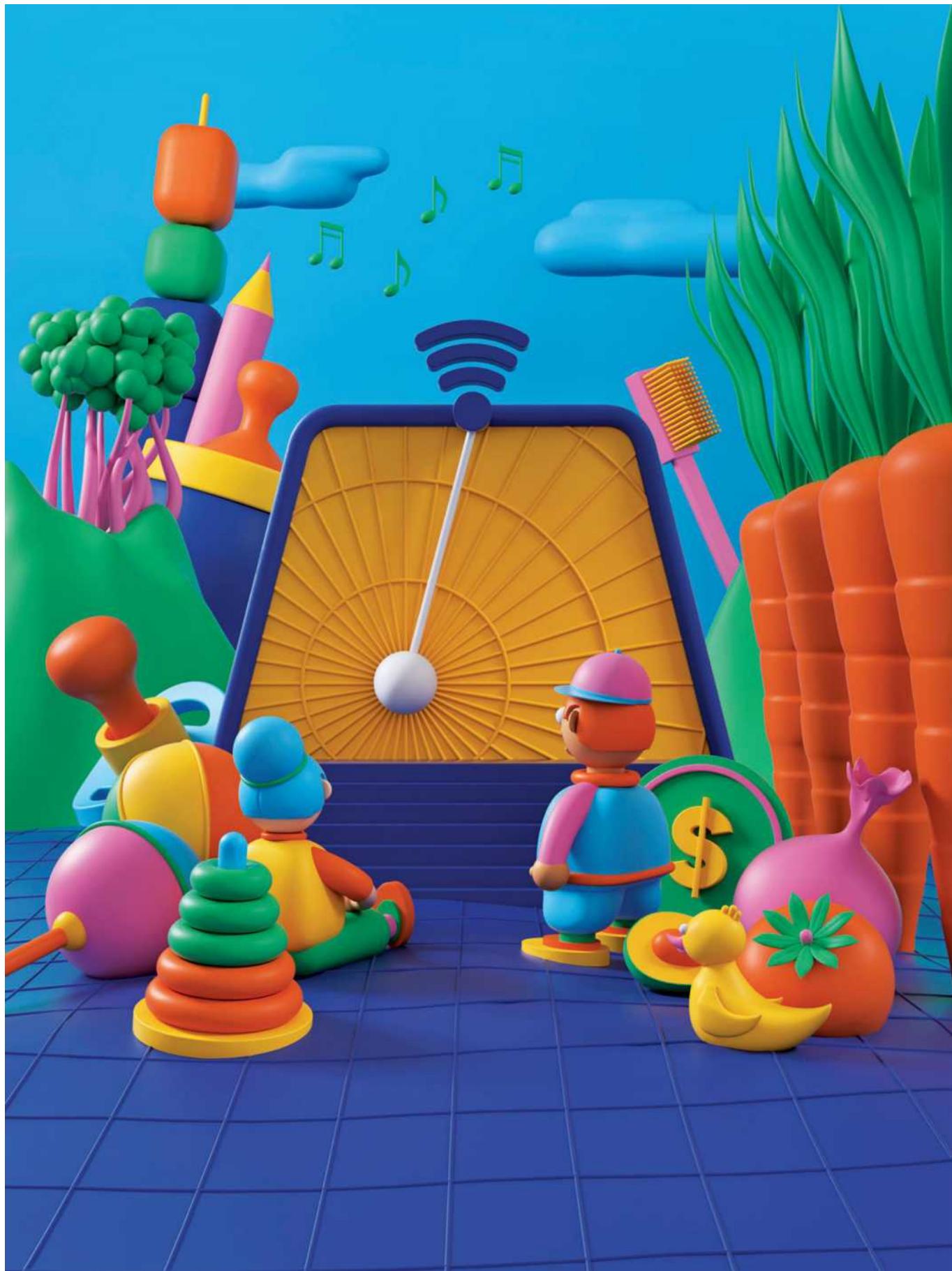
The cycle Foote described soon became visible in Florida. Since November, several wooden vessels carrying dozens of Haitian migrants have evaded U.S. coastal patrols to reach the Florida Keys. One group told U.S. officials they had spent more than three weeks at sea.

On Jan. 21, the latest high-level international meeting to determine Haiti's future ended with renewed calls for the dueling political factions—led by Henry and his allies on one side, and a

coalition of civil-society and political groups on the other—to reach a consensus. There is now broad agreement among both Haitian and international officials that holding elections will be impossible without a plan in place to handle the volatile security situation. "There needs to be adequate security for candidates to campaign ... and for voters to be able to safely go forth and cast their ballots," a senior Administration official told reporters.

In Miami, the Haitian diaspora is directing much of its anger and frustration at the Biden Administration. "What's going on in Haiti is partly a result of bad U.S. foreign policies, of decades of supporting incompetent and corrupt leaders," says Bastien. Some members of the community have gone as far as changing their voter registration from Democratic to independent.

"I've never seen young Haitian Americans so alert and engaged," Bastien says. "They see the truth: the most powerful nation in the world is not only taking very little action, but making things worse." □



BUSINESS

Cuckoo for CoComelon

The online makings of a children's entertainment juggernaut

BY ALANA SEMUELS

THE TODDLER'S FACE IS GLOWING GREEN from the tablet in her hands, which shows a cartoon boy singing a nursery rhyme and dancing with dinosaurs. The toddler doesn't know what dinosaurs are or what the lyrics mean, but she's so entranced that she doesn't blink when her mother calls her name. "It's literally like crack for her," says her mom Meng Zhou at their home in Redwood City, Calif.

"It" is *CoComelon*, which may be the most streamed children's entertainment program in the world. The show was watched for 33 billion minutes last year, more than the Netflix hits *Squid Game* and *Bridgerton* combined, according to market-measurement firm Nielsen. *CoComelon* had 3.6 billion views on YouTube in January, according to Tubular, a social-video measurement company, as many as three-quarters of whom were from outside the U.S. *CoComelon* was a Top 10 show on Netflix for more than 100 straight days in 2021, and its music is streamed 1.3 million times a day on Spotify.

CoComelon is not only a ratings juggernaut. It's also a model for a new approach to children's TV. The educators who developed hits like *Sesame Street* and *SpongeBob SquarePants* had to fight for years to get their shows on the air. A room of adults could toil on a concept that helped kids learn important ideas, only to find out viewers weren't interested. *CoComelon* is part of a push to eliminate such guesswork. Its parent company, Moonbug Entertainment, scours digital platforms like YouTube for popular kids' programming, buys them, and then tries to build them into even bigger phenomena, drawing on data from YouTube to figure out what resonates with audiences. "Data is really at the heart of everything we do," says Richard Hickey, Moonbug's head of creative. "With YouTube, you've got an audience there that literally tells you whether they want to watch something or not, in real time."

It's not entirely clear how much of *CoComelon*'s

runaway popularity stems from this formula and how much it owes to the pandemic, which put more kids in front of screens. As parents juggled childcare and remote work, demand for kiddie content spiked 52% between January 2020 and February 2022, according to data from Parrot Analytics. Either way, the success of the show is attracting big money. In November, Moonbug was acquired for \$3 billion by two Disney alums backed by the private-equity firm Blackstone. Since then, the company has rolled out a *CoComelon* live tour, a Spotify podcast, and just about every form of merchandise you can imagine, from bubble machines to throw pillows.

