

Volume 12 / Number 2
Summer 2020

CARNEGIE REPORTER



GLOBAL CRISES
OPPORTUNITIES
INFORMED ACTION

WELCOME TO THE SUMMER 2020 ISSUE OF THE CARNEGIE REPORTER

Navigating a New Reality

The rate of current upheaval in the world is unrelenting. We are seeing the disruption of the underpinnings of society, and yet, at the same time, we are seeing extraordinary acts of courage, hope, sacrifice, and community.

Our volatile new reality is distinguished by disruption and interconnectedness, individual isolation and civic unity, crisis and rescue, cruelty and selflessness, dispiriting acts of hatred and a deep upswelling of demands for equal justice. On many days, it seems that the enormity and pace of change is more than any one person can grasp. And yet, somehow, as a society, we are collectively finding our voices, addressing our ignorance and assumptions, and learning to do better.

Well before the coronavirus, we at the *Carnegie Reporter* were considering the ways that data can reveal the visible and invisible inequities that have now been laid bare by the pandemic. Well before the killing of George Floyd and the national and international cries for racial justice, we were assessing the political usage of identity to serve domestic and foreign policies. Insights in this issue of the *Reporter* have taken on new urgency and reach.

Highlights include:

- **Emerging Global Order** Carnegie Corporation of New York research associate Eugene Scherbakov looks at how the crises and challenges of the world of 1920 uncannily echo in our world today, asking, “Is It Déjà Vu All Over Again?” He proposes that today’s world leaders are similarly struggling to comprehend complex networks of social and technological forces undergirding the foundations of modern life.
- **Census** Former Reuters journalist Michael Connor looks at the vital importance of the ongoing 2020 Census to virtually every aspect of life in the U.S. — from schools to health care to transportation projects and more. Perhaps most importantly, the census is not all about money. It is key to allocating political power.
- **Middle East** Hillary Wiesner, a Corporation program director and Middle East expert, suggests that we are

witnessing a generational turn away from sectarian politics in the region as younger people are beginning to demand a nation-state that works *for all citizens*. Wiesner further explores these issues in a Carnegie Conversation with two other area experts, Lina Khatib of Chatham House and Karim Sadjadpour of the Carnegie Endowment for International Peace.

- **Revealing Information** Corporation program analyst Aaron Stanley explores the many ways that data visualizations help us grasp complexities. Through a curated portfolio, Stanley invites viewers to engage more deeply with data across a multitude of issues with which all of us, including our grantees, are grappling — from immigration and civic engagement to transnational movements and long-term conflicts.

In a recent conversation about Carnegie Corporation of New York’s response to COVID-19, our president, Vartan Gregorian, reminded us that he often looks to the past for lessons of resiliency and hope and of the importance of reflecting on our values and beliefs.

As before, in times of crisis, it has helped me to turn to history, to consider how humanity, in war, pestilence, and upheaval, has faced the unthinkable. While history holds disasters and malevolence, it also shows us how generations have struggled, overcome, and enriched humanity even in crisis.

I am deeply encouraged by this thought.

In place of his traditional essay, we publish President Gregorian’s letter in response to COVID-19 and his statement of commitment to help end systemic racism. His messages are accompanied by commentary from our program leadership as they, along with our grantees, navigate the challenging issues and circumstances of our times. We at Carnegie Corporation of New York join with voices around the world in proclaiming unequivocally that Black Lives Matter. Through our work and our values, we continue to fight for a better world through building and sharing greater knowledge and understanding.

Julia Weede

Chief Communications and Digital Strategies Officer
Carnegie Corporation of New York

CARNEGIE REPORTER

Chief Communications and
Digital Strategies Officer

Julia Weede

Director of Content and Publications

Kelly Devine

Editor/Writer

Kenneth Benson

Principal Design Director

Daniel Kitae Um

Researcher

Ronald Sexton

Carnegie Corporation of New York is a grant-making foundation, investing in knowledge that inspires informed action in democracy, education, and international peace since 1911. Visit carnegie.org to learn more about our work and to sign up for our newsletters.

To subscribe to the *Carnegie Reporter* magazine – it's free! – go to: carnegie.org/reporter. To update your mailing address or to submit a question or comment, please email reporter@carnegie.org.

BOARD OF TRUSTEES

Thomas H. Kean, Chair

Janet L. Robinson, Vice Chair

Vartan Gregorian, Ex Officio

Pedro Aspe

Lloyd J. Austin III

Lionel Barber

Jared L. Cohon

Kevin J. Conway

John J. DeGioia

Leymah Gbowee

Jean-Marie Guéhenno

Caroline Kennedy

Maria Elena Lagomasino

Marcia McNutt

Martha Minow

Louise Richardson

Anne Tatlock

Judy Woodruff

Helene L. Kaplan, Honorary Trustee

Newton N. Minow, Honorary Trustee



437 Madison Avenue
New York, New York 10022
Phone: 212.371.3200 Fax: 212.753.0584
carnegie.org

ON THE COVER

"Thank You"

The Montreal-based illustrator **Pierre-Paul Pariseau** writes: "The inspiration for the cover image came to me simply as I was living through the lockdown this spring. I thought of doing something that was positive – even though the situation wasn't. I used lively colors, adding the tree and the yellow bird to convey the feeling of summer that was coming. The flock of birds could be a symbol of the liberty that will come following the lockdown."

TABLE OF CONTENTS

FROM THE PRESIDENT

Global Crises, Opportunities, Informed Action Messages from Carnegie Corporation of New York leadership during times that are challenging all of us

02

CARNEGIE CONVERSATION

Iran, Saudi Arabia, and Societal and Political Change in the Middle East

How did we get here? And where are we going? Three experts debate shifting conflict dynamics in the region.

06

FEATURES

What Is Sectarianization? Hillary Wiesner investigates how identities and pasts are invented and used to produce power in the Middle East and beyond.

14

1920/2020: Is It Déjà Vu All Over Again? There is a misalignment between our ability to govern and the breakneck pace of change. This is not a new story.

24

Who Counts? What Counts? The 2020 Census will inform the distribution of \$8 trillion in public funds. But it's not just about money – it's about the allocation of political power.

32

CENTER POINT

Re-Focus: Thinking in New Ways with Data Visualizations How can we better understand the world and its complexities? One answer: data visualizations.

40

CARNEGIE ON THE GROUND

Children Are Counting on the 2020 Census Geri Mannion and Ambika Kapur join forces to show how the 2020 Census can ensure that communities receive the resources and representation they deserve.

52

Beyond STEM in Africa Sr. Dr. Dominica Dipio argues that the humanities together with STEM are necessary to build Uganda and infuse its development with values and ethics.

55

How to Hack Your Foreign Policy Against the backdrop of COVID-19 and the upcoming 2020 presidential election, what's next?

57

NOTABLE EVENTS

The Corporation's CIO Kim Lew Inducted into Wall Street Hall of Fame | President Gregorian Visits Innovative Early College Program | Corporation Hosts Reception at Secretaries of State Conference in D.C. | Addressing Students' Social and Emotional Needs During the Pandemic | NYC COVID-19 Response & Impact Fund Awards \$110 Million in Grants and No-Interest Loans

60

CARNEGIE BOOKSHELF

Books of Note Radical Women: How a Circle of Renegade Anthropologists Helped Overturn the Tenets of Scientific Racism | Getting Kids Excited about Reading | Are Colleges Fulfilling the Promise of Social Mobility? | Exposing the Deceit and Rampant Fraud Behind the Global Generic Drugs Industry

64

CARNEGIE CORNER

Carnegie Mellon's CREATE Lab Building the tools that communities actually need, this innovative lab uses robotics, education, and technology to help empower people to address real problems – and create real change.

76

FROM THE **PRESIDENT**

GLOBAL CRISES, OPPORTUNITIES, INFORMED ACTION

Messages from Carnegie Corporation of New York
during times that are challenging all of us

Life in the Time of COVID Two friends, both wearing vinyl gloves, hold hands after greeting each other outdoors in a park in Brooklyn, New York, during the coronavirus pandemic. CREDIT: PHOTOGRAPHY BY KEITH GETTER (ALL RIGHTS RESERVED) VIA GETTY IMAGES

COVID-19: A Time of Hardship and Resiliency

The coronavirus (COVID-19) pandemic is presenting tremendous challenges for our entire world with long-term consequences we cannot fully predict or comprehend. During this period of hardship and uncertainty, Carnegie Corporation of New York, its board of trustees, and its staff are dedicated to the health, safety, and well-being of our international community and neighbors.

While we have transitioned to working remotely from our homes, we are maintaining all grant-making operations. I thank our determined staff for their exceptional efforts now and in the months to come. For our program areas, this period presents both a challenge and an opportunity to develop responsive and effective ways of supporting the changing needs of our grantees. As programmatic and operational initiatives develop, we will update our grantees and partner organizations and encourage the sharing of questions and concerns.

Carnegie Corporation of New York will continue without interruption its mission of promoting the advancement and diffusion of knowledge and understanding around issues of peace, education, and democracy — enduring causes established by Andrew Carnegie that are increasingly important in light of current crises. Indeed, it is our goal to strengthen our foundational work and further the role of the philanthropic and nonprofit sectors as demonstrated by the recent formation with our philanthropic peers of the NYC COVID-19 Response & Impact Fund to assist New York City in addressing the many hardships caused by the coronavirus pandemic. I am grateful that once again the New York philanthropic community has come together to do its best in response to a catastrophe, as it did during the aftermath of 9/11 and Hurricane Sandy.

In closing, I offer these guiding words of goodwill from Andrew Carnegie, delivered in 1910 at the dedication of the Pan American Union Building in Washington, D.C., about the hopes of humanity:

... to know each other and learn of the sterling virtues of their colleagues, and especially their earnest desire for the prosperity of all their neighbors and their anxious hope that peace shall ever reign between them.

With my deepest wishes for good health, resiliency, and hope to all of you,

Vartan Gregorian

President

The Emerging Global Order

Even as COVID-19's full implications are unfolding, there are signs that the pandemic is exacerbating negative and dangerous tendencies in the International Program areas of priority and beyond, be those nuclear security, global power dynamics, Arab region challenges, or peace and development in Africa. COVID-19 is raising questions about nuclear weapons in the context of what constitutes national or international security, increasing the prospects of friction between the United States and China, and highlighting the fragility of developing countries. It is also raising a host of questions about the emerging global order that has been dominated by the United States since the end of the Cold War and defined by decades-long international alliances and multilateral institutions.

The pandemic and its fallout are poised to change the status quo, and International Program leadership and staff have begun a multilayered process of thinking through the potential programmatic implications. We first assessed the immediate and near-term impact of the pandemic on all current grantees with the aim of restructuring projects and budgets as needed. We also engaged

with grantees in substantive discussions about their ongoing or new work in the context of the pandemic, exploring possibilities for a few immediate and rapid-response grants to support those most impacted by it. To promote the work of grantees, the team started monitoring and helping disseminate grantees' COVID-19-related outputs, such as webinars, podcasts, and digital publications. These efforts will continue in the context of COVID-19's evolving impact on international issues.

Deana Arsenian

Vice President, International Program
Program Director, Russia and Eurasia

In Support of Equality, Dignity, and Justice

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. Declaration of Independence, July 4, 1776

The principles of the Declaration of Independence are embodied in the U.S. Constitution, the covenant that unites us as a nation and defends the pillars of our democracy: equal rights, equal justice, and equal opportunity — rights and protections that must be afforded to all citizens regardless of race, gender, or creed.

Some two-and-a-half centuries later, we are still failing to uphold these foundational principles for all. The killing of George Floyd has caused grief, anger, and fear, but also feelings of revulsion toward this latest manifestation of the country's shameful legacy of racism. At this history-shaping moment, we seek to affirm racial and social justice as more than slogans or lofty aspirations; rather they must become the agenda of our nation, one that requires the full support of every American, from every background.

This latest atrocity moves us to be more vigilant in making sure that Carnegie Corporation of New York adheres to its mission and accomplishes its goals. We value education as the bedrock of our democracy. We believe in our historical role and moral obligation to provide all children with equal opportunities to learn, to succeed, and to obtain higher education. We value civic participation as the defender of a strong democracy. We believe that all Americans must be able to exercise their right to vote and engage in the democratic process. We support the rights of individuals and groups to make their voices heard in order to confront ignorance, injustice, and the systemic racism that has brought us to this point.

We are reckoning with the fact that justice delayed is justice denied, and we salute those institutions working to reform the law enforcement, criminal justice, and judicial systems that have discriminated against Black Americans. Our immediate priorities include collaborating with our philanthropic peers to expose and end the long line of injustices against people of color and their communities. By working toward solutions, we seek to further the democratic ideals of our founder, Andrew Carnegie.

More than a century ago, Carnegie reflected on many of these fraught issues in his book *Triumphant Democracy*, writing that one person's right is every person's right: "The flag is the guarantor and symbol of equality." This is the time to reflect on our values and beliefs. This is the time to uphold the constitutional rights of all people by pursuing equality, fairness, and justice. This is the time to demonstrate that Black Lives Matter.

Vartan Gregorian

President

A Vision of Equal Opportunity

With unfathomable speed, life as we knew it has ceased to be. Practically every aspect of our lives, as individuals and as a nation, has been turned upside down. Hardest hit have been our economy, our democratic processes, and our education system.

In the midst of a presidential election year, traditional campaigning and political discourse have gone out the door, replaced by increasing cultural conflict and civil unrest. That discord has merged with long-unanswered grievances about racial discrimination, elevating a critical and overdue national discussion. In addition, every educational institution in the country suddenly stopped doing what it had been doing and scrambled to find ways to do it differently, resulting in vast inconsistency, confusion, inequality, and lost learning.