Both parents and programming executives say there is something rare about the hold that *CoComelon* exerts on babies and toddlers. You can see the proof in the dozens of TikTok videos showing kids who hear the marimba tones of its theme song and come running. Zhou's daughter's third word, after *Mama* and *Dada*, was *CoCo*. "I don't think we've ever seen anything like it when it comes to generating kids' streaming audiences," says Brian Fuhrer, senior vice president at Nielsen.

As the show and others like it become inescapable, parents are going to have to grapple with whether this type of children's programming works for their families. Sure, their kids may love it—but does that mean it's any good for them?

IN A LOS ANGELES conference room, *CoComelon* executives are debating a pacifier. Seated around a white table strewn with open MacBooks, they're reviewing a soon-to-be-released episode focused on a character named Cody, a classmate and best friend of JJ, the show's cartoon protagonist.

The episode covers a rite of childhood: welcoming a younger sibling. Cody's parents haven't told him they're having a baby. But as Cody and JJ sleuth around Cody's home—singing an original song about solving a mystery, to the tune of

“Teddy Bears’ Picnic”—they find a onesie, a rattle, and finally a pacifier, all objects that Cody has outgrown. An earlier version of the episode had Cody scorning the pacifier, saying it was “for babies.” But since the show is geared for children as young as 1, that sent the wrong message, Katie Nahab, a creative executive, explains to her colleagues. “Babies watch *CoComelon*, and they’re going to be looking at this and thinking, Oh, I shouldn’t want a pacifier, Cody doesn’t want a pacifier,” Nahab says. The script changed.

Considering the needs of babies is a new thing in kids’ TV. Before screens were ubiquitous, most families had just a television or two, and children’s shows were geared toward a broad age group. (*Sesame Street*, for instance, was targeted at 3-to-5-year-olds but watched by a wider spectrum of kids as well as their parents.) When parents started having phones in their pockets, entrepreneurs realized they could make shows for even smaller kids and still get millions of viewers.

CoComelon was created in 2005 by Jay Jeon, a father of two in Southern California. Jeon, who had directed some TV commercials, was trying to teach his kids the ABCs. He started working with his wife, a children’s-book author, to make videos to accompany the nursery rhymes they sang to their sons. They began uploading the cartoons to YouTube the following year under the brand name ABC Kid TV.

Over time, the revenue from YouTube ads allowed Jeon to quit his job to focus on the show. In 2017, he made two key adjustments: building the show around JJ, a toddler with a single blond curl, and changing the format from 2-D animation to 3-D. Monthly viewership on YouTube nearly doubled in two months, to 238 million views by December 2017, according to Tubular. By December 2018, *CoComelon* was getting 2 billion views a month.

In July 2020, Jeon sold his company, Treasure Studio, to Moonbug, which had been founded just two years earlier. Moonbug expanded the show to more audiences, inking deals with platforms in South Korea, China, and Europe. The company’s other big acquisitions include *Little Baby Bum*, a YouTube channel created by a British couple that revolves around nursery rhymes, and *Blippi*, a live-action YouTube show. The company is perpetually searching for the next sensation. In February, Moonbug acquired *Little Angel*, a network of YouTube channels featuring 3-D cartoons about a toddler named Baby John, who sings alongside his family as colorful subtitles play along the bottom of the screen.

For a company with this formula, *CoComelon* was a “once-in-a-generation opportunity,” Andy Yeatman, a Netflix alum who is the managing director of Moonbug, tells me. The show is deceptively



simple. Each episode is a self-contained song that lasts two to three minutes. Some of them are nursery rhymes like “Wheels on the Bus”; others are original earworms about the moments that make up a toddler’s life. The songs star JJ and his two siblings, older brother TomTom and older sister YoYo; their mom and dad; and JJ’s friends. There’s a lot of repetition and an inordinate amount of disembodied toddler giggles. Some of the lyrics feel as if they were written by a computer that doesn’t quite get rhyming. (A sample: “Good, good, carrots are good for you/ Yay, yay, yay, I love them, ooh.”)

But there are little touches, experts say, that make the show appealing to younger kids in particular. The world depicted on *CoComelon* has bright colors and no sharp edges or corners. It is shot from a low perspective, so the viewer sees the world from a toddler’s level. The characters are unfailingly kind to one another; there is no conflict on *CoComelon*. And the topics are universal: viewers see JJ perform familiar tasks, like potty training and putting on shoes, and struggle with familiar challenges, like learning to share and getting sick. The show takes “every meaningful moment” in a toddler’s life and makes a song around it, says Patrick Reese, general manager of Moonbug.

Every Monday, *CoComelon* puts out a new episode on YouTube, often experimenting with new characters, music, or story lines. Within the next few days, Moonbug’s data-insights team in London has crunched the numbers to suss out what did or didn’t work. If an element resonates, the creative team will try more of it. If it doesn’t, they move on to something else. The upshot is that viewers of

▲
CoComelon
revolves around
the adventures of
JJ, center, and his
two older siblings,
YoYo, left, and
TomTom



Moonbug's programs on platforms like Netflix are getting content that has already proved successful with a large audience.

One benefit of this iterative approach is that *CoComelon* can try a lot of different things quickly. Its episodes take 12 to 14 weeks to make, Reese says, which allows the show to respond to current events in ways that typical children's programming, with its longer lead times, cannot. Early in the COVID-19 pandemic, *CoComelon* added an episode about handwashing; another segment focused on going to the doctor.

Lately the show has also introduced more characters of color. In addition to Cody, who is Black, there's a Latina character named Nina Rodriguez, whose mom works as a firefighter. The diversity has helped *CoComelon* find new viewers: 56% of its audience comes from African American, Hispanic, or Asian American homes, according to Nielsen.

THERE ARE ALSO DOWNSIDES to a children's show taking its programming cues from YouTube stats.

If all content were driven by what YouTube viewers liked most, we'd be watching endless videos of dogs befriending cats. Shows like *Sesame Street* or *The Electric Company* have curriculums developed by pediatricians, says Dimitri Christakis, director of the Center for Child Health, Behavior and Development at Seattle Children's Research Institute. They rely on metrics that show whether a children's series is educational. While *CoComelon* may look that way to parents because it has words highlighted on the screen and tackles concepts like "left" and "right," those ideas aren't actually accessible to little kids in the process of learning language. "It's one of those shows that is designed for parents to think they're educational," Christakis says, "but it doesn't strike me as being high-quality at all."

CoComelon execs say they send concepts and scripts to educational consultants who help verify whether an episode is too advanced for young kids and whether it will make them feel safe. The show tries to model good behavior so that kids and parents alike can see how a loving family would behave in an ideal world. "Developmentally, we want to make sure that we're on point and that we're hitting our core age demo" of 1 through 3, says Hickey, the Moonbug executive. Never mind that the American Academy of Pediatrics recommends no screen time for children under 18 months, unless it's video chatting with a parent or family member. Most families threw those recommendations out the

window in the hardest days of the pandemic and haven't looked back.

In late 2021, a mom and former preschool teacher named Jerrica Sannes, who has a master's degree in early-childhood curriculum and instruction—and a website that helps parents wean their kids off TV—posted an Instagram story claiming that *CoComelon* was "hyperstimulating" and made its young viewers experience symptoms of addiction and withdrawal. The charge resonated with parents suspicious of what made the show so irresistible to their kids. Many left comments vowing to turn off *CoComelon* for good. Others criticized Sannes for scaremongering.

Child-development experts say *CoComelon* is no more problematic than most other children's TV shows. "It's not that *CoComelon* is addictive," says Susan Linn, the author of *Consuming Kids*. "It's that just about everything on the web is designed to be addictive." That design works; even before the pandemic, kids under 2 spent about 49 minutes a day on screens, according to Common Sense Media. "You're setting up kids to start depending on screens for stimulation and soothing," Linn says. "What we really want is for kids to be able to amuse and soothe themselves."