Through the Corporation's investments in recent years and our work with grantees, partners, and allied organizations, we know a great deal about how to build alliances and to thoughtfully design and implement new initiatives. Our starting place must be a vision of equal opportunity, and from there we must imagine systems that can actually ensure it — irrespective of how different they may look from the ones we now have. If we can seize on this moment to share what we have learned when what we have learned is so needed, then we have the potential to strengthen the future of our citizenry and our democracy.

LaVerne Evans Srinivasan

Vice President, National Program
Program Director, Education

Toward a Vibrant and Fair Democracy

Just as the country was beginning to contain the COVID-19 pandemic, the killing of George Floyd set off a firestorm of protests against police brutality aimed predominantly at Black and brown communities. It has been a very painful and difficult time as the nation (and the world) faces the realities of inequality surfaced by the pandemic and the cries of the many victims of police harassment and structural racism.

Our health-care and education systems are under enormous stress, and the economy is under immense pressure, disproportionately impacting communities of color, immigrants, and low-income families. Many of these individuals, historically marginalized by structural inequality, are among the essential workers who are risking their own well-being to meet the health, infrastructure, manufacturing, service, food, safety, and other needs of all Americans.

The politically diverse grantees of the Corporation's Strengthening U.S. Democracy program seek to foster a vibrant and fair democracy through the civic integration of immigrants, an accurate 2020 Census, and support for nonpartisan voter registration and education, election protections, and voting rights for all citizens.

The Corporation has been the leading foundation supporting a nonpartisan commitment to strengthening our democracy through alliance building within our immigration and voting work. In this particularly polarized time, seeking solutions based on shared ideals — not party affiliation — to immigration reform, election administration, and voting rights remains crucial to achieving meaningful and lasting policy.

Geri Mannion

Program Director, Strengthening U.S. Democracy
Director, Special Opportunities Fund

CARNEGIE CONVERSATION



On the Brink An elderly woman raises the Lebanese national flag behind riot police during clashes with antigovernment protesters in downtown Beirut in late January 2020. Maha Yahya, director of the Carnegie Middle East Center, told the *Washington Post*, "Lebanon is being pushed to the brink of chaos and anarchy. This is a country that is spiraling economically downwards, you have increasing frustrations among a young population, and things could get out of hand very quickly." Protestors chanted "Not peaceful, not peaceful. This is a revolution, not a song." CREDIT: JOSEPH EID/AFP VIA GETTY IMAGES

IRAN, SAUDI ARABIA, AND SOCIETAL AND POLITICAL CHANGE IN THE MIDDLE EAST

**How did we get here? And where are we going?
Three experts debate shifting conflict dynamics
in the region**

By **Lina Khatib, Karim Sadjadpour, and Hillary Wiesner**

How are developments in the Middle East viewed from within the region?

For more than 20 years, Carnegie Corporation of New York has engaged with academic and scholarly communities in the United States and the Middle East with grantmaking that expands the activity, connections, and impact of the knowledge sector while addressing critical trends that are shaping the future of the region and beyond. In December 2019, the Corporation hosted a discussion on emergent social movements and political competition rising with the region’s next generation.

Lina Khatib leads the Middle East and North Africa Programme at Chatham House in London. Formerly director of the Carnegie Middle East Center in Beirut, she cofounded the Program on Arab Reform and Democracy at Stanford University’s Center on Democracy, Development, and the Rule of Law. Karim Sadjadpour is a senior fellow at the Carnegie Endowment for International Peace and a prominent media commentator on Iran and U.S. foreign policy. As an adjunct professor at Georgetown University’s Walsh School of Foreign Service, he teaches a class on U.S. foreign policy and the Middle East. They spoke with Hillary Wiesner, director of the Transnational Movements and the Arab Region program at Carnegie Corporation of New York.



HILLARY WIESNER: Events in the region sometimes seem futuristic. The region seems at the cutting edge of trends that are really global and not special to any one region. But when it comes to the number of internationalized conflicts — and countries operating proxy groups in other countries — this region looks special. How do you think we came to this point?

LINA KHATIB: I mean it depends on how far back we want to go in history. We can go back to the days of colonialism and Western mandates that created these countries in the region and that entrenched divisions in societies. The political systems that were installed after colonialism or after invasion, such as the 2003 war in Iraq, have been deeply flawed. All of them were either authoritarian, or they entrenched patron-client relations as in Lebanon. Over the decades these kept increasing divisions in society, and widening the gap between the elites and ordinary people.

KARIM SADJADPOUR: Obviously, one important year is 1979, the year of the Iranian Revolution, when Iran went almost overnight from being a U.S.-allied monarchy to becoming a U.S.-opposed theocracy. Iran’s vision for itself and for the Middle East fundamentally changed. It started to see itself as a revolutionary cause, and it started to create allies and militias overseas like Lebanese Hezbollah.



Events in the region sometimes seem futuristic. The region seems at the cutting edge of trends that are really global and not special to any one region. But when it comes to the number of internationalized conflicts — and countries operating proxy groups in other countries — this region looks special.

— **Hillary Wiesner**, Carnegie Corporation of New York



Saudi Arabia saw the emergence of this revolutionary ethos as an existential threat. And so Saudi Arabia started to support Sunni counterparts throughout the region, also in the war against the Soviet Union in Afghanistan, supporting Sunni fundamentalism and trying to spread Sunni conservative values at home. If you fast forward to today, however, one reason why Iran has prevailed over Saudi Arabia in regional conflicts is that virtually all Shia radicals are willing to fight for Iran, while virtually all Sunni radicals want to overthrow the government of Saudi Arabia.

KHATIB: Other countries compete, too. Saudi Arabia and Qatar for a while were engaged in competition for influence. That led them to support rival opposition groups within Syria after 2011.

WIESNER: And in Libya, and Eastern Africa, Somalia.

KHATIB: Absolutely. And let’s not forget that Syria had occupied Lebanon militarily for decades as well. So these instances of countries meddling in others’ affairs are not new. They have political ambitions that go beyond their own national borders.

WIESNER: This is a region of wealth and also growing poverty. Social scientists are documenting collapsing middle classes in some countries, growing pauperization,



Perspective (l-r) Lina Khatib of Chatham House, Karim Sadjadpour of Carnegie Endowment for International Peace, and Hillary Wiesner of Carnegie Corporation of New York posed for a group portrait at Carnegie Corporation of New York’s headquarters in New York City in early December 2019.
CREDIT: FILIP WOLAK

while at the same time extremes of wealth — as we have in our country. Young people growing up in this context today, they’re the new majority and they’re now becoming vocal in protest movements. What are young people calling for?

SADJADPOUR: I think protest movements in the Middle East are often triggered by economic concerns, but they’re sustained by much deeper political and social concerns. If you had to craft an overarching narrative about popular protest in the Middle East, it’s usually a young population rising up against the corruption and nepotism of a ruling establishment. Iran, Syria, Gaddafi’s Libya, Yemen, or Lebanon today. I think really what angers people is seeing the same politicians and their families treating themselves as the country’s owners, the sense of entitlement that they have over the state and its resources.

You can afford not to have any political reforms or not to allow your citizens a greater say if you’re delivering for them economically, like say the Chinese government has done. But when you don’t deliver economically and you deprive them of social freedoms, and you deny them political freedoms, then I think many citizens look at the government and say, “What redeeming qualities does it really have? What is it that they’re providing for us?” For that reason I think we should expect to see continued protests throughout the region for the foreseeable future.

KHATIB: Younger people did not experience the classic wars that their parents lived through, such as the Lebanese Civil War or the Iran-Iraq War. And they have quickly realized that the economic crises they are facing in their countries are not the source of the problem, they are an outcome of the problem. The problem is a political system that is deeply flawed, that fosters corruption and inequality, and that denies citizens their basic rights. Protesters are asking for a state that allows them the freedom to express themselves, a state that delivers services to them, a state that gives them an equal political voice.

WIESNER: Today’s technologies give superpowers to demonstrators and to social movements. But also surveillance and punishment by states, and social control — tracking and policing through social credit scores.

KHATIB: I just want to tell an anecdote that I thought was interesting, to illustrate how complex the role of social media or technology in general is. Karim, as you know in Iran there was an Internet shutdown to try to prevent protestors from communicating and mobilizing. In Lebanon it was the opposite. Large crowds gathering in downtown Beirut caused a strain on the mobile phone data network. Some of the protestors pleaded with one of the two big telecommunications companies in Lebanon to add antennas in downtown Beirut because the network couldn’t cope. And they did, even though the company is

affiliated with the government. Why? Because Lebanon has some of the most expensive telecommunications services in the world. The company thought that this would be a great opportunity to increase their profits.

WIESNER: On the question of the identity of citizens: Kim Ghattas's new book *Black Wave* talks about the history since 1979, showing a top-down political sectarianization coming from the Saudi gulf and from Iran. Governments tried to shift people's social identities toward politicized religious identities. Do you see a change in those dynamics recently? Is there a shift toward nationalism happening both in Saudi Arabia and Iran? Do you think we've turned the corner on that trend?

SADJADPOUR: It's notable that protestors in Iraq and Lebanon wave national, not sectarian, flags. Iranians see themselves definitely first as Iranian, and they're proud to be Iranian; having lived under a repressive theocracy for four decades, most are not interested in sectarian conflict. There's been enormous and valid criticism of Mohammed bin Salman in Saudi Arabia, but he has tried to create a Saudi nationalism and deemphasize a "Wahhabi" narrow sectarian identity. Of course in Europe excessive nationalism led to self-destruction. There is a happy medium, in that excessive nationalism can lead to self-destruction, but insufficient nationalism can lead to implosion or state collapse. It's good to see patriotism in the younger generations in the Middle East, and they're not as ideological as previous generations. They're not as sectarian, they're proud of where they come from, they just want to live under good governance.

WIESNER: Lina, you've talked about the ongoing conflicts in Syria and Yemen. These are great disasters, humanitarian emergencies that Americans have often closely followed in our news. Is there an end in sight? How do you each see the situation progressing in Syria and Yemen?

KHATIB: When it comes to Syria, unfortunately the Syrian regime and its external patron Russia have not exhibited any sign that they are serious about political transformation happening in Syria or about reaching a peaceful resolution to the conflict. They feel that they have won the conflict militarily and they are just going to continue until they take over all areas that are not currently under regime and Russian control.

Iran, meanwhile, feels that the Syrian conflict paved the way for increasing its influence in the Levant in a way that is more extensive than ever since 1979. Events in Syria do not bode well for the kind of political transformation that the United Nations Geneva Resolution 2254 had called for. As for the U.S., I'd say that Syria has become a component of the Iran file rather than a standalone file. Speaking with American officials about this, I was surprised to hear them saying in very clear terms that they don't mind if Russia becomes the most influential external actor in Syria. In the

ongoing conflict, the state in Syria is becoming hollowed out from within as Iran seeks to exert its influence in Syria both through state institutions and through its proxies and militias. Russia is taking over some state institutions in Syria and curating them to make them loyal to Russia in the long run, regardless of who the leader of Syria might be.

SADJADPOUR: On Yemen there are three key external actors: the United Arab Emirates, Saudi Arabia, and Iran. For Saudi Arabia they see Yemen as a core existential issue. Iran sees Yemen as more of an extracurricular issue. It's not core to their strategic interest. They saw an opportunity to wield influence on the cheap. They have perfected the art of working with proxy militias, and they actually have used Hezbollah to train other militias. And it's been a relatively low-cost endeavor for Iran. Saudi Arabia's probably spent 100 times more in Yemen than Iran has spent — and to no avail.

And I think the humanitarian costs of the conflict, the reputational costs, have forced the United Arab Emirates to reconsider its approach, and I think you're now starting to see the UAE try to phase out of Yemen, realizing that there is no viable endgame for them. For years the way Saudi Arabia had managed Yemen was essentially using what they call *riyalpolitik* — meaning financially co-opting the various actors in Yemen. And I suspect that is where it will end up again, a return to the power of the purse eventually.

KHATIB: When it comes to the war on Yemen, Saudi Arabia has invested so much that it cannot foresee itself ending the war while saving face at the same time.

SADJADPOUR: But in contrast to, let's say Syria, which is a core issue for the Iranians, Yemen is something that Iran will probably use as a chip to exchange for something else.

WIESNER: That raises the topic of negotiation. Many point to a need for regional security architecture, perhaps an organization like the one based in Vienna, the Organization for Security and Co-operation in Europe (OSCE). Rather than ad hoc solutions or competitions through militaries, negotiations might lead to ongoing structured dialogue that, say, Turkey and Iran would also participate in. Is there hope for conflict prevention or mitigation through such an organization in the future?

SADJADPOUR: I'm not optimistic at the moment for a couple of reasons. One is that Iran feels like it's benefited from the current status quo. The weakness of Arab governments has created opportunities for Iran to wield influence beyond its borders, and the nature of the Iranian regime is kind of a bipolar one: its most powerful officials are inaccessible, and its most accessible officials are not powerful. So the diplomats in Iran aren't powerful. The powerful folks in Iran do not conduct diplomacy. They are

////////////////////////////////////
We shouldn't think that reduction of American power and American presence in the Middle East is going to create a vacuum that will be filled by Norway. It's going to be actors like Russia, China, and Iran. That doesn't mean that you have to maintain a large U.S. troop presence in the region. You obviously have to be strategic and mindful of popular demands in the United States.

— **Karim Sadjadpour**, Carnegie Endowment for International Peace

////////////////////////////////////

the military and the supreme leader, and they've never shown a willingness to really partake in multilateral structures which discuss things like governance and regional security agreements because the lack of a regional security framework and weak governance have been advantageous for them. From their standpoint, if it's not broken, why should we fix it?

But will Iran inevitably see more and more of a backlash against its policies in the region, as we've seen in Iraq and Lebanon? In a future Iran, one more likely ruled by overt military autocracy than it is right now, I think you may start to see military leaders with a bit more pragmatism and a willingness to engage with its Arab counterparts. But I don't see that on the near-term horizon.

KHATIB: Indeed, things may be moving in the opposite direction. A few years ago there was more potential for this kind of security architecture, or negotiating, or mediating body to emerge because Saudi Arabia and Turkey had kind of improved their relationship. The Gulf Cooperation Council (GCC) was still relatively viable. Today, each country in the region seems to have national security as its primary goal and there is no longer interest in multilateralism or even regional engagement. Even the GCC, because of the Gulf crisis mainly between Saudi Arabia and Qatar, has become merely a ceremonial institution. When Saudi Arabia and the UAE announced two years ago that they were going to establish their own security organization, separate from the GCC, disagreements over Yemen two years down the line completely derailed that plan as well. So right now we have a highly fragmented region in which there is no common vision, neither politically nor militarily, or on the security level.

SADJADPOUR: Just as America builds leverage against Iran with sanctions, Iran feels it builds leverage against the United States by either sowing chaos in the region or by restarting its nuclear program. So I think it's likely we'll see more attempts of sabotage by Iran in the region. They're not likely to go after the same target twice, but to try to spike the price of oil and inflict costs on world powers so they get involved. If not sanctions relief, Iran may get some economic relief if they cease their acts of sabotage in the region. But the dangerous dynamic is that we're incentivizing Iran to conduct acts of sabotage and to restart its nuclear program — by *not* rewarding them to stop doing those things.

WIESNER: In an ideal world, what would you see the United States doing in the near future? What could people in this country or their government be doing, if anything?

SADJADPOUR: I would argue the United States has a responsibility to countries in the Middle East because we've had an adverse effect oftentimes. Certainly the Iraq War had an adverse effect in the region, but we shouldn't think that reduction of American power and American presence in the Middle East is going to create a vacuum that will be filled by Norway. It's going to be actors like Russia, China, and Iran. That doesn't mean that you have to maintain a large U.S. troop presence in the region. You obviously have to be strategic and mindful of popular demands in the United States. There isn't a popular will to have another major U.S. conflict in the region, but our political system thinks much more short-term than our global counterparts and adversaries. Members of Congress view the world in two- or six-year increments; administrations use the view of the world in four-year increments.

////////////////////////////////////
At a diplomatic level, what is needed is political will on the part of the United States to play a leading role in steering conflicts toward a resolution. I firmly believe that the United Nations has proven itself almost obsolete in its mission as a peace broker in the Middle East. However, it can play a role as a vehicle for implementing peace, but for that to happen the first step should be diplomatic leadership and for that role the United States is essential.

– **Lina Khatib**, Chatham House

////////////////////////////////////
And Vladimir Putin, Premier Xi, Ayatollah Ali Khamenei: they're not term limited. They can afford to have longer-term strategic plans in the region. The real world is a marathon, not a sprint. A place like Syria, it's going to take at least a generation to rebuild. Yemen as well.

WIESNER: Often in meetings with government officials the message is, "We want you here, America. We want a much stronger presence." But it's to bolster their rule. Meanwhile, citizens — or professors and academics — pretty much say the opposite. So, it depends who you're asking.

SADJADPOUR: The Chinese and the Russians are not even going to pay lip service to human rights. No external power has had great success in the Middle East. It's been kind of a string of failures. Still, I personally don't think that total U.S. withdraw from the Middle East would make it a more safe, secure place.

KHATIB: The protestors in Lebanon are accused by their detractors of being foreign conspiracy tools. The protestors have been mocking these accusations, while at the same time saying that past U.S. involvement has only led to great disappointment. So what the United States should do is have a balanced approach. We're not talking hands-on

interventionism and we're also not talking complete disengagement. The United States under President Obama often said the right things while not following up with action. With the current administration there are no meaningful words and no action. Both of these things have reduced trust amongst citizens in the Middle East of the United States.

I have two recommendations. First, at the grassroots level, the U.S. should continue its soft engagement or "soft power" approach, which is support for media freedom, support for civil society, support for education, and support for female political empowerment, for example. Secondly, at a diplomatic level, what is needed is political will on the part of the United States to play a leading role in steering conflicts toward a resolution. I firmly believe that the United Nations has proven itself almost obsolete in its mission as a peace broker in the Middle East. However, it can play a role as a vehicle for implementing peace, but for that to happen the first step should be diplomatic leadership and for that role the United States is essential. ■

.....
Conversation recorded at Carnegie Corporation of New York's headquarters in New York City on December 5, 2019.

... there were two revolutions in 1979, one that made headlines and one that unfurled quietly, a black wave with far-reaching consequences for millions.

— **Kim Ghattas, *Black Wave: Saudi Arabia, Iran, and the Forty-Year Rivalry that Unraveled Culture, Religion, and Collective Memory in the Middle East***

WHAT IS SECTARIAN- IZATION?

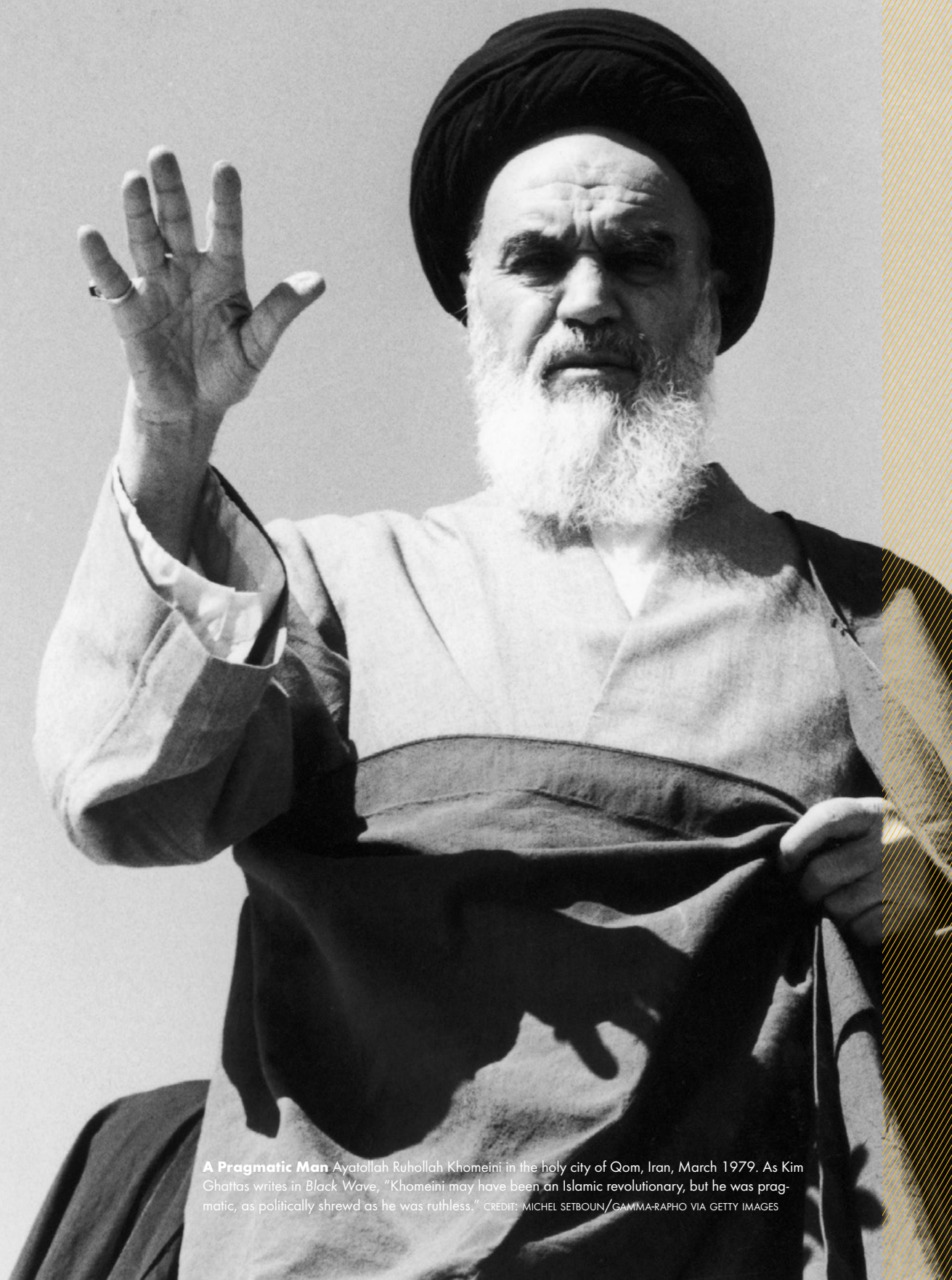
How identities and pasts are invented and used to produce power
in the Middle East and beyond

By **Hillary Wiesner**



What is political sectarianization? It is an alternative to the static concept of sectarianism, which implies that ancient grudges or theological disputes eternally divide religious communities. Today a majority of political scientists see sectarianization as a political tool. It is the political usage of identity to produce power.





A Pragmatic Man Ayatollah Ruhollah Khomeini in the holy city of Qom, Iran, March 1979. As Kim Ghattas writes in *Black Wave*, "Khomeini may have been an Islamic revolutionary, but he was pragmatic, as politically shrewd as he was ruthless." CREDIT: MICHEL SETBOUN/GAMMA-RAPHO VIA GETTY IMAGES

While the Iranian Revolution made headlines in 1979, during the same era, governing elites from Saudi Arabia to Pakistan changed the laws and social norms that shaped their countries. As rulers competed for legitimacy at home and for influence overseas, they fabricated new forms of social and political behavior. They refashioned the present by remaking the past, reshaping the identities of citizens and societies. In her vivid new book, *Black Wave: Saudi Arabia, Iran, and the Forty-Year Rivalry that Unraveled Culture, Religion, and Collective Memory in the Middle East*, Kim Ghattas asks, “What happened to us?” What dynamics worked against the cultural diversity and coexistence that her home country of Lebanon and its region had known?

Ghattas, a BBC television and radio journalist who spent 20 years reporting from the Middle East and from Washington, D.C., is now a writer and fellow at the Carnegie Endowment for International Peace. In search of answers to her question, Ghattas takes her readers on a guided tour through 40 years of state-sponsored religion. Her account embeds the testimony of cultural figures whose lives were upended by an age of politically driven sectarianization.

As Nader Hashemi and Danny Postel describe in their 2017 volume *Sectarianization: Mapping the New Politics of the Middle East*, sectarianization is often a top-down and “deeply artificial” product of failed governance rather than a cause. It often masks real drivers of conflict, economic and political, with a manufactured religious rivalry.

For example, a functioning state may seek legitimacy by providing public services, opportunities to thrive, and inclusive narratives of national identity that form a credible social contract. However, failed national-level governance brings the famous “absence of the state,” intense inequality, or stifling authoritarianism. When the ruler’s toolbox of incentives or coercion falls short, a brittle state seeks other means of power. Ruling elites may construct or mobilize ethnic, sociopolitical, or religious identity groups.

When the ruler’s toolbox of incentives or coercion falls short, a brittle state seeks other means of power.

They treat citizens not as individuals but as subnational groups or as foreign presences backed by a rival power. Citizens receive benefits and protection unequally on the basis of their assigned identities. By this measure, the opposite of sectarianization is equal citizenship.

In *Black Wave*, Ghattas recounts the intellectual and social movements that led up to the events of 1979, including the Movement of the Disinherited in Lebanon. She demonstrates that prime drivers of the region’s political reconfiguration lie not in religion but in “dispossession and injustice,” lack of representation, and, in the Shah’s Iran, brutal repression.

By any standard, 1979 is a pivotal year. Young people who did not live through that time will appreciate Ghattas’s navigation of complex, interlocking events. She charts Iran’s fateful course up to and following the departure of the Shah in January and Khomeini’s arrival in Tehran on February 1. She recalls how revolutionary cassette tapes bypassed state-controlled media in the 1970s, similar to how social media has sometimes been able to elude government controls in the 21st century. Ghattas laments Khomeini’s failure to compromise, and his Orwellian inclination to snuff out intellectual and political diversity.

The construction of clerical rule and an Islamic Republic of Iran sent shock waves overseas. The author traces echoes of Iran’s revolution in the circumstances of Egyptian president Anwar Sadat’s assassination in October 1981. Likewise, she sees reverberations in the cascade of events that followed the siege of the Great Mosque of Mecca, seized that November by fundamentalists inspired in part by Saudi Arabia’s own conservative cleric Abd al-Aziz bin Baz. In the wake of that attack, Saudi leaders remodeled the kingdom to better match the social goals of the fundamentalists. At home, they empowered religious police and restrictions. Overseas, they faced nearby Iran’s enmity to monarchy in general and to the Saudi kingdom in particular. Successive Saudi rulers would seek to delegitimize Iran’s claims of Islamic governance by fostering sectarian, anti-Shia propaganda — propaganda that would resurge horrifically years later in the attempt to overthrow the Assad regime in Syria. Bin Baz would go on to become an influential religious leader supporting the Saudi monarchy, and eventually Grand Mufti of Saudi Arabia.