Ultimately, the show's success gets kids attached to an entity whose primary interest is selling them stuff. Since Moonbug acquired *CoComelon*, the show has been translated into 10 languages and has doubled the amount of content available. In addition to plush toys and sleepwear, parents can now buy *CoComelon*-branded booster seats, xylophones, books, snacks, and kitchens. Moonbug has a book deal with Simon & Schuster and licensing agreements with dozens of toy brands.

Many of those products will feature staple characters like JJ. But as the universe of *CoComelon* expands, the merchandising possibilities are endless. The new episode in which Cody learns he's going to be a big brother will be followed by others, executives say, in which he helps his parents set up a nursery, watches his mom's baby bump grow, and then sees the baby coming home from the hospital. The Moonbug team will be waiting to see whether it's a story line YouTube viewers want to watch—and will surely have Cody's baby-sibling dolls ready to go if so. In the meantime, a *CoComelon* live show is on its way to Boston; Rochester, N.Y.; and Akron, Ohio. True to form, Moonbug is asking the internet where it should go next.—With reporting by JULIA ZORTHIAN □

**'I don't think
we've ever seen
anything like it.'**
—BRIAN FUHRER, NIELSEN

CHINA WATCH

PRESENTED BY CHINA DAILY



Path to green future put on drawing board

Low-carbon targets demand concerted effort

BY OUYANG SHIJIA,

LIU ZIHUA

and HOU LIQIANG

China is ready to make a greater contribution to the global response to climate change, and the country is taking concrete steps to foster green, low-carbon, high-quality development as it embarks on a path toward carbon peaking and neutrality, experts said.

According to the Government Work Report, delivered at the opening of this year's session of the 13th National People's Congress in Beijing on March 5, the government has pledged to take well-ordered steps to achieve peak carbon dioxide emissions and carbon neutrality. They include making coal use cleaner and more efficient, while reducing the use of the fuel and replacing it with alternative energy sources in an orderly fashion.

The report said the country will work to upgrade coal-fired power plants to conserve resources, advance the planning and building of large wind and photovoltaic power bases, and promote the research, development and application of green and low-carbon technology. It will also encourage the steel, nonferrous metals, petrochemicals, chemicals and building materials industries to improve energy conservation and reduce carbon emissions.

He Lifeng, head of the National Development and Reform Commission, said China is confident of achieving the goal of peaking carbon dioxide emis-

sions before 2030 and reaching carbon neutrality before 2060.

"That will create new development and business opportunities, such as spurring the development of emerging sectors and the upgrading and renovation of old equipment," he said.

Pushing ahead with carbon peaking and neutrality will effectively improve the living environment in both rural and urban regions, promote green development and contribute to the global response to climate change, he said.

Kang Yanbing, deputy director of the National Energy Conservation Center, said the government's efforts to achieve carbon peaking and carbon neutrality will boost the green economic recovery.

Looking to the period of the 14th Five-Year Plan (2021-25), he said that to take the lead in bringing carbon emissions to their peak, the country must push hard to adjust its industrial structure, boost energy efficiency, improve the energy structure, strictly control the new production capacity of high-energy-consuming projects, vigorously develop green and low-carbon technologies and industries — such as renewable energy, new energy vehicles and clean heating — and support key regions and industries.

In recent years China has made great progress in reducing carbon emissions. From 2015 to 2019 the country's carbon intensity — the amount of carbon dioxide emissions produced per unit of GDP — fell by 18.2%, fulfilling the binding



Workers lay turf in an area in Rugao, Jiangsu province, as part of the city's project to build an environmentally friendly location. WU SHUJIAN / FOR CHINA DAILY

targets set in the 13th Five-Year Plan (2016-20) ahead of schedule, the Ministry of Ecology and Environment said.

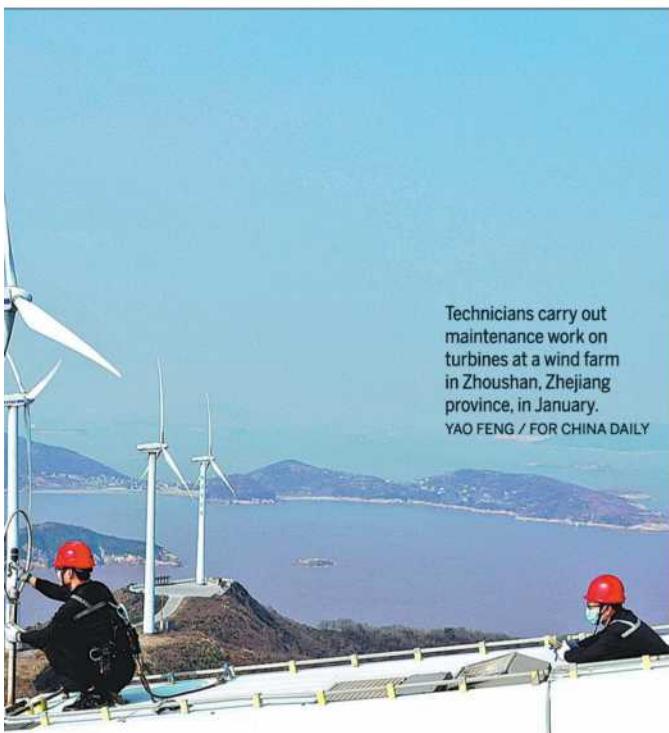
Kang, citing such factors as China taking the top global spot in number of patents, investment and total power generated by renewable energies, said clean energy and green and low-carbon technologies offer a zero-carbon and low-carbon technology path to achieve the country's goal of reaching peak carbon dioxide emissions before 2030 and reaching carbon neutrality before 2060, as pledged by the top leadership, and they also provide support

for green industries to grow.

Liu Shangxi, head of the Chinese Academy of Fiscal Sciences, said the cost of the low-carbon transition would be high for a country with such a large economy, and the method of dealing with it would be a decisive factor in how China reduces carbon emissions and pollution.

Control of carbon emissions and pollution requires policy, technology and accounting systems, the establishment of which will come at a cost, he said.

Xie Zhenhua, the country's special envoy for climate



Technicians carry out maintenance work on turbines at a wind farm in Zhoushan, Zhejiang province, in January.
YAO FENG / FOR CHINA DAILY

change affairs, said that as a developing country, China's industrial structure remains dominated by heavy industry and its energy mix still relies on coal.

This means the country's low-carbon transition will not be easy, but many opportunities will emerge from this transition, he said.

In the energy system's low-carbon transition, more than 130 trillion yuan (\$21 trillion) of investment — about 2 to 3% of annual GDP every year over the period — will be needed if China takes proactive climate measures, he said.

"The market potential is big," he said, adding that these low-carbon endeavors will not only promote high-quality economic development but also tackle environmental pollution at its roots.

In October the government issued a document detailing guidelines to achieve the carbon peaking and neutrality goals, along with a detailed action plan for the 2030 target.

China aims to gradually increase the share of nonfossil energy consumption to about 20% by 2025, about 25% by 2030 and more than 80% by

2060, the document said.

Liu Qiao, dean of the Guanghua School of Management at Peking University, highlighted the importance of fostering green and low-carbon development, saying the investment in fields related to reaching the carbon peak will create new economic growth points, help boost total-factor productivity and maintain healthy and sustainable development.