Still in 1979, bear with me, Ghattas traces the flow of ideas and money leading up to the transformation of Pakistan’s legal code into the *Nizam-i-Islam* by Zia-ul-Haq in February of that year — the year that also saw the execution of Pakistan’s former prime minister Zulfikar Ali Bhutto, whom General Zia had deposed in a coup. Finally, in December of 1979 came the Soviet invasion of Afghanistan, which would become another landmark in the history of manufactured sectarian conflict. Throughout the 1980s, the invasion was countered by a mobilization

of fighters and militias — the mujahideen — infused with jihadist narratives against the Soviet Union. The United States, Pakistan, and Saudi Arabia were leading sponsors of the Afghan mujahideen and foreign fighters in this internationalized conflict. Ghattas traces the interplay of politics and state-sponsored sectarian polemic through the long-running conflicts of the Cold War — arguably made longer by their sectarianization. This includes the devastating Iran-Iraq War (1980–88), the prolonged wars of Lebanon and Afghanistan, and the rise of anti-Shia violence in Pakistan, violence which in some cases draws in Iran to back Shia populations within Pakistan.

In the years that followed 1979, Iran and Saudi Arabia moved against music, alcohol, cultural institutions, sports, and entertainment. They curtailed women’s employment,

mobility, and visibility, and together they became the two countries to impose mandatory veiling. Ghattas finds that changes in the laws and norms affecting women are common denominators of state-sponsored religion. Many of the changes in Iran and Saudi Arabia also happen in Pakistan, which itself becomes a leader in using blasphemy prosecutions against dissidents and political targets.

A key trend that Ghattas illuminates in *Black Wave* is the focus of a research project based at Georgetown University and the Brookings Institution. Led by Peter Mandaville, the project is tracing “the geopolitics of religious soft power” through the export of religious influence. Scholars are mustering fresh and archival research on the global impact of religious propagation activities, sometimes

Go Deeper: Middle East and North Africa (MENA) Politics

A selective listing of Corporation grantees who are working on political sectarianization, the geopolitics of religious soft power, and more, many of whom offer digital resources, including online publications, podcasts, and videos

////////////////////

American Political Science Association (APSA)

The American Political Science Association now features the APSA MENA Politics Section, as well as MENA research development workshops. apsanet.org

Arab Political Science Network (ASPN)

An independent organization founded by graduates of the APSA, the Arab Political Science Network (ASPN) is a research and professional development forum centered in the region. arabpsn.org

The Century Foundation

The Century Foundation’s international scholars network addresses political sectarianization in the terrain of human rights and conflict mitigation through analysis and publications such as *Order from Ashes* (2018) and *Citizenship and Its Discontents* (2019). [tcf.org](https://www.centuryfoundation.org)

The Geopolitics of Religious Soft Power

A partnership of Georgetown University’s Berkley Center for Religion, Peace & World Affairs and the Brookings Institution, The Geopolitics of Religious Soft Power project “explores the global impact of religious propagation activities sponsored by several countries in the Middle East.” The research project is led by Peter Mandaville. brookings.edu | berkeleycenter.georgetown.edu

Inclusive Governance

Lebanese American University’s project on Transnational Movements and Inclusionary States studies sectarianized political systems. Led by Bassel Salloukh, it offers the online report *Challenges to the Middle East North Africa Inclusionary State* (POMEPS Studies 37, February 2020). lau.edu.lb

Legitimacy and Citizenship in the Arab World

London School of Economics’ project on Legitimacy and Citizenship in the Arab World is led by Rim Turkmani. It works with Syrian and international scholars on state manipulations of identity politics, when violence becomes a mechanism for mobilizing sectarian sentiment and predatory economic behavior. *The Question of Religion in Syria’s Constitutions: A Comparative and Historical Study*, by Turkmani and Ibrahim Draji, is the first publication in the project’s Working Paper Series. lse.ac.uk

POMEPS (Project on Middle East Political Science)

George Washington University’s Project on Middle East Political Science (POMEPS) is a major field-building network founded by Marc Lynch. An online collection of essays, *Sectarianism and International Relations* (POMEPS Studies 38, March 2020), is among the project’s many publications and podcasts. POMEPS is based at GWU’s Institute for Middle East Studies. pomeps.org

SEPAD (Sectarianism, Proxies and De-sectarianisation)

Led by Simon Mabon and based at Lancaster University’s Richardson Institute, the Sectarianism, Proxies and De-sectarianisation (SEPAD) project is an international scholars network aimed at “understanding the conditions that give rise to sectarian violence and proxy conflicts along religious lines with the aim of creating space for a ‘de-sectarianisation’ of socio-political life.” sepad.org.uk

Striking from the Margins

Central European University’s Striking from the Margins project was founded by Aziz Al-Azmeh to expose the relationship between transformations of religion and changes to the state and social structures in Syria, Iraq, and other countries. strikingmargins.com



Internationalized War U.S. President Ronald Reagan “meeting with Afghan Freedom Fighters to discuss Soviet atrocities in Afghanistan,” February 2, 1983. Shortly thereafter, the United States, together with Saudi Arabia, was pouring hundreds of millions of dollars each year to anti-Soviet militants in Afghanistan. CREDIT: RONALD REAGAN PRESIDENTIAL LIBRARY

through a flow of financing to religious institutions or charities abroad — a common practice of Saudi Arabia, Iran, and other countries, especially during the Cold War. A forthcoming volume, *Wahhabism and the World* (Oxford University Press, 2021), will examine the impact of that funding. Of course, like sectarianization itself, the use of religion in foreign policy is practiced in every region, not only in the Middle East. The Georgetown/Brookings project has expanded to Western and Eurasian state uses of religious influence abroad.

For her part, Ghattas notes the rise of anti-Shia pamphlets and books across the 1980s. First in sectarianizing publications and then on television and cable networks, Shias are increasingly characterized as heretics to be eliminated. Over time, the propagation of religious hate speech progresses from conferences and broadcasts to fatwas and sect-based militias. Another artifact of this era are the 1985 adaptations of the Qur’an produced with “egregious modifications or footnotes, turning those editions into polemics.” A product of policies we might today identify as sectarianizing, these “Saudi-endorsed versions remain,” as

Ghattas writes, “the most widespread, offering non-Arabic speakers a very specific, one-sided reading of Islam.”

At Lancaster University in the U.K., SEPAD, a growing scholars hub on “sectarianization and de-sectarianization,” convenes international social scientists analyzing how social conflict can be manufactured to produce political power. The raw material for this operation — differences among citizens — can be regional, class, or ethnic differences. We could be talking about innocuous, even trivial differences, or they might be grounded in deep historical injustices. Groups are defined, treated unequally, and sometimes set against each other. Leaders — or “sectarian entrepreneurs” (another term from the academic literature) — incite favored and disfavored groups to suspicion and enmity, deploying victimhood or “protection” narratives. Victimhood narratives cast other people as an aggressor to be hated or feared. Difference is thus politicized, and then “securitized.” This means that your neighbor is cast as a physical threat to you and your family. Now an authoritarian leader is needed to protect you from the enemy that he himself has created. Soon a

society no longer consists of fellow citizens. Instead, there are only victims, perpetrators, and self-identified saviors or protectors. You choose.

There is a self-fulfilling quality to sectarianized conflicts, say experts who have experienced these dynamics in their own countries. The discourse may start out as fake, may at first even seem completely absurd. Yet over time, the conflict may grow to resemble the manufactured narrative, planting the seeds of future conflicts. In Syria, Yemen, and Bahrain, sometimes rulers' false assertions materialized as conflicts progressed, both internationalized through the involvement of foreign powers. SEPAD researchers find that, all too often, the narrative of sectarian conflict is used as "camouflage" to cover systemic corruption and the monetization of war.

Ussama Makdisi of Rice University emphasizes the particularity of specific histories because "there is no such thing as a transhistorical sectarianism ... a stable, obvious, ever-present, singular social reality that floats above history." Makdisi examines the 19th century in *The Culture of Sectarianism* (2000) and in his recent book, *Age of Coexistence* (2019). He digs into the contexts of unique historical events, because there is "no such thing as an endlessly repeating story of sectarianism."

Naturally, historians of religion place religious factors in sharper focus. They examine how the roles of religious leaders, doctrines, and narratives are adapted for political conflicts. These dimensions are explored in a major report from Harvard's Belfer Center, *Engaging Sectarian De-Escalation* (2019), as well as in the analysis of Geneive Abdo, who interviewed religious actors to include their viewpoints in *The New Sectarianism* (2017).

In *Black Wave*, Kim Ghattas keeps her focus on the region's own leaders and intellectual movements. But the wider picture includes the history of American support to political Islam and sectarianization across the broader Middle East. Religion was sponsored and sectarianized to counter Communism, socialism, and Arab, Turkish, and Persian nationalisms. This story is told in other books, such as Robert Dreyfuss's *Devil's Game: How the United States Helped Unleash Fundamentalist Islam* (2005). The author interviewed officials who funded the international propagation of religious conservatism as a bulwark against Communism. Eventually, these militant ideologies and militias would give rise to al Qaeda and the terrorist attacks of September 11, 2001.

Today, in spite of the catastrophic results, states continue to sponsor sectarian militias in other states as a form of "indirect warfare," and they continue to intervene in internationalized civil wars. With Carnegie Corporation of New York support, the American Bar Association's Center for Human Rights produces guidance on regulating the ongoing American policy of war "by, with, and through

proxies." Al Qaeda and ISIS are ongoing repercussions of geopolitical struggles that mobilized and weaponized religious identities for political ends. For some followers, sectarian regimes offered a simulated authenticity, a spurious return to tradition. But these regimes instrumentalized their followers to advance the political goals of their state sponsors.

Sectarianized conflict hit a new low in the tawdry orientalism of ISIS — with its invented Islamic past and spectacle of atrocity crimes. A project based at Central European University (CEU) examines phenomena such as ISIS as major breaks with the past, not as foreseeable continuities. CEU's Striking from the Margins initiative tracks marginal movements as they progress from the fringes to the mainstream in societies torn by misrule. In *Islams and Modernities* (2009), Aziz Al-Azmeh writes that a gap in meaning, an "abstraction from contemporary reality ... marks all fundamentalism: an absence is engendered, which is filled by interpretations provided by those with the means of enforcing an interpretation."

In sum, Ghattas's book elucidates the interface between power and public religion. It debunks the popular narrative of hatreds ancient, religious, and tribal that supposedly drive people — many of whom did not associate themselves with any sect or denomination or were only recently categorized as Sunnis and Shias, and then often by outsiders. *Black Wave* shows the conflicts to be modern and manufactured by political elites for purposes of domestic regime survival and foreign competition, particularly since 1979. Ghattas detects the wide-ranging fallout from these changes across the lives of the people she profiles.

Today, we need the political science and social science analysis of Arab-region scholars to understand the phenomenon of political sectarianization, because it occurs in every region. It can be found in the dynamics of party-political polarization, and in what UNESCO experts call "enemy image creation." Regional scholars have found it more accurate to speak not of sectarianism but of governance or conflict that *becomes* sectarianized — what political scientist Bassel Salloukh of Lebanese American University calls "the sectarianization of geopolitics." His work traces the dysfunction of confessional political systems as found in Lebanon and Iraq. In these systems, one's religious sect becomes one's political affiliation. You are *born* into your political party; it is a state-selected identity. Intended to ensure power-sharing and inclusive governance, these systems perform poorly for constituents. For example, following the 2003 U.S. invasion of Iraq, a Lebanese-style "muhasasa" political party system was installed in Iraq, in which political parties are essentially comprised of ethnic or religious identity groups. Dependent on the machines of patronage and clientelism, such systems feed endemic corruption, political paralysis, and nonaccountability. They are currently the object of

protest movements seeking to restructure political participation outside of sect identities.

Today in different ways, from Lebanon to Iraq, from Saudi Arabia to Iran, we may be witnessing a generational turn away from sectarian politics. Lina Khatib, director of the MENA Programme at Chatham House, cites popular demand for change in Iraq and Lebanon: “People have figured out that their economic distress is a product of their political system.” When Chatham House surveyed protestors, they heard, *I want a nation* — a demand for issue-based politics and a functioning nation state. Likewise, international experts trace these themes through the historical interplay of religion, secularism, and politics in *Citizenship and Its Discontents* (2019), a Century Foundation book edited by Thanassis Cambanis and Michael Wahid Hanna.

Has the tide ebbed? Will states instead turn to nationalism to seek their legitimacy? Nationalism can serve as a counterweight to transnational religious movements, although nationalism can also be fused with religion, as seen in the histories of Saudi Arabia and Iran. Saudi Arabia has in recent years made efforts to shift its narrative from religion to nationalism. In 2018, it created the nation’s first Ministry of Culture with a mandate to build “arts and culture across Saudi Arabia that enriches lives, celebrates national identity, and builds understanding between people.” Iran also shows sporadic signs of a shift toward nationalist discourse. And yet nationalisms, too, involve the pursuit of invented pasts. Kim Ghattas, time traveler, seeks a state at the service of its people. ■

Read Deeper

A select reading list of essential titles from current and past Carnegie Corporation of New York grantees

Age of Coexistence: The Ecumenical Frame and the Making of the Modern Arab World. Ussama Makdisi. Oakland, Calif.: University of California Press, 2019.

Beyond Sunni and Shia: The Roots of Sectarianism in a Changing Middle East. Frederic Wehrey, ed. London: Hurst & Company, 2017.

Citizenship and Its Discontents: The Struggle for Rights, Pluralism, and Inclusion in the Middle East. Thanassis Cambanis and Michael Wahid Hanna, eds. New York: The Century Foundation Press, 2019.

Cold War in the Islamic World: Saudi Arabia, Iran and the Struggle for Supremacy. Dilip Hiro. London: Hurst & Company, 2018.

Countering Sectarianism in the Middle East. Jeffrey Martini, Dalia Dassa Kaye, and Becca Wasser, eds. Santa Monica, Calif.: RAND Corporation, 2019.