"Sectors such as carbon neutrality, re-industrialization or the digitalization of the industrial sector, and new infrastructure will provide new growth momentum for the Chinese economy to maintain a stable rise in growth, which is on the way to switching to a new development model underpinned by such new growth momentum," Liu said.

To realize the goal of carbon neutrality, more industrial policies should be formulated to encourage technological and commercial model innovations in industries that are key to that aim, he said, including construction, power and heat generation, metallurgy, chemicals, transportation, telecommunication devices, computers and other electronic equipment.

Feathered friends bring good fortune to rural residents

BY YANG WANLI and LI YINGQING

Hou Tigu, a bird hunter turned bird-watching guide, often mocks himself saying he is deeply indebted to birds for the first half of his life, so he will spend the rest of his days protecting and preserving them.

The 53-year-old's home, Baihualing, a village in the Gaoligong Mountains in Yunnan province, is renowned for its diverse wild bird population, with more than 520 species seen in the region.

When he was a youngster in the 1970s birds were targeted for food, he said.

"People were so poor at that time. To have some meat on the dinner table was a luxury, so almost all the children were good at using slingshots."

His life changed in 1989, when a couple hiking through the mountains visited Baihualing and asked for lodgings at Hou's home.

"During their stay they asked me to be their guide and lead them to good bird-watching spots. That was the first time I made money from birds without killing them."

In the decades that followed, more bird-watchers visited the village. The trend developed into a profitable business and contributed to improved living standards for many residents.

As Baihualing's first bird-watching guide, Hou started a project to build areas featuring artificial versions of the habitats wild birds prefer.

Now, instead of chasing the birds, enthusiasts can enjoy their beauty by simply visiting the scenic spots.

The village became a popu-

lar destination for bird lovers, and more than 60 people in the settlement make their living as bird-watching guides. More than 20 guesthouses bring in total income of 15 million yuan (\$2.3 million) a year.

Hou's guesthouse has hosted visitors from more than 100 countries and regions.

"During the peak season I serve nearly 100 tourists a day," he said, adding that his son-in-law is developing an education project to provide young people with opportunities to study and research wild birds.

"By watching birds, young people can get close to nature and learn to love and respect it, which will benefit them in return. This is a truth I've learned over recent decades."

Early in 1995 the residents of Baihualing voluntarily established a biodiversity protection association that now has 154 members, an impressive surge from the 50 founders.

"People have seen their lives become prosperous thanks to the improved environment," said Hou Xingzhong, head of the association. "Instead of destroying the environment to make money, people are now helping with efforts to crack down on illegal hunting and other activities that threaten the environment."

Yang Ming, deputy secretary-general of the Kunming Bird Association, said: "Changes have happened over the past 10 years as many bird hunters have become forest rangers or started making a living through green businesses, such as bird-watching and eco-friendly tours or by cultivating herbs that have high financial value."



Black-necked cranes gather at the Dashanbao Black-necked Crane National Nature Reserve in Zhaotong, Yunnan province, in January.
HU CHAO / XINHUA

CHINA WATCH

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中国日报



A concert presented by the Tianjin Juilliard Ensemble and the China NCPA Orchestra in Beijing on May 16 last year. PHOTOS PROVIDED TO CHINA DAILY

A RELATIONSHIP OF NOTE

**Classical music
a cultural bridge
over half a century**

BY CHEN NAN

In September 1973 the Philadelphia Orchestra, led by its musical director Eugene Ormandy, became the first U.S. orchestra to perform in China since the founding of the People's Republic of China in 1949.

The orchestra embarked on a six-concert tour of Beijing and Shanghai.

"The interesting thing was that the audiences were very polite at the beginning of concerts and little by little we noticed that their enthusiasm grew," said Herbert Light, now 85, a violinist who joined the Philadelphia Orchestra in 1960 and retired in 2016.

After that historic visit, the orchestra returned to China in 1993, 1996, 2001, 2008, and 2010, when it played at the opening of the World Expo in Shanghai, before further, almost annual, tours between 2012 and 2017. In 2019, the orchestra once again returned to China with a tour marking the 40th anniversary of the establishment of diplomatic relations between the two countries.

Light has witnessed the lasting friendship between the orchestra and its Chinese audiences. He has also frequently traveled back to China to perform and give master classes.

On Feb. 21, he, with a group of guest speakers, attended an online symposium organized by Tianjin Juilliard School, the first overseas campus established by the New York performing arts educational institution.

With a theme "50 years of musical exchanges between the United States and China", the event was held to mark the 50th anniversary of former U.S. president Richard Nixon's historic visit to China.

On Feb. 21, 1972, Premier Zhou Enlai greeted Nixon at Beijing's airport. The visit by Nixon to China, which concluded with the signing of the China-U.S.

joint communique, opened the door to a relationship between the two countries in nearly all aspects of life, including music, culture and education.

Over the past 50 years, classical music's popularity has surged across China, prompting the construction of many new concert halls and the musical education and development of tens of thousands of children, many of whom have gone on to perform internationally, some even leaders in their fields. Music exchange programs have also been conducted by musicians from both countries.

One of those who has made a great contribution to the cultural exchanges between China and the U.S. is the Chinese American composer Chou Wen-chung, who was commemorated during the online symposium.

Chou moved to New York in 1946. He joined Columbia University in 1964 and taught an increasingly international array of students, including the acclaimed composers Tan Dun, Zhou Long and Bright Sheng.

In 1978 Chou established the Center for U.S.-China Arts Exchange at Columbia University. He believed that culture and the arts would be the common language through which both countries could share their mutual respect.

In 1987, Joseph W. Polisi, president of Juilliard School at the time, led the Juilliard Orchestra on its first tour of China, visiting six cities. Polisi led the orchestra upon its return to China on tour in 2008, one that included a concert collaborating with the Central Conservatory of Music at the National Center for the Performing Arts in Beijing.

In October Polisi, 74, returned to China once more to attend the dedication ceremony of the Tianjin Juilliard School campus, which opened in September 2020.

"Roots grow in really good soil," Polisi said. "China has done incredible cultivation of its classical music soil over the last 40 years. Here we want to train and develop the next great musicians and to serve as a cultural bridge."



The ensemble is a perfect combination of Chinese traditional music and Western chamber music.

BY WANG ZHUOQIONG

Li Song, a marketing executive in Beijing, started to learn snowboarding late last year. He shows his enthusiasm for the hobby the moment he steps on a board.

"A few trips down the slopes exhilarate me," Li said. "I enjoy the speed and the wind on the mountain. Snowboarding is a very awe-inspiring sport. It is about concentrating, taking a risk and facing fear."

Soon, instead of relying on rentals, he bought his own jacket, goggles, bindings, boots and a snowboard from Burton for about 20,000 yuan (\$3,200).

With more people joining in snow sports, ski and snowboarding brands are in hot pursuit of the market.

"It was crazy at the store," said Li, in his 30s, describing the difficulty he experienced in finding the gear he wanted. "Popular bindings are quickly sold out. Sometimes it takes a month of waiting to obtain a lot of the snowboarding equipment."

Li has made 15 visits to Nanshan Ski Resort, one of the largest ski destinations in Beijing, which is about a 90-minute drive for him.

He also uses Goski, a ski application and an online community used by about 1.5 million skiers and snowboarders, where they can log their activity. Li has accumulated a total of 37 miles of snowboarding and can handle intermediate-level trails and slopes.

Wei Lixin, a snowboarding coach in Songhuahu, a ski resort in Jilin province, said the success of Su Yiming and Gu Ailing, who won gold medals in the Beijing Winter Olympics, has helped pushed enthusiasm for winter sports to a new level. The scale of public participation has also boosted coaching and tourism businesses at ski resorts nationwide.