The Culture of Sectarianism: Community, History, and Violence in Nineteenth-Century Ottoman Lebanon. Ussama Makdisi. Berkeley, Calif.: University of California Press, 2000.

Engaging Sectarian De-Escalation: Proceedings of the Symposium on Islam and Sectarian De-Escalation at Harvard Kennedy School. Cambridge, Mass.: Harvard Kennedy School Belfer Center for Science and International Affairs, 2019. Convened by the Belfer Center’s Iran Project. Available free online: shiasm.wcfia.harvard.edu/publications

Houses Built on Sand: Violence, Sectarianism and Revolution in the Middle East. Simon Mabon. Manchester: Manchester University Press, 2020.

The New Sectarianism: The Arab Uprisings and the Rebirth of the Shi’a-Sunni Divide. Geneive Abdo. New York: Oxford University Press, 2016.

The Politics of Sectarianism in Postwar Lebanon. Bassel F. Salloukh, Rabie Barakat, Jinan S. Al-Habbal, Lara W. Khattab, and Shoghig Mikaelian. London: Pluto Press, 2015.

Sectarianization: Mapping the New Politics of the Middle East. Nader Hashemi and Danny Postel, eds. London: C. Hurst & Co. (Publishers) Ltd., 2017.

Sectarian Politics in the Persian Gulf. Lawrence G. Potter, ed. New York: Oxford University Press, 2014. Published in collaboration with Georgetown University’s Center for International and Regional Studies, School of Foreign Service in Qatar.

The Siege of Mecca: The Forgotten Uprising in Islam’s Holiest Shrine and the Birth of al Qaeda. Yaroslav Trofimov. New York: Doubleday, 2007.

Wahhabism and the World: Understanding Saudi Arabia’s Global Influence on Religion. Peter Mandaville, ed. New York: Oxford University Press, forthcoming in its *Religion and Global Politics* series, 2021.

“What’s So Sectarian about Sectarian Politics: Identity Politics and Authoritarianism in a New Middle East.” Morten Valbjørn. *Studies in Ethnicity and Nationalism*, Vol. 19, No. 1. (2019).

Q&A with Kim Ghattas: The Middle East, History, and Hope

The Corporation's Nehal Amer interviews the Emmy Award-winning journalist about her latest book, *Black Wave*, which the author describes as a "One Thousand and One Nights" tale of modern Middle Eastern politics



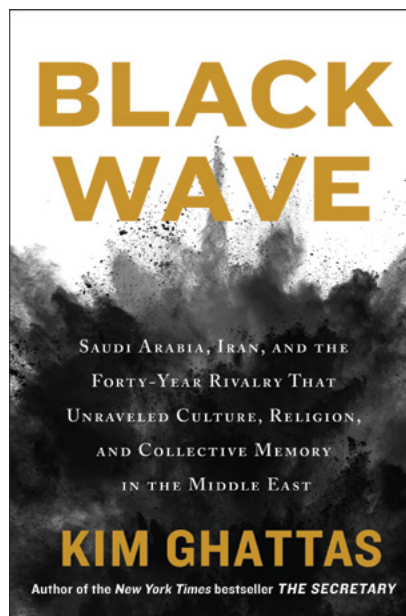
CREDIT: TAREK MOKADDEM

You've had a wide-ranging career as a journalist. Tell us about some of the most memorable events and places you've covered.

From my first reporting trip to South Lebanon in 1997, covering the Israeli occupation there, to the few months I spent in Pakistan in 2015 doing stories about the training of a women's police unit in tribal areas or the vaccine campaign against polio, to the final trip on Hillary Clinton's presidential campaign plane, landing at dawn on Election Day ... I've loved every moment of my career. Every story is special, every event memorable – and that's really not an exaggeration. I've felt very lucky throughout my career to have the opportunities I've had, meeting incredible people everywhere, who welcome you into their homes, their lives, and open their hearts to you. Some stories are intense and difficult, like the assassination of Lebanon's former prime minister Rafik Hariri in 2005, or the war between Israel and Lebanon's militant group Hezbollah in 2006. Some are incredibly special, like a radio piece I did on Sufi music and traditions in Aleppo. I often pull up my recordings from that trip and listen to the music again. It's a world that is now lost, after nine years of war in Syria. Throughout my career, this is what I've always tried to figure out: What does it mean? How does it affect people?

What inspired you to write *Black Wave*, and what were some of the challenges you faced?

Black Wave is the culmination of 20 years of reporting – in some ways, the combination of all the knowledge I had acquired and all the questions that were left unanswered, such as the one at the start of the book: "What happened to us?" It's a question that many of us in the wider Middle East ask ourselves when we think to the not-so-distant past, the past that our parents and grandparents lived in and



Black Wave: Saudi Arabia, Iran, and the Forty-Year Rivalry That Unraveled Culture, Religion, and Collective Memory in the Middle East
Kim Ghattas | Henry Holt and Company | 377 pp. | 2020

which is very different from our reality today. I wanted to understand how things had unraveled because the region has not always been in the throes of such despair, sectarian violence, and intolerance. And I wanted to tell our story, from our perspective in the region, to help change the narrative.

Initially, the biggest challenge was convincing my agent and my publisher that I was presenting them with a new, BIG idea about a region that people are really tired of hearing about, that I was offering a new reading of known history, one that would open people's eyes to a different way of looking at the Middle East. And that is precisely what I do with the book: I go against key misconceptions that people have about the Middle East, so I hope readers come away with a totally different perspective of the region. I get a lot of emails from readers telling me reading the book was an aha moment for them. The other challenge was realizing the enormity of the task: tackling 40 years, 7 countries, and 15 characters in one book. I got a lot of skeptical looks when I told people what I was about to undertake.

Black Wave weaves together — impressively — extensive historical research and on-the-ground reporting. Can you tell us a bit about your research process?

I started by writing a proposal for my agent that we would shop around to publishers. To write the proposal, which ended up being 70 pages, I spent a year reading, researching, and talking to people about my thesis: that 1979 was a pivotal year that began the unraveling, triggering the Saudi-Iran rivalry, which ultimately undid the region, igniting dormant sectarian tensions and unleashing the rise of political Islam and, with it, the rise of cultural intolerance. With the help of two part-time research assistants, I stress-tested the thesis, dug for information in books and articles, and did preliminary interviews. After a year of writing and fine-tuning, we presented the proposal to a publisher and got a book deal. Then the hard work started! I moved from Washington, D.C., to Lebanon because I knew this book had to be written while I was surrounded by the moods, the cultures, the languages, and the smells of the region. I wanted to be able to grab a quick coffee with a journalist who had witnessed the Iran Revolution, or someone who had lived in Saudi Arabia in the 1980s, or someone who had met Arafat. They would inspire me. I didn't want to be consumed by the policy world of D.C. — or else the book would have become something very different.

I knew all the countries I was writing about from my years of reporting. I traveled back to most of them, except Syria. I had been to Iran in 2015 while I was writing the proposal but was not able to return. I had two other research assistants in Beirut who were incredible and should get a lot of credit for what we achieved. They practically lived in the library of The American University of Beirut, going through books, newspapers, magazines, film footage, trawling the Internet for days and days, looking for all the big bits and the tidbits that helped me fill out the narrative with texture, color, and incredible detail, building on the interviews I had conducted. After six months of intense reporting, researching, and drafting, I spent a full month just organizing the pieces of the puzzle and figuring out the structure. The book is chronological, different characters moving through time and space simultaneously. It's a complex structure but it has to feel effortless for the reader.

You are careful not to paint the Middle East in a singular, monolithic light, but you do present the reader with an overarching argument: that the Saudi-Iran rivalry has shaped not only the politics but also the diverse

cultures of the region. Why did you decide to look at this particular question?

There are many turning points in the region that have had a huge political, geopolitical impact: from the fall of the Ottoman Empire to the creation of Israel to the U.S. invasion of Iraq. My argument is that none of these events transformed culture and religion or collective memory the way the year 1979 did. Before that year, Iran, a dominantly Shia country, and Saudi Arabia, a Sunni country, were allies. Competitive? Yes. But they were friendly, twin pillars in U.S. policy in the region to counter the Soviet Union. Before 1979, there were occasional communal disputes, grievances, and there have been battles in past centuries, but the Sunni-Shia divide did not feature in or define the geopolitics of the region. As custodian of the two most holy sites in Islam, Saudi Arabia had begun deploying religion as a soft power tool during the 1960s, but it did so haphazardly. Its efforts were not met with great enthusiasm. In 1979, Khomeini transforms Iran into an Islamic Republic, he has visions of leadership beyond his country's borders and beyond the world community of Shias. He begins to challenge the House of Saud in their leadership of the Muslim world — and that pushes Riyadh to deploy all the soft power tools at its disposal to rally the Muslim world to its side. With that comes a lot of money, billions of dollars — spent on education, religious education, literature, even cinema — that begin to transform people's cultural references, shaping a world that is more to Saudi Arabia's image. More conservative, more literalist, more puritanical. Meanwhile, Iran is busy doing the same, exporting its Islamic revolution where it can, including to places like Lebanon. That competition for hegemony, with religion as a tool, has a profound impact on the region. Slowly but surely it alters norms and references, and in doing so it transforms our collective memory.

Your first book, *The Secretary: A Journey with Hillary Clinton from Beirut to the Heart of American Power* (2008), is both an insider's account and a lens through which you engage with questions around America's role in the world. Talk about your experience writing *The Secretary*, a very different sort of travelogue from *Black Wave*. Does anything connect the two books?

Though I did not know it at the time, writing *The Secretary* was great preparation for writing *Black Wave*, almost like a first trial in terms of technique and structure. In my first book, I also take the reader on a journey, from country to country as I travel with the secretary of state around the world, from China to Pakistan to Morocco and on and on. I also try to tell the bigger story of American foreign policy, how it works and doesn't work, by telling the stories of the human beings at the heart of the machine. The biggest difference is that the period I cover in *The Secretary* is much more condensed — four years of the tenure of a secretary of state — and I am a witness to all the events I'm writing about. I know all the players in the secretary's entourage, and I interview them as the action unfolds. The book came out a month after Clinton left the State Department. It's a first draft of history, though it is not purely a biography about her time in office. *The Secretary* is a much bigger story about how American foreign policy affects people, what drives it, what hinders it. My own story as someone who grew up in Beirut, on the receiving end of American foreign policy, is part of the narrative and is the impetus of



The Ruins of Raqqa A member of the Syrian Democratic Forces (SDF), backed by U.S. special forces, stands on a building near Raqqa’s stadium as they clear the last positions on the front line in the Islamic State’s crumbling stronghold, October 16, 2017. This image starkly captures the results of proxy war and sectarianized conflict, and it should not be forgotten that the final destruction of Raqqa involved the bombing of civilians and civilian infrastructure.

CREDIT: BULENT KIILIC/AFP VIA GETTY IMAGES

the key question I try to answer in the book, the question that people still ask themselves in various parts of the world: How will American foreign policy affect me, affect my country? I must say though that *The Secretary* now feels like a book of ancient history, a template for how foreign policy was conducted once upon a time, perhaps to be revived under a different president.

For several years now, protests have been unfolding throughout the region — in Iraq, Lebanon, Sudan, Algeria, and Iran. Can you help us understand these protests in light of what you discovered while writing *Black Wave*?

Not everything that is wrong in the region is due to 1979 or the Saudi-Iran rivalry, but that rivalry undergirds a lot of the dynamics and exacerbates a lot of the current issues. Of course, another key driver is the Arab-Israeli conflict — it is in the name of the fight against Israel that countries like Egypt and Syria justify their bloated defense budgets, the repression of civil society, etc. The interplay between these two trends, combined with problematic American foreign policy, such as invasions or supporting dictators for the sake of maintaining stability in the region, is what has led much of the Middle East to sink into the crushing darkness in which it finds itself today. It should be no surprise that people revolt. The younger generation does not want to remain wedded to the old ways of

doing things, it doesn’t want to be held hostage to the ghosts of 1979. A majority of young people polled also say religion plays too big a role in everyday life. They want governments that are accountable and uncorrupt, that offer solutions, employment, governance. They want what everybody wants, everywhere: dignity and justice.

Think of the general reader, not an area specialist. What do you want them to take away from your book?

This book is not for specialists. It’s very much for the general reader who is interested in knowing more about the Middle East. It’s not a light read, but it’s a page-turner. So I would say: come with me on a journey through time, a “One Thousand and One Nights” tale of modern Middle Eastern politics, and discover a region that is more interesting, more vibrant, more diverse, and more tolerant than any newspaper headline would lead you to believe. Meet some incredible people who are just like you, whoever you are, anywhere you are. People who fight for what is right, who recite poetry, march for their rights, defy dictators, sing when music is banned, tell jokes to keep smiling. Most of all, I would say this book will show you that the Middle East has not always been as dark as it is today, because of various accidents of history, and therefore, it can also recover and move forward on a better path. The answer is within us, our own history, our own rich culture. ■



1920/2020: IS IT DÉJÀ VU ALL OVER AGAIN?

Global threats like the coronavirus pandemic are transforming the world today. An existential truth has emerged: the misalignment between our ability to govern and the breakneck pace of social and technological change is growing at an alarming rate. This is not a new story

By **Eugene Scherbakov**



n an unremarkable day in January just over one hundred years ago, the age of empire in Europe came to an end. The colossal states that ruled over vast, multiethnic territories with supreme self-confidence

suddenly ceased to exist. Empire's end arrived with a bang, not a whimper, to be sure. Though the Treaty of Versailles that came into effect in early 1920 redrew the map of Europe, the great monarchs sealed their own fates when they ambled unwittingly into the fires of the Great War. Their demise demonstrates the cost of miscalculation when the pace and scale of technological and social change outstrip political capacity and imagination. Once begun, the war proceeded according to a brutal logic of bloody and unexpected escalation, culminating in the destruction of the very states that had presided over the rise of modern Europe. As we reflect upon the war a century later, we may be surprised to find that the similarities between our time and that not-so-distant past are more troubling than the differences.

Over the course of the 19th century, scientific and technological progress advanced at such a pace that the governing bodies could scarcely grasp the enormity of the transformation of the very ground beneath their feet. They were lulled to complacency by their own seeming immutability. Changes within their realms were embraced as indications of progress and celebrated in tribute to the greater glory of the states themselves. Writing of the replacement of gas streetlamps with electric lighting, the novel rapidity of horseless carriages, and the newfound ability to soar aloft like Icarus, the Viennese writer Stefan Zweig recounts how “faith in an uninterrupted and irresistible ‘progress’ truly had the force of a religion for that generation. One began to believe more in this ‘progress’ than in the Bible, and its gospel appeared ultimate because of the daily new wonders of science and technology.”

Technological progress in turn-of-the-century Europe may strike modern readers as quaint and innocuous. Today, after all, leading firms compete to achieve quantum supremacy in computing, political leaders darkly intone that mastery of artificial intelligence will lead to global domination, and Silicon Valley billionaires look to the stars — investing immense capital in the production of satellites and spaceships to mine the mineral wealth of asteroids.

Just as in Zweig's Vienna, however, today's world leaders are hard-pressed to comprehend the complex networks of social and technological forces that undergird the foundations of modern life. High up over our heads, along with the fixed satellite relays that provide instant face-to-face communication with anyone, anywhere, in real time, are concealed satellites that states rely upon to receive and transmit critical information to submarines, perform surveillance and reconnaissance, and provide early-warning monitoring for missile launches. Satellites are an

example of a “dual-use” technology: that is, a technology that can be used for both socially beneficial and military purposes. In this sense, they are not dissimilar from railroads in the 19th century.

Railroads spiderwebbed across the European continent in the 1800s, and in the process reshaped national economies, industries, and cultures. Their very ubiquity became a key component of German military planning — strategic surprise leading to quick victory — in the years leading up to World War I. By mobilizing and rapidly deploying thousands of troops via the railroad, imperial German strategists believed that they could deliver a knockout blow to France before turning to engage the Russian Empire on their eastern flank. Today, some scholars suggest that an overreliance on satellite and communications technology presents a similar temptation for military planners: the alluring appeal of the first strike, of a sudden and overwhelming surprise attack. Consider, for example, the confusion that would result from an unexpected strike that disabled the early warning military satellites used to detect the launch of nuclear missiles.

If history is any guide, we should take warning. When the German surprise attack on France was rebuffed on the banks of the Marne River, the deployment of modern machine guns — whose use was largely unaccounted for in 19th-century German strategy — necessitated the digging of trenches to protect troops from devastating attack. Frustration with the intransigence of trench warfare led generals to seek out advantages by modern means. Chlorine gas, newly synthesized and manufactured thanks to breakthroughs in the chemical sciences, was found to be an effective means of targeting enemy trenches from afar. Suddenly, what was to have been a very quick engagement became an epochal rupture.

James Acton, codirector of the Nuclear Policy Program at the Carnegie Endowment for International Peace, defines the potential risk of military confrontation spilling over into nuclear escalation derived from the increased complexity and interconnectedness around dual-use technologies as a problem of *entanglement*. Acton writes:

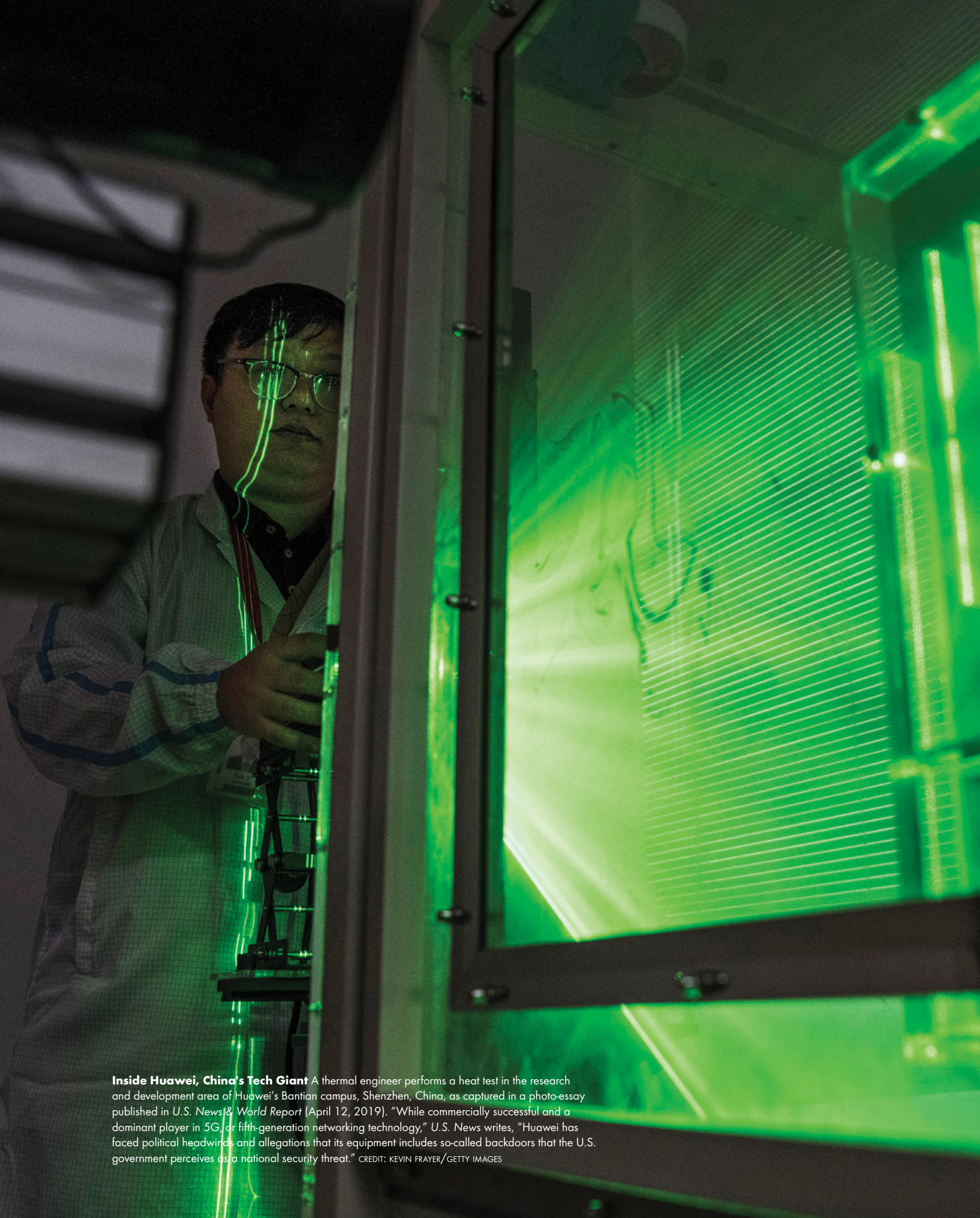
In a conventional conflict, if U.S. defenses were effective in intercepting Russian non-nuclear missiles fired against targets in Europe, Russia might attack U.S. early-warning satellites to blunt these defenses.

However, because such an attack would also degrade the United States' ability to detect incoming nuclear strikes, Washington could interpret it as the prelude to a Russian nuclear attack — potentially resulting in escalation.

What differentiates risk today from that of a century ago is that entanglement may be inadvertent. The Imperial German Army of 1914 *intended* to utilize the relatively



Safe at Home Sitting on the front stoop of his house, an American soldier models his gas mask, ca. 1919. First used in World War I by the Germans at the Second Battle of Ypres in 1915, chlorine gas proved an effective means of targeting enemy trenches from afar. Following the deadly Ypres attack, the London *Daily Mail* condemned the "cold-blooded deployment of every device of modern science," thundering, "Devilry, Thy Name Is Germany!" Within months, Britain would attack German trenches with gas at the Battle of Loos. CREDIT: KIRN VINTAGE STOCK/CORBIS VIA GETTY IMAGES



Inside Huawei, China's Tech Giant A thermal engineer performs a heat test in the research and development area of Huawei's Bantian campus, Shenzhen, China, as captured in a photo-essay published in *U.S. News & World Report* (April 12, 2019). "While commercially successful and a dominant player in 5G, or fifth-generation networking technology," *U.S. News* writes, "Huawei has faced political headwinds and allegations that its equipment includes so-called backdoors that the U.S. government perceives as a national security threat." CREDIT: KEVIN FRAYER/GETTY IMAGES

modern technology of railroads to launch a surprise attack. The attack failed due to miscalculation, resulting in a grim and unforeseen sequence of cascading escalations culminating in the death of 40 million people and the demise of the imperial grandeur that had occupied the European imagination for centuries. Today, such a series of events could be set in motion without the first shot being knowingly fired.

That is because, unlike railroads and train cars, there is more to satellites than meets the eye. Satellites themselves are a *physical* aspect of a novel digital realm made up of a myriad of well-nigh impossible to trace interrelations, connections, and dependencies. While a satellite orbiting many thousands of feet above our heads can be physically disabled, for instance by a missile or a spacecraft (a scenario some strategists worry about), it can also be hacked into remotely, monitored, disabled, or taken over by the same keyboard that can be used to attack a kitchen toaster, an electric car, a city power grid, or a polling booth. Furthermore, satellites invariably depend upon networks of other systems to receive and process the signals they send, and those systems bring with them their own risks and vulnerabilities. In other words, satellites, like office computers, airplanes, elevators, and hospital ventilators, are only as secure as the systems they depend upon. If a determined nonstate group targeted a power supply or a telecommunications network, they could unintentionally — or intentionally — blind an early-warning satellite and thereby precipitate a nuclear crisis between states.

It gets worse. Not only are cyberweapons invisible to the naked eye, but their very efficacy lies in their concealment: once an adversary becomes aware of the existence of a cyberweapon, a suitable defense can be quickly engineered and the weapon effectively neutralized. Unlike previous paradigms of warfare, the absolute emphasis on protecting the secrecy of cyber operations makes it extraordinarily difficult for competing states to develop confidence-building measures or safeguards to protect against inadvertent escalation.

Nuclear arms control, for example, depends upon the willing disclosure of military assets in order to function effectively, enhancing mutual understanding of each party's capabilities and intentions. The Open Skies Treaty, currently in jeopardy of falling victim to mistrust, allows states to conduct regular surveillance flights over adversarial territory to observe troop movements and weapons arsenals for themselves. It was precisely this ability to inspect the activity of treaty partners that ushered in an age of arms control and cautious good will, informed by Ronald Reagan's pithy formula: "Trust, but verify."

In cyberwar as it is currently waged, there can be neither trust nor veracity. Rules of the road are figured out on the fly, in combat, in the dark. To operate in this mercurial

arena, the United States has adopted a policy of "persistent engagement." *Achieve and Maintain Cyberspace Superiority* describes cyberspace as a "fluid environment of constant contact and shifting terrain," wherein the "constant innovation of disruptive technologies offers all actors new opportunities for exploitation." This April 2018 "roadmap" for U.S. Cyber Command (USCYBERCOM) states that "the United States must increase resiliency, defend forward as close as possible to the origin of adversary activity, and persistently contest malicious cyberspace actors to generate continuous tactical, operational, and strategic advantage."

Picture a cat's cradle strung with thermonuclear trip wires and threaded between the fingers of a number of rivals, each of whom actively seeks to undermine and attack the others. The lights are off and the barriers to entry are not forbiddingly high. Any party with sufficient programming expertise and computing capacity can enter the arena and pick up a thread. Apart from its piquancy, the image suggests a deeper level of uncertainty below the technical. Beyond the tangle of tripwires, the complexity and risk of the predicament is compounded by the variety of psychologies at play. Quite apart from understanding which string could lead to which effect, there is a lack of understanding of how individual players might interpret any specific action.

In a 2016 report that sought to find common ground between the United States and Russia in regards to cybersecurity, Harvard's Working Group on the Future of U.S.-Russia Relations began by noting that the two rivals do not even use the same terminology to describe the threat: "Russia emphasizes 'international information security,' whereas the United States believes that cybercrime, cyberespionage, and cyberterrorism are the main threats in this domain and so prefers the term 'cybersecurity' and a focus on the protection of computer networks and resources." The prescient report went on to highlight a troubling concern: rising consternation in the Kremlin that its dependence on a global system of interconnected computer networks administered from outside its borders was a threat to its sovereignty, and that the country had begun to seek methods to protect itself, including decoupling from the Internet altogether. Four years later, just such a decoupling appears to be coming to pass.

While some challenges can be addressed with technocratic solutions, others are rooted in pathologies more nebulous and difficult to parse. According to the late Cambridge historian C. A. Bayly, it is the latter that powers the centrifuge of history. While discussing the "motors of change" in the 19th and 20th centuries, Bayly identified war as a principal driver, but argued that as a frame of analysis, its purchase was limited. Where, after all, does war come from? Surveying the 20th century, he observed that while warfare both fueled and was fueled by the demand for economic growth and expansion, the direction of conflict

Unfamiliar technological and social conditions teeter upon ossified political structures in a moment eerily similar to the early years of the 20th century. The time has come to pinch ourselves and ask if we are dreaming. Were a misstep to wake us, we might long for the days of horseless carriages, flying machines, and the “dim street lights of former times.”

itself was provided by national and extranational identities. “Cecil Rhodes’s career in southern Africa, or the project of building the Berlin–Baghdad or Trans-Siberian railways, were ultimately directed by states or political actors attempting to ensure [not only] their wealth, but also their *identity*.” In the thaw of the Cold War, the twin energies of globalization and the rise of the Internet compressed time and space, bringing the pressures of wealth acquisition and identity to a head as never before. Today, the example par excellence of Bayly’s insight may be found in the global struggle over Huawei, the Chinese government–backed telecommunications company.