"This winter season I've seen an unprecedented number of visitors, four or five times at least the number of visitors to the resort last year," said Wei, 37. The veteran coach said he earns 1,000 yuan an hour and works four hours a day, offering snow-



Cold-weather profits heat up

Enthusiasm fires up sector's radiant prospects



Top: Li Song, a snowboarder in his 30s, practices at Nanshan Ski Resort in Beijing in January. Above: Consumers browse sportswear at a Goski Originals store in Jilin, Jilin province, in January.
PHOTOS PROVIDED TO CHINA DAILY

boarding lessons to groups and individuals. Skiers have to book Wei's lessons a month in advance.

Many young enthusiasts prefer to buy their own apparel and equipment, costing between 20,000 yuan and 30,000 yuan, even before they step out onto the snow, Wei said.

The value of equipment sales in the 2021-22 winter season until the end of January rose 51.9% compared with the corresponding period last year. The value of ski resort tickets sold rose 131.5% and ski tourism site tickets 95.2%, the Ministry of Commerce said, relying on information from key e-commerce platforms in China.

The Olympic Games have played a tremendous role in boosting the snow sports business in particular, said Lai Gang, founder of Goski.

"When talking about winter

sports, people usually talk about ice here," he said. "Now almost everyone in the country knows about snow sports, thanks to the outstanding performance of snowboarders and skiers during the Games."

Goski's revenue, generated by Cold Mountain, its retail network for winter sports apparel and gear, and Goski Originals, its ski gear and clothing line, rose at least 50% last year compared with the previous year, he said. Growth of 80% was recorded during the Spring Festival holiday, which coincided with the Games.

Goski is opening new stores in eastern and southern China, where there are more indoor ski resorts, and developing new production lines amid Lai's meetings with institutional investors during the Games.

"The winter sports industry is the hottest investment area this year," he said.

The growth of the winter sports industry is also propelling the expansion of Burton, which has sponsored leading snowboarders including Shaun White and Su Yiming.

In snowboarding, the top five most popular brands during last year's Double 11 shopping event included Burton and Nitro, with the domestic brand Nobaday ranking No. 8, according to an e-commerce report published by the research institute Ebron.

Sales were good for the whole snow sports industry in China, it said.

"We will open several direct-to-consumer stores in different cities this year, adding to our existing and online stores," according to a statement from Burton. "We will also open Burton Academy, which is focused on training, coach certification and customized experiences."

The company said it has plans to expand its reach to more consumers in China by marketing more products and services based on characteristics of local consumers and the local environment. It will consider features such as resorts, weather and different consumer needs to provide the most comprehensive and best sports experience it can for local consumers, it said.

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Time Off



THE ART OF REINVENTION

BY ANNABEL GUTTERMAN

A tech whistle-blower makes her fiction debut with a ripped-from-the-headlines thriller about scammers and strivers

INSIDE

MARK RYLANCE IS A
PERFECT FIT FOR THE OUTFIT

HOW APPLE TV+ ADAPTED THE
SPRAWLING NOVEL PACHINKO

MAKE LUNCH WITH MARTHA
STEWART'S SALAD CHEF

IS IT POSSIBLE TO REINVENT YOURSELF? The question has been on Susan Rigetti's mind since 2017. It was then that she, under her maiden name Susan Fowler, wrote a viral blog post that thrust her into the spotlight at just 25 years old. Titled "Reflecting on one very, very strange year at Uber," the post described the rampant sexual harassment she experienced as an engineer at the ride-share company. It sparked a headline-grabbing internal investigation, led by former U.S. Attorney General Eric Holder, that underlined serious cultural problems at the company, leading to the eventual resignation of CEO Travis Kalanick. Susan Fowler became a household name, a leading figure in bringing the #MeToo movement to Silicon Valley, and the author of the critically acclaimed memoir *Whistleblower*, which told the full story of what she had endured.

"People told me many times, 'If you say anything about this, you'll never work in engineering again,'" she says, looking back on her decision to speak out. "So I said, 'OK, I'll have to start all over.'"

That new beginning includes the title she's been waiting to claim most of her life: novelist. On April 5, as Rigetti, she'll make her fiction debut with *Cover Story*—a frothy thriller that draws inspiration from scandalous headlines about other figures who have set out to reinvent themselves. The book chronicles the antics of Cat Wolff, a grifter making her way in the high-powered worlds of tech and media, who, with her ambiguous European background, hotel residence, and penchant for defrauding banks, is clearly modeled in part on Anna "Delvey" Sorokin. When Cat meets Lora, a naive *Elle* magazine intern who's aching to become a writer and who has just lost her scholarship at New York University, the two immediately see each other as a means to their respective ends: Lora's writing skills will help Cat produce fiction, and Cat's name and standing in New York will help Lora get published and pay for school. At least that's the plan Cat sells to Lora.

The result is a page-turner that's hilarious in its dedication to vamping on viral news stories about real-life strivers and cons from Delvey to Instagram personality Caroline Calloway, whose former friend accused Calloway of exploiting her for her writing—a delicious read for anyone who, like Rigetti, perhaps ironically, can't resist a scandal. "I wanted to write something that felt to read as it did to scroll through people's social media posts, read all their blog stuff, and try to piece together this narrative of evidence," she says. "I just want to gossip about the book with other people."

RIGETTI, NOW 30, is a self-described rule follower. She's fascinated by the processes people follow to advance or change their lives. "I'm always trying to figure out how the world works," she says. "You want to write a movie or a book—how do you do that? How do you get there? There are all these rules." Her life before Uber was marked by hardship and a determination to succeed—she grew up in rural Arizona, one of seven children, with barely any formal education. But she



always wanted to write. While her childhood and adolescence were full of painful setbacks due to her family's financial situation, she was a hungry reader and taught herself what she needed to know to get into college. She learned the rules to get to where she wanted to be, and she followed them.

Which is why Rigetti has been fascinated with scammers for as long as she can remember. She loves the movie *Catch Me if You Can*. One of her favorite pastimes is plunging into internet holes about cons. "When I read about scammers, I have to know everything," she says. "I can't get enough of it." She's not alone: *Inventing Anna*, the Shonda Rhimes Netflix drama based on Sorokin's story, and *The Dropout*, the Hulu series about Elizabeth Holmes and the lies on which she built Theranos, are two of the buzziest shows streaming right now—not to mention Showtime's *Super Pumped*, which revisits the very story of what Rigetti experienced at Uber.

In Cat, Rigetti has constructed a character who learned the inner workings of powerful institutions, from venture-capital funds to fashion media, and understood how she could manipulate them to fund her lavish lifestyle. Lora is guided by the precedent that she's seen play out in the movies: she got the dream internship, and she believes that if she works hard enough and makes the right connections, then everything else will fall into place. Once she meets Cat, Lora hangs on the dazzling woman's every word—even when those words don't really make sense, and even when they get Lora into trouble. It's Lora's drive to succeed, fueled by her insecurities about her humble Pennsylvania upbringing, that makes her so susceptible to Cat's schemes.

Rigetti remembers what it was like to be Lora's age and to feel like an outsider just trying to get her foot in the door. The bulk of the book is written in the form of Lora's diary entries, and Rigetti turned to her own journals from her youth to sift through vulnerable moments and develop Lora's voice. She noticed her younger self's fixation on being taken seriously. "You're looking around, trying to figure out: How on earth do I fit into this?" she recalls. "There's that feeling of wanting so badly to prove yourself and to have the chance to claim your ambition without people thinking you're getting ahead of yourself."