The determination with which the United States has sought to deter its allies from purchasing Huawei’s communications infrastructure speaks to its recognition that the contours of commerce and social engagement in the 21st century will be determined by the computer code that routes them. In the succinct formulation of Harvard’s Lawrence Lessig, “code is law.”* In the coming decades, as more and more physical commodities and social processes come online, that code and network will become a broadening tributary channeling an ever-increasing supply of human activity: shoes, refrigerators, thermostats, but also Internet browsing and chat functions, archival access, and — not least — telemedicine, logistics planning, taxation, energy, and voting. To handle the sheer increase in web traffic volume resulting from such a boom, we will require network and communication services with greatly increased capacity. As of 2020, due to underinvestment, there is no credible Western alternative to Huawei, whose rise and adoption across broad swaths of Asia and Africa, and now Europe, has been subsidized as a national priority project of the People’s Republic of China.

As the enormous transformations taking place in the late 19th and early 20th centuries disrupted social norms and generated novel political demands, declining landowning and military elites were unable to adapt to the changing circumstances. Dismayed by an emerging world in which their stature was not guaranteed, the *ancien régime* — ranging from German *junkers* and Russian nobles to British and French aristocrats — sought in vain to manage popular social movements with nationalistic rhetoric and, ultimately, conscription. We should take care to heed the lack of political imagination to conceive of or keep up with the massive changes underway. The misalignment between our ability to govern and the breakneck pace of social and technological change grows at an alarming rate. We agitate about immigration, as if a wall could keep out a pandemic. We lavish ever greater fortunes upon our militaries, while the U.S. military is one of the single greatest carbon emitters on this planet. We undermine and revoke stabilizing international treaties, as reality dissolves into quanta before our eyes. Entanglements multiply by the inexorable progress of technological and scientific innovation. Machine learning, lethal autonomous drone swarms, artificial intelligence, and quantum computing crowd a dark horizon. A besieged climate will continue to spark conflagrations and catalyze social, economic, and political unrest. Unfamiliar technological and social conditions teeter upon ossified political structures in a moment eerily similar to the early years of the 20th century. The time has come to pinch ourselves and ask if we are dreaming. Were a misstep to wake us, we might long for the days of horseless carriages, flying machines, and the “dim street lights of former times.” ■

*For the website *Above the Law* (August 12, 2019), Olga V. Mack provided some context for this famous dictum: “[W]hen Lessig first used the phrase, he didn’t have in mind its contemporary usage. Lessig doesn’t argue that if software code permits an action, it is necessarily allowed. And he definitely doesn’t argue that software will replace law.” Rather, Mack explains, “when he wrote that ‘code is law,’ Lessig was arguing that the Internet should incorporate constitutional principles. Lessig astutely observed early on that the software that underlies the very architecture and infrastructure of the Internet governs it as a whole. But who decides what the rules of code are? Who are the architects behind these code-based structures? There is an obvious and troublesome lack of transparency.”

For the next decade, long after the COVID-19 pandemic is hopefully over, data from the 2020 Census will be used to give classrooms and public health facilities the federal funding they need, communities the democratic representation they deserve, and more. Amid the fears of today, the census is as essential and as vital as ever.

— **Geri Mannion**, Director, Strengthening U.S. Democracy Program, Carnegie Corporation of New York



GOVERNMENT

CENSUS

2020

Division for Computer and Communications of Census del 2020

Who Counts? What Counts?

The 2020 Census and Beyond

The census will impact virtually every aspect of American life for the next decade, informing the distribution of \$8 trillion in public funds for a range of social services including education and health care. But it's not all about money. The census is key to the allocation of political power

By **Michael Connor**

The coronavirus pandemic, a cascade of layoffs and business closures, ongoing mass anti-racism protests, and a presidential election in November. These realities, among other challenges, make up the backdrop of the 2020 Census as the U.S. Census Bureau continues a national head count that it has conducted once every decade since the presidency of George Washington.

The census has seldom been as important — for students, parents, mayors, governors, the ill, the poor, educators, entrepreneurs, health and social service providers, and city planners, among others. While the principal use of the information collected in the census, as identified in the Constitution, is to apportion seats for the U.S.

House of Representatives, the data also serves a host of other purposes. It will be used to enforce civil rights and housing laws, and to fund services such as child welfare, school lunches, and disability programs. The 2020 Census will affect federal payouts until 2030, totaling trillions of dollars and shaping decisions great and small.

The huge amounts of money at stake demonstrate the importance of the census. For example, more than \$1.5 trillion in federal funds was dispersed during fiscal year 2017 for 316 programs directed to cities, towns, and state governments on the basis of 2010 census counts and analyses. In fiscal 2016 alone, California, the most populous state, received \$115 billion in federal monies tied to the results of the 2010 Census.

Health care, disaster preparedness, and transportation, among many other resources and services, are allocated according to the respective size of each state, based on census counts. The Coronavirus Aid, Relief, and Economic Security Act, also known as the CARES Act, recently distributed trillions of federal stimulus monies to states using data from the 2010 Census.

“Census numbers have a life across the decade,” according to Kenneth Prewitt, former director of the United States Census Bureau and Carnegie Professor of Public Affairs at Columbia University. “If a state is shortchanged in the apportionment of congressional representation or a school system is shortchanged in new construction funds, it’s not a one-year problem but a ten-year problem.”

The census sets the table as well for public, private, and nonprofit decision makers, who in the coming decade look likely to face greater stresses than they did during the 2010s. States and municipalities, weighed down by recession, will be short on revenues, even as spending on unemployment and other social service programs will need to increase. Census data is used to track population trends for infrastructure projects, for commissioning factories and launching products, and for deciding where and how to invest philanthropic resources.

“There is not a Costco or a Starbucks sited in this country without the census,” according to research economist Andrew Reamer, who specializes in census-based funding at George Washington University in Washington, D.C. “The Census is like our economy’s plumbing. Lots of decisions flow through that data.”

Even before COVID-19 hit in the spring, the 2020 count was already facing intense challenges. “There were major concerns about the ability of the U.S. Census Bureau to achieve a fair and accurate count in the 2020 Census,” says Geri Mannion, director of Carnegie Corporation of New York’s Strengthening U.S. Democracy program. “The census is one of the most important elements of the U.S. democracy framework — and it is a constitutional requirement.”

Five years ago, 15 major philanthropies, including Carnegie Corporation of New York, joined together to establish the Funders Census Initiative (FCI), working to make sure that the 2020 Census included hard-to-count populations that had been underrepresented in the 2010 Census. Since then, the initiative has raised \$90 million from philanthropic institutions and leveraged another \$350 million from government and other sources to ensure a fair and accurate count. The initiative has focused on advocacy, communications, organizing, litigation, and public education to ensure that census operations are adequately funded by the federal government.

//////////
Census data is used to track population trends for infrastructure projects, for commissioning factories and launching products, and for deciding where and how to invest philanthropic resources.

//////////
FCI helped litigate a citizenship question that the Trump administration sought to add to the census form, a move ultimately blocked by the Supreme Court. But despite the win in court, mistrust of government lingers among people of color and immigrants, potentially decreasing census participation by these households. According to a 2018 Census Bureau survey, 60 percent of the public mistrusts the federal government; 53 percent believe the census is used to locate the undocumented; 28 percent doubt that the Census Bureau will keep their answers confidential; and one in five Americans believes census answers can be used against them. As Mannion explained in an interview with Carnegie Corporation of New York grantee GCIR (Grantmakers Concerned with Immigrants and Refugees), “The citizenship question, even though it is no longer on the census form, left behind a lot of fear of filling out the form, especially in immigrant communities.”

“The Funders Census Initiative is an excellent example of how foundations — at the national, regional, state, and local levels — can work collectively toward fixing a problem that we know is coming and to really engage around it in advance,” Mannion said during 2020 Census & COVID-19: What Funders Can Do to Support a Fair and Accurate Count, a Council on Foundations webinar. “Here we actually thought about it five years out. And that has paid off.”

Undercounts are always a big concern, and the pandemic has heightened worries about the demographics that are historically difficult to count, such as low-income and minority populations, children under the age of five, and residents of rural communities and Native American reservations. According to the Census Bureau, in the 2010 Census, Black Americans were undercounted by more than 2 percent and Hispanics by 1 percent, while nearly 5 percent of Native Americans on reservations were missed. In addition, nearly 5 percent of all children under age five were not counted — that is one in every 20 kids.



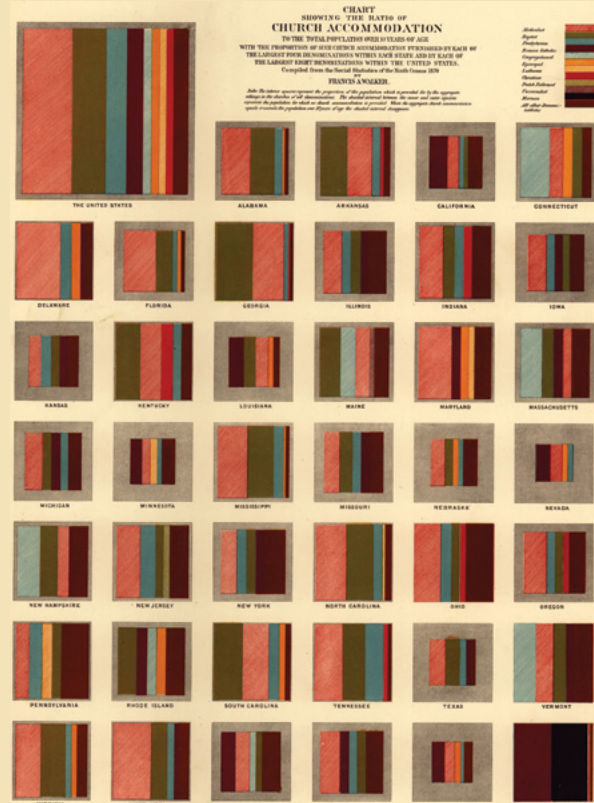
Midcentury Nose Count (TOP) Colorado census taker Bette Maxwell, traveling on snowshoes with census books in hand, was featured in “US Counts 151 Million Noses,” published in *Life* magazine, April 17, 1950. (ABOVE) Also in April 1950, Kiyto Sugiua and his wife, owners of the Elsinore Hotel in Denver, were interviewed by census bureau enumerator Leo J. Cronin. With the Sugiuias are their two children, Noma and Shuni. CREDITS: CARL IWASAKI/THE LIFE IMAGES COLLECTION VIA GETTY IMAGES; AL MOLDAVAY/THE DENVER POST VIA GETTY IMAGES

These undercounts most heavily impact marginalized communities, and part of what census funders do is spread the word about the critical importance of the once-a-decade count. With support from the Corporation’s Democracy and Education programs, the nonprofit Simply Put Media produced and promoted *We Count!* — a “2020 Census counting book for young children and the grownups who love them.” Translated into 15 languages, the illustrated book encourages families to participate in the 2020 Census to ensure that they — and their young children — are accurately counted.

While the pandemic and related school closures affecting 55 million K–12 students have played havoc with the campaigns meant to boost census participation, the pandemic itself has illuminated issues of inequality and access. “We are seeing public institutions, such as hospitals, schools, and other support systems, being disrupted and overburdened right now,” says LaVerne Evans Srinivasan, vice president of Carnegie Corporation of New York’s National Program. “In ordinary times, people aren’t as worried about the census, but now we are actually focusing on how hospitals are funded, how schools are funded. On the one hand, public attention has shifted to the pandemic. But on another level, the pandemic has actually brought to the fore the issues that the census and the funding behind it are designed to address.”

The stakes for schools, especially those coping with concentrations of social dysfunction and chronic underfunding, are especially high in the 2020 Census, according to Randi Weingarten, president of the American Federation of Teachers labor union. Any discrepancies will drag on a school for the next 10 years — until there are adjustments following the 2030 census.

“Wherever there are undercounts, students will not get the resources



1870 America, Visualized Mapping employment, education, and religious affiliations of persons over the age of 10 for each state, these charts were compiled from the population counts and social statistics of the ninth U.S. Census of 1870, under the direction of Francis A. Walker, the economist and statistician who served as superintendent of both the 1870 and 1880 censuses. As the chart on the left shows, in 1870 the largest proportion of gainfully employed Americans were “engaged in agriculture.” The percentage of the population over 10 years of age who were attending school (yellow) varied greatly by state. The chart on the right shows that America in 1870 was overwhelmingly Protestant, with Methodists forming the largest denomination, followed by Baptists and Presbyterians. CREDIT: BUYENLARGE/GETTY IMAGES

they need. A lot of resources, like Title I and Medicaid, are tied to the data,” Weingarten told the *Carnegie Reporter*.

Weingarten, whose union has 1.7 million members, said schools serving students from broken, impoverished, or otherwise dysfunctional homes will be especially vulnerable.

“I think we are going into recession, just as we are getting back some of the funding from the last one,” she said. “Even still, 21 states are spending less on public education than they were when the last recession came around.”

Beyond dollars and cents, Weingarten said, the census at its best promotes democracy and a better civil society by identifying and bringing into the public fold people and groups that are newly arrived or struggling to assimilate.