As much as Rigetti identified with Lora, she also needed to understand Cat—this woman who's fighting to keep her position in a moneyed world through lying, stealing, and adopting multiple identities. Rigetti had to ask herself: What makes a person choose that life?

'The whole time I was working on this book, I was trying to figure out: Who am I?'

SUSAN RIGETTI

"Cat ends up doing terrible things, making a total mess of herself at a young age, piling on more and more until she's in so deep that this is all she can do now," she says. "She doesn't see another way to live."

AFTER SPEAKING OUT against Uber, Rigetti gave up her career in software engineering and pivoted, taking editing jobs at a startup and the *New York Times*. During that period, she found herself an object of interest, constantly confronted by people asking her how she viewed herself in the world. Writing the novel was her escape, a touchstone she'd turn to during lunch breaks and late at night. "The whole time I was working on this book, I was trying to figure out: Who am I?" she says.

For one, she's the center of a family. She married her husband Chad Rigetti, the founder of a quantum computing company, in 2017, and they've since had two children. She tried her hand at editing and now is focused on writing her own stories, working on fiction and screenplays. And she's made a point to have more fun. She uses the word more than 30 times in our conversation—*fun* is the backbone of the book, the sensibility that she was chasing while writing, and what she wants readers to experience while reading. Rigetti remembers, after coming up with the idea for *Cover Story*, how she pulled her husband out of his office to take a walk and explained the twisting plot to him—each tech-world detail a small joy. "I was telling him: It has PowerPoints! She'll go to Y Combinator! There'll be an article about her age to get on this '30 under 30' list!" she says.

People familiar with Susan Fowler's story might be surprised to hear she's written a novel poking fun at both newsmaking scandals and the world she helped hold to account. But Rigetti refuses to let her past define her when she has so many other stories to tell and versions of herself to be. She doesn't buy into the idea that each life has a single narrative or meaning. "The place where it's interesting is what it takes to get from one stage of your life to another," she says. "The trick is finding a way to prove to the world that you are capable of doing something new." □

Rigetti's novel
is her entry
into the
scammer canon





◀ Cera and
Schumer try a
little tenderness

TELEVISION

Beth be not proud

BY JUDY BERMAN

AMY SCHUMER IS RECLAIMING THE spotlight. The rare female comedian to land on Hollywood's A-list, she dominated the mid-2010s with the groundbreaking sketch show *Inside Amy Schumer*, a string of hit movies, and a best-selling memoir. Yet the past few years have been relatively quiet for Schumer, as the self-deprecating feminist comedy that fueled her rise has become ubiquitous enough to feel tame. Can she recapture the zeitgeist? One big test will be her Oscars co-hosting gig on March 27. But first, she'll unveil *Life & Beth*, a Hulu dramedy that she created, stars in, and helped write and direct.

The show's premise, like its title, is both indistinct and somewhat trite. Fast approaching 40, Schumer's Beth has managed to create a pretty nice life for herself. She works at a wine company alongside her cute superstar-salesman boyfriend,

Matt (Kevin Kane), with whom she shares a Manhattan apartment. To her high school friends in Long Island, who refer to "the city" in tones of hushed reverence, this is what success looks like. But she isn't really happy. Beth's family is no help: her mom (Laura Benanti) has no boundaries; her dad (Michael Rapaport) is, for all practical purposes, out of the picture; and she calls her angry younger sister, Ann (Susannah Flood), only when she wants to complain about them.

It takes an unanticipated tragedy for Beth to stop sleepwalking and reconsider who she is and what she wants out of life. Back in her childhood home, she dips into diaries that reveal a kid marinating in the shame of her parents' divorce, the family's money problems, and her own developing body. Schumer tells these stories through extensive flashbacks, drawing parallels between young

Beth's (Violet Young) humiliations and grownup Beth's suppressed emotions. Meanwhile, work brings her to a vineyard where she meets a disarmingly direct farmer named John (a patchily bearded Michael Cera).

LIFE & BETH isn't a catastrophe. There are scenes that would've made clever *Inside* sketches; in one, an MRI tech plays DJ for his captive audience. Benanti and Rapaport make convincingly chaotic parents. Cera gives us a different kind of rom-com lead.

But unlike the best shows that took up *Inside*'s mantle, such as *Fleabag* and *Hacks*, it suffers from a lack of purpose. That's not to say it sets its stakes too low. Some of the best series on TV are slice-of-life programs about women navigating middle age, from *Better Things* to *Work in Progress* to *Somebody Somewhere* (starring Schumer's friend Bridget Everett). What's missing, here, is a unifying sensibility. The inconsistencies are glaring. *Life & Beth*'s tone lurches from realistic to absurd and back; relatively normal characters suddenly devolve into off-the-wall caricatures. Flashbacks framed as life-altering ordeals often read as normal teen baggage—a particular problem at a time when TV is saturated with parallel timelines and trauma plots. The pieces just don't add up to a satisfying whole.

Too often in the age of content churn, series go into production with undercooked premises and scripts crying out for another—if not a first—round of revisions. Maybe that's because pay-TV execs think a famous face like Schumer's (or Steve Carell's in *Space Force*, or Nicole Kidman's in *The Undoing*) will be sufficient to attract subscribers. A lot of the time, they're right. It's a shame, though, that as shows with star power behind them proliferate, shows that play like complete statements get harder to find.

LIFE & BETH premieres March 18
on Hulu



Young: a servant with certitude

MOVIES

A MAID'S DAY OFF, A LIFE CHANGED

In Eva Husson's *Mothering Sunday*, Jane (Odessa Young), a young housemaid in 1924 England, uses her day off for a secret assignation with Paul (Josh O'Connor), a toff from a neighboring estate who's engaged to be married to a class-appropriate beauty. Paul's house is empty: the servants are off visiting their mothers for the holiday; his parents are at a luncheon; and his brothers are dead, killed in the war. His heart is still heavy, and in bed with Jane, he finds respite from his melancholy.

Though Jane loves him, their class differences don't make her needy or vulnerable. In one of the film's most remarkable scenes, she pads alone, naked and self-assured, through Paul's large, drafty house, examining paintings, furniture, the books in the library, before heading to the kitchen for some meat pie and a bottle of beer—she belches after a hearty swig of the latter.

Mothering Sunday is set in a sorrowful period of British history, when so many were mourning their lost sons. (Colin Firth and Olivia Colman play such a couple, buttoned up in their grief.) The picture is a bit arty and decorous; it could do with fewer swimmy camera moves. But Young vests it with a fascinating, flinty grace. Never a victim, Jane keeps moving toward what she wants, resilient even in the face of loss. Her life is one big exploration, too far-reaching even for the walls of a grand country manor. —Stephanie Zacharek

MOTHERING SUNDAY: SONY PICTURES CLASSICS; THE OUTFIT: FOCUS FEATURES

MOVIES

A mob story told in tones of muted flannel

THE PLEASURES OF WRITER-DIRECTOR Graham Moore's intimate little crime thriller *The Outfit* sneak up on you with the same glissando shiver that you feel when you slip on a silk-lined coat. Much of the story unfolds between lines of dialogue, in furtive glances between characters, or in clever feats of magician-like misdirection. The movie's star, Mark Rylance—as Leonard Burling, a skilled but humble English tailor—is adept at actorly sleight of hand, gradually revealing his character's secrets in slivers of dry, wicked wit.

It's 1956 Chicago, where the Savile Row-trained Leonard now runs his own shop, making fine suits for a clientele heavy on high-ranking gangsters. Though Leonard allows his workspace to be used as a sort of message center for the mob, he keeps his head down and his nose clean, focusing mostly on turning out meticulously worked buttonholes, or cutting through swaths of wool with his treasured shears. His loyal receptionist, Mable (Zoey Deutch), a bright young woman who longs to see the world beyond her stifling city, may or may not

be having a romance with junior mobster Richie (Dylan O'Brien). And wherever Richie goes, his ambitious and hotheaded sidekick Francis (Johnny Flynn) goes too, stirring up trouble with every step.

At the center of this clever pinwheel of a story—Moore co-wrote the script with Johnathan McClain—is Rylance, whose economy of motion and emotion is a marvel. As he sits quietly and watchfully sewing a sleeve hem, you believe in every stitch—Rylance shows how Leonard's confidence in his work ripples through him like electricity, reaching right through his fingertips. At times Rylance's Leonard has the eyes of an anxious terrier, wary and alert. His gaze softens when Mable is around: she's a kind of surrogate daughter to him, a jewel worth protecting. Nearly all the action in *The Outfit* takes place inside Leonard's shop, a cozy lair shot in muted-flannel tones of gray and gold, but Rylance fills the space with subtle grandeur. Every movement, every breath, is made to measure. How can we ever go back to off-the-rack? —S.Z.



Rylance delivers a performance tailored to perfection

Inside the making of a trilingual epic

BY ANDREW R. CHOW

IN 2017, WHEN FILM AND TV AGENT THERESA Kang-Lowe read Min Jin Lee's epic novel *Pachinko*, which tells the story of a poor Korean family through generations and across borders, she feared it didn't stand a chance of receiving Hollywood's attention. "I thought it was an impossibility," she says. "This was pre-*Crazy Rich Asians*, pre-*Parasite*, pre-*Squid Game*. We had never seen something like this in series form."

Five years later, on March 25, the first season of *Pachinko*—for which Kang-Lowe serves as an executive producer—will arrive on Apple TV+ in a vastly different landscape. Television shows from around the world, including South Korea's *Squid Game*, the Paris-set *Lupin*, and the U.S.-Mexico drama *Narcos: Mexico*, have found rabid audiences on Netflix. These shows have proved that contrary to decades of conventional Hollywood wisdom, viewers are willing to read subtitles and eager to consume global stories centering people of color.

While *Pachinko* could ride this larger wave of global representation to success, the show is still a precarious risk for Apple TV+ and its filmmakers: it's a trilingual, big-budget period piece that hopes to attract audiences without superheroes, sex, or dramatic action sequences. *Pachinko*'s ability to find viewers could have a ripple effect on whether similar concepts are greenlit for years to come. "Right now, stories about diverse people are largely relegated to a certain budget level," says Kang-Lowe. "*Pachinko* is a first, and we don't want it to be an only."

Minha Kim, left,
with Lee Min-ho in
Pachinko

Apple TV+ bets big on an adaptation of the novel *Pachinko*

PACHINKO IS THE SECOND NOVEL by Lee, who is Korean American and, several decades ago, became fascinated by the struggles of Korean immigrants in Japan in the 20th century. She wove together the story of one family across four generations, through the Japanese colonization of Korea, the impact of the atomic bombs on Japan, and the Westernization of Japanese life. The main character is Sunja, who is born in the early 1900s and stoically absorbs the suffering of everyone around her as she perseveres through one crisis after another.

The novel, a 2017 National Book Award finalist, struck a chord, especially with many Asians and Asian Americans who saw echoes of their own familial histories in Lee's work. One of those readers was writer and showrunner Soo Hugh (*Under the Dome*, *The Terror*), who was given the book by Kang-Lowe in the hopes that she might want to spearhead the adaptation. When Hugh read *Pachinko*, she was bowled over. "It was such a shock: they were my mother and grandmother," she says. "It was so visceral, that feeling of: finally someone had the bravery to put these people's stories to work."

But Hugh was "terrified" of leading such an important project and had to be convinced by Kang-Lowe that she was the right person for the job. "I told her, 'If you don't take this on, it's



APPLE TV+ (5)

going to take another seven to 10 years for another Asian American writer to rise through the ranks to get where you are as a really high-level showrunner," Kang-Lowe recalls. "And we need to tell the story now."

There were many factors working against Kang-Lowe and Hugh as they began shopping the concept around to streaming services. Not only did the show need to have an all-Asian cast, but it also needed to be told in three languages: Korean, Japanese, and English, as its characters migrated across the world. Asian histories told by Hollywood, excluding war stories like *Letters From Iwo Jima* or *The Last Samurai*, were few and far between. And the *Pachinko* team was requesting an enormous budget, on par with that of *The Crown* or *Succession*, in order to convey the book's epic scope. Kang-Lowe says that while many streamers were initially interested in the concept—especially enticed by the allure of courting Asian audiences—they balked at the price tag. They told her: "We wouldn't do that for this show."

Kang-Lowe says Apple and Netflix eventually offered what the creators were looking for—and the team decided to go with Apple, thanks in large part to the support of executive Michelle Lee, who is now the streamer's director of domestic programming. Apple was trying to position itself as a home for international series and prestige fare with shows like *Dr. Brain*, and *Pachinko* hit both targets. Having an executive like Lee was "everything," Hugh says. "She also comes from the immigrant experience and knows these characters inside out."

AFTER GETTING THE PROJECT greenlit, adapting the 500-page novel was another challenge completely. For one, the author was initially involved, but left the project for unspecified reasons. ("Although I did not write or create the series, I wish them well," Lee wrote in an email.)

And while the book unfolds chronologically at a methodical pace similar to that of the film *Boyhood*, Hugh felt the adaptation needed to be rearranged and placed into dual timelines, one starting in the 1910s and the

ONE FAMILY, FOUR GENERATIONS

The protagonists of *Pachinko*, across decades and continents:

B. 1897



Inji Jeong
as YANGJIN

B. 1915



Minha Kim
as SUNJA

B. 1937



Soji Arai
as MOZASU

B. 1961



Jin Ha
as SOLOMON

other starting in the '80s. "The greatest thing about film and TV is playing with time," she says. "All of a sudden, when we moved things around, the show became a thesis statement of, How do you have a conversation with the past? How do you, from the past's point of view, leave something indelible for the future?"

The restructuring led to the character elevation of Sunja's grandson Solomon, an ambitious young banker determined to prove himself at his American firm, even if it means betraying his roots. Hugh hopes that Solomon resonates with a younger generation. "I connect very strongly to Solomon and the feelings of both immense gratitude and burden from what your parents and grandparents sacrificed for you," she says.

The show's cast features a mix of newcomers and superstars. Minha Kim, making her television debut as teenage Sunja, stars opposite Lee Min-ho, who is one of South Korea's foremost idols. Hugh says that she didn't receive any pressure from Apple to cast marquee Korean stars, and that even Lee, who hadn't had to audition for a role for 13 years because of his megafame in his country, had to try out for the role of Hansu. "This challenging next step in my career in an unfamiliar working environment set my heart aflutter a bit," he wrote in an email. "I am so thankful that we are living in a time where this diversity and globalization is accepted."

For the actor Soji Arai, who plays Sunja's son Mozasu, *Pachinko* offered a rare opportunity to showcase his own Zainichi (the term for ethnic Koreans living in Japan) heritage. Arai's grandparents immigrated to Japan at the same time Sunja did, and his parents were activists who fought against discrimination. Arai says it's still very rare for Japanese stories to feature Zainichi characters or for Zainichi celebrities to proudly showcase their ethnicity, which makes this role all the more special. "I'm so happy, because now people all over the world will know who Zainichi people are, maybe for the first time in history," he says.