“It is important for people to be seen, and the census makes sure that happens,” says Weingarten.

To ensure the highest census counts possible, U.S. philanthropies, nonprofits, local governments, and many states had been campaigning through schools, community centers, social services, and other agencies before the country was hit with the COVID-19 lockdown. Indeed, most schools were closed by the time official Census Day (April 1) rolled around — and outreach efforts and campaigns to get people to complete the census were forced to move online.

“People were and are concerned that there may be an undercount,” according to Ambika Kapur, who leads the Education program’s Public Understanding portfolio at Carnegie Corporation of New York. “The census allocates billions of federal dollars for education. Schools and districts have been actively concerned and have been encouraging communities to complete the census.”

Like much of the country, the Census Bureau was deeply affected by the coronavirus pandemic and suspended



Keeping Tabs U.S. Census Bureau workers transferring data to punch cards that will be used with mechanical statistical machines. Washington, D.C., ca. 1940. CREDIT: LIBRARY OF CONGRESS, PRINTS AND PHOTOGRAPHS DIVISION

////////////////////////////////////
The census is also key to the allocation of raw political power. State legislatures will be rejiggered by redistricting based on the results of the 2020 Census. The House of Representatives' 435 seats will be reallocated among states after the census, and the U.S. Electoral College — the body that ultimately determines who will move into the Oval Office (and which has twice since 2000 overruled the popular vote) — reapportions its seats among the states following each census.

////////////////////////////////////
most operations for six weeks beginning in March. It is now targeting its door-knocking enumerating surveys for August. The customary June 30 completion deadline has been extended to October 31 — three days before the November 3 election.*

The census is also key to the allocation of raw political power. State legislatures will be rejiggered by redistricting based on the results of the 2020 Census. The House of Representatives' 435 seats will be reallocated among states after the census, and the U.S. Electoral College — the body that ultimately determines who will move into the Oval Office (and which has twice since 2000 overruled the popular vote) — reapportions its seats among the states following each census.

Florida and Texas look to be the biggest winners in the coming postcensus reallocations. Each of those rapidly growing states will gain two or more House seats, giving them more pull in Congress, while five other Western and Southern states will pick up seats, according to a Brookings Institution analysis.

“Ten states are projected to lose one seat each. The most noteworthy of these is California, which has never lost a House seat via reapportionment,” said William Frey, senior fellow at the Brookings Institution. “Other states projected to lose seats are located in the Midwest (Minnesota, Illinois, Michigan, Ohio), the Northeast (Pennsylvania, New York, Rhode Island) and slow-growing parts of the South (West Virginia, Alabama).”

As of July 14, before census workers had begun knocking on doors, the response rate was 62.1 percent, which translates to 91,800,000 households that have returned the questionnaire by mail or responded to it online. That appears to be a respectable rate, especially considering the profound disruptions of COVID-19 quarantining and

the attendant widespread economic disruptions, but it is significantly shy of the comparable 2010 response rate of 66.5 percent.

According to the UN Population Fund, a national census is one of the biggest tasks short of going to war that a government undertakes. The U.S. Census in 2020 is expected to cost \$92 per American household, up from \$16 in 1970. The most labor-intensive part of the census involves enumerators — door knockers more commonly known as census takers — who will canvas households from Alaska to the Florida Keys, tracking down and questioning in person the millions of households who have not yet responded to the census questionnaire.

Each U.S. Census builds on its predecessors and innovates. This year's head count is the first to allow U.S. residents to respond online, as well as by filling in traditional printed forms or by speaking to an enumerator. Census officials also rolled out algorithms meant to enhance the security of private details. Census workers in New York City, where local officials claimed 50,000 people in Queens and Brooklyn were missed during the 2010 head count, are redoubling efforts on outliers such as a crowded block on Grand Street in lower Manhattan where not a single person returned a completed census form a decade ago.

As Mannion points out, America's democracy begins with counting every individual, in spite of, and particularly in light of, present challenges. “For the next decade, long after the COVID-19 pandemic is hopefully over, data from the 2020 Census will be used to give classrooms and public health facilities the federal funding they need, communities the democratic representation they deserve, and more. Amid the fears of today, the census is as essential and as vital as ever.” ■

.....
*As this magazine went to print, Census Bureau director Steven Dillingham confirmed in a statement (Aug. 3, 2020) that all census field operations, including in-person door-knocking interviews by enumerators, as well as telephone and online efforts, would end on Sept. 30 — rather than Oct. 31. This last-minute decision may mean more litigation and advocacy.

Infopoetry

How do we reconcile the description of a phenomenon with the experience we have about it? A “poetic” approach to data could help: there are moments in the data-journey when “feeling” the phenomenon behind the data could be as relevant as accurately “seeing” the data that represent it.

DensityDesign Research Lab | Politecnico di Milano |
Milan, Italy | densitydesign.org

RE-FOCUS

Thinking in New Ways with Data Visualizations

By **Aaron Stanley**

How can we better comprehend the world and its complexities? One way is by seeing information differently. Data visualizations present layers of perspectives, helping us gain new understandings. The visualizations presented in this portfolio include data relevant to Carnegie Corporation of New York grantmaking — from immigration and civic engagement to transnational movements and long-term conflicts. These visualizations challenge us to contemplate how our world is interconnected.

Grasping complexity is inherently difficult. The amount and types of information available to digest in our era of big data are increasing at a dizzying pace. Previously unfathomable amounts of material — from text and images to audio and video recordings — allow for large-scale analysis beyond traditional counting exercises. With this deluge of data, a range of presentation methods and techniques has arisen. While not new, data visualization is an increasingly popular tool. Today, data artists condense large and multifarious data into concise, dynamic, and engaging designs.

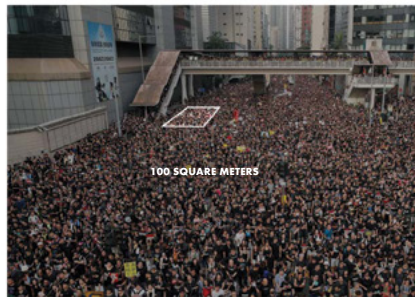
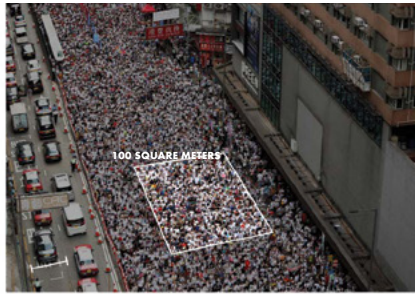
Like fine art, data visualizations draw us in with colors, patterns, and recognizable shapes. A good data visualization directs our eyes to important points, outliers, and trends using contrasting and complementing colors, positioning on the page, and the effective use of space. The best visualizations engage us seamlessly, providing information that moves us to examine our biases and assumptions, and with improved technology, interactive visualizations are allowing us to dive even deeper into the data. Moreover, a great visualization does not tell a single story but rather invites the viewer to engage with the content on multiple levels.

Visualizations can help us understand complex events like COVID-19, which began in China and then spread exponentially throughout the rest of the world. Global threats like pandemics, inequality, authoritarianism, terrorism, and climate change can be seen as interconnected — and directly connected to local issues.

The data visualizations that follow give a sense of the fluidity, fragility, and interdependency of our world. As you move through these visualizations, we invite you to explore the connections, consequences, opportunities, and threats — made visible in our collective data. ■



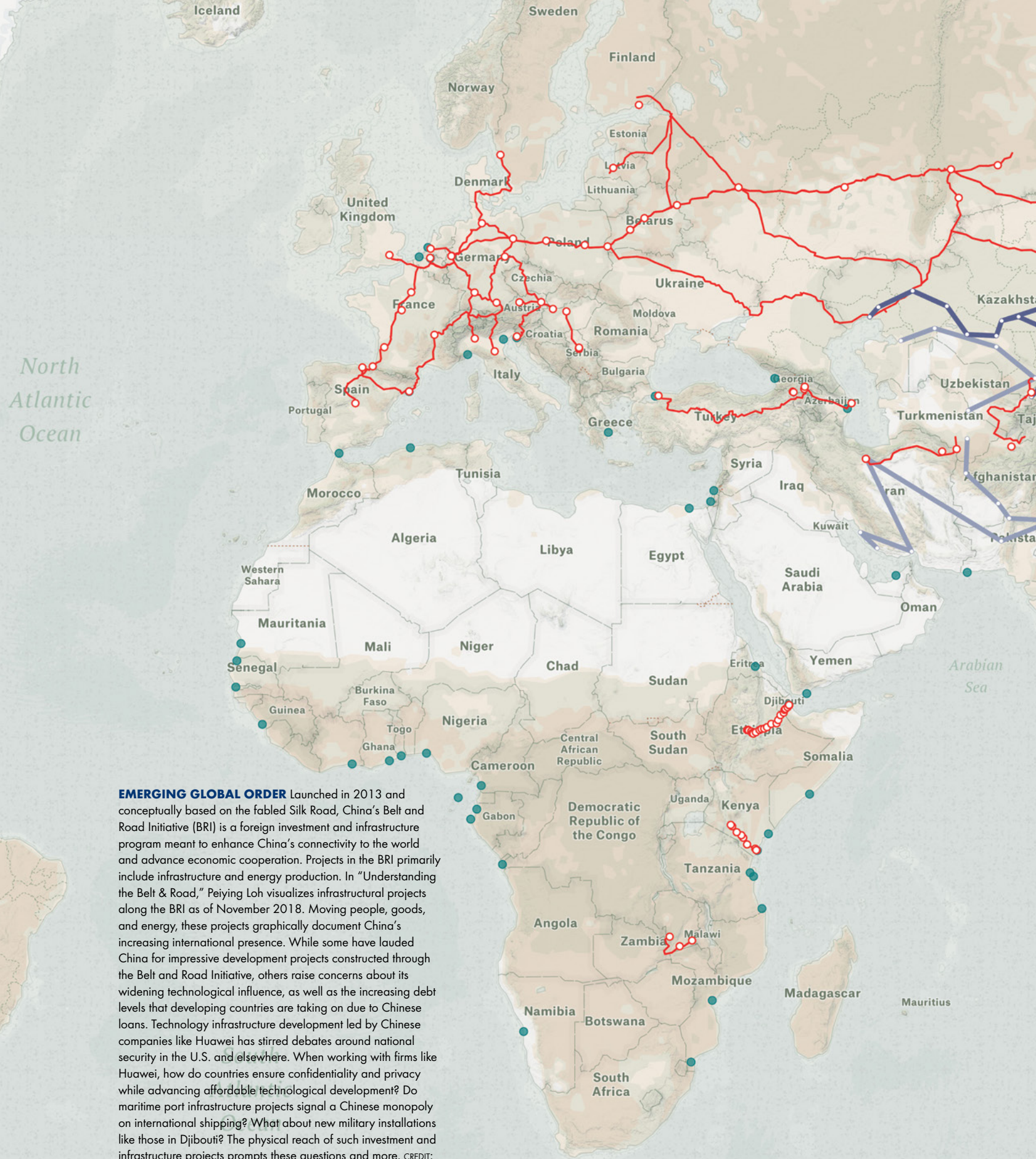
DO I EXIST? Around the world, an official form of identification is crucial for accessing a range of services and claiming rights such as voting. Routine activities like opening a bank account and travel normally require credentials, yet hundreds of millions of people worldwide do not have an officially recognized form of identification. Kasae Seyed Sajad’s visualization “Counting the Uncounted” confronts us with the conundrum of undocumented populations around the globe. CREDIT: THIS DATA VISUALIZATION WAS DESIGNED BY KASAE SEYED SAJAD AS PART OF THE DENSITYDESIGN RESEARCH LAB COURSE (2018/19) WITH FACULTY P. CIUCCARELLI, S. MANDATO, M. MAURI, S. VANTINI, S. ZINGALE



HEAD COUNTS In June 2019, protests erupted across Hong Kong against a proposed bill that would allow the extradition of some criminal suspects to mainland China. Opponents of the plan argued that such extraditions were another bid by mainland China to expand control over semi-autonomous Hong Kong. Protestors came out in droves, spilling onto overflow routes as they marched from Victoria Park to the Legislative Council. Determining the size of protests has become an increasingly contentious issue – and not just in Hong Kong. Protest head counts are used as an indicator of the energy and strength of a movement, popular sentiment, and the efficacy of a movement’s organization. As a result, organizers regularly cite inflated numbers while government officials habitually underestimate crowd sizes. In “Measuring the Masses” (June 20, 2019), Reuters journalists Simon Scarr, Manas Sharma, Marco Hernandez, and Vimvam Tong used photographs to present the data science of accurately estimating the population of a dense and constantly moving crowd during the Hong Kong protests. Variables like density and the speed of the crowd’s movements are essential to arriving at an accurate count. Still, as one expert observed, actual numbers are not as meaningful as “whether you can feel that the mass of people [are] coming out.” CREDIT: © THOMSON REUTERS

RICH TOWN, POOR TOWN While increasing immigration may correlate with decreasing crime in most American cities, income inequality has become a growing challenge. Even as politicians embrace rhetoric to tackle inequality through housing, education, and job creation, the gap between the haves and the have-nots is growing. Research shows that conflict and inequality are inextricably linked. Tensions around inequality in the U.S. have erupted into movements such as Occupy Wall Street, the 99 Percent Movement, and Black Lives Matter, as well as in the successes of populist political platforms. In New York City, Amazon decided against building a second headquarters in Queens after protests and political pushback. While the huge project, involving billions in public subsidies and government incentives, offered the prospect of new jobs, local lawmakers and longtime residents argued against the use of such incentives and subsidies to lure companies as unwarranted, leading inevitably