Arai and the rest of the cast are waiting to learn if they will return to their roles. While Hugh wrote the show to last four seasons, the series has yet to be picked up by Apple beyond its first eight episodes. These days, it's not uncommon for ambitious shows to be canceled prematurely: HBO's fantasy epic *Lovecraft Country*, for example, was axed after just one season. Kang-Lowe recognizes that there's more riding on *Pachinko*'s success than her résumé. "Any project with this scale and scope needs to perform better because of the financial investment," she says. "I'm really hoping that people watch and streamers take notice and say, Oh, look, we could do a big epic with other stories about people of color." □

FOOD

A cookbook author who will turn you into a salad freak

BY ELIANA DOCKTERMAN

JESS DAMUCK IS TRYING TO TEACH me how to artfully swirl yogurt at the bottom of a bowl. “Push the spoon out and rotate,” she instructs me from her home in Los Angeles. Even over Zoom, I can tell her bowl looks flawless.

This is not surprising. Damuck, whose first cookbook, *Salad Freak*, comes out March 29, worked with Martha Stewart for more than 10 years, starting as an intern while in culinary school and climbing the ranks to food stylist and recipe developer. One of her early duties was preparing the homemaking mogul’s lunch. Stewart would dole out some vague instruction, like, “I’m in the mood for something light and fresh and truly delicious today.” So Damuck would head to the farmers’ market and then painstakingly remove the droopiest leaves from a head of lettuce. “It was a duty that gave a lot of people anxiety because Martha has really specific tastes,” Damuck, 34, says.

Her most nerve-racking presentation came when she made a shaved-zucchini salad with pecorino cheese and almonds. Just before she served it, some co-workers warned that Stewart didn’t enjoy “wet things” in her salad. “I was standing there, terrified, thinking about how wet the zucchini was,” Damuck remembers. “She did have comments, but not about the zucchini. She was like, ‘I don’t usually enjoy both nuts and cheese in my salad.’ That’s about as harsh a criticism as I got. But she ate the whole thing.” Damuck’s creations became known as “three-hour salads” because that’s how long they took to shop for and curate.

Thankfully, most of *Salad Freak*’s recipes do not take that long, though they’re not quick either. “Just ‘throwing something together,’ that’s a fallacy,” she says. “If you’re going to make a grocery list, and go to the store, and invite someone over to eat your food, make it special.” She



Damuck makes a chard, egg, and yogurt dish with chili crisp

believes we should lose ourselves in mundane tasks like dicing an onion. “I don’t think salads are self-care per se, but also they are,” she says.

DAMUCK ISN’T FOCUSED only on taste. Throughout the book, she offers “styling tips” on how to make your food look its best. “We know as much as people love eating, they love posting food on Instagram more,” she says. She even recommends a special curved serving spoon for plating dishes to create “a very chef-y swoop.”

While I am a defender of one-use kitchen tools—I show Damuck three different citrus squeezers on our call—I’m skeptical that even salad acolytes will shell out for the special spoon. Then again, this is probably why I’m failing to plate the yogurt in an aesthetically pleasing manner. I give up on Instagram-ready perfection and

add my chard, eggs, and honeyed chili oil on top. This concoction may not be what you think of when you imagine a salad. “I’m admittedly stretching the definition,” says Damuck, whose book also includes a salad based on a Nashville hot-chicken sandwich.

Damuck attended Ross School, a private high school in East Hampton, N.Y., that had a program focused on eating seasonally and sustainably. But it was working for Stewart that turned her love of vegetables into an obsession. Damuck ventured out from under Stewart’s wing in 2015, but the two are still close. Stewart wrote the foreword to the book. They guest-starred together in Damuck’s partner Ben Sinclair’s HBO comedy, *High Maintenance*. Stewart recruited Damuck to work on the VH1 series *Martha & Snoop’s Potluck Dinner Party*.

Damuck is the rare noncelebrity cookbook author who has never worked in a restaurant. Sometimes she thinks people underestimate her because of it. “They’re like, ‘You’re not a chef. You’re a food stylist,’” she says. “And I’m like, ‘I’ve cooked a million meals for Martha Stewart, and that’s the harshest critic I can think of.’” □

I don’t think salads are self-care per se, but also they are.’

LINDA PUGLIESE

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Ryusuke Hamaguchi The multi-award-winning director of *Drive My Car* on adapting Haruki Murakami and why listening is the most important part of acting

You were on a flight to Berlin when the Oscar nominations were announced. What crossed your mind when you saw the news? I was in shock. My emotions couldn't really catch up with the reality.

Driving with someone is an intimate experience—being trapped in a moving box enables a certain level of trust and honesty. Was this a way into the story for you? The physical closeness of the two characters was definitely an important aspect. Relationships are revealed through that. What mental state they are in gets revealed as well.

You expanded and made changes to Murakami's original work but were able to preserve the short story's aura of mystery. How did you approach the adaptation? We knew the short story couldn't simply be adapted into a film. So rather than thinking heavily about how to change things, we just made sure that we were reading it over and over. It became part of us and naturally came through in our writing.

Your dialogues emphasize the importance of the art of listening. Your characters are palpably tuned in to each other. They really experience other people's lines. And without that comfort of being listened to, you're vulnerable. It's also hard for the actors to portray these characters without that. So really, listening is the most important part of the acting process. It creates this domino effect of interaction.

You used a variety of languages in the staging of *Uncle Vanya*, the play featured in this story of a theater director and his chauffeur. How did you reach this choice and also decide that sign language belonged in the mix? Listening

The exchanges between your characters often feel like a journey with an unknown destination.

I can't force lines to push the story. I know that the characters need to go in a certain direction, but as I write, I come to understand and get to know them more. Sometimes they surprise me. It's almost like I'm listening in on someone else's conversation.



focuses on comprehending the voice, but things are also communicated through body language. By using all of these different languages, it was almost like I was letting the meaning be expressed through the body more. Sign language was another step in that direction. It's a more direct form of communication in terms of body movement and expression. And it's a beautiful medium of communication.

In the film, part of the *Uncle Vanya* rehearsal process is reading through the work without emotions. You also rehearse with your actors in this manner. What does this process enable? It establishes this baseline where the words are simply understood. You're able to just act while feeling what your body actually feels. Acting is lying, in the end. If the actors were to act in a way that's not real, not true to their being and body, then their partners and other people on set will see that. If an action is too strong emotionally, they'll know. In a sense, what they're doing is like emotional improv, because they've memorized the lines so well.

Unknowability of humans is a big theme here. The suggestion that Kafuku can accept his wife as completely authentic, even when she sought other men, is a radical way of looking at identity, marriage, and infidelity. We learn how much we can't know only through getting to know someone little by little. We dig into [different] parts of people. We have to accept who they are, fully embodied, whether they are alive or not. In terms of infidelity, I don't think about relationships that way. It's impossible to define a relationship, which is a very important aspect that I tried to portray in this film. —TOMRIS LAFFLY



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A large, vibrant collage at the top of the page depicts a variety of people in different settings. In the foreground, a man in a wheelchair is being pushed by another man. Behind them, a woman in a white dress and a man in a blue shirt are walking. To the right, a group of young women are sitting together, laughing. In the background, there's a city skyline with wind turbines, a woman jogging, and an elderly couple smiling. The collage is set against a blue gradient background with a digital grid overlay containing numerous small, overlapping images of people in various scenarios, suggesting a vast network of global operations.

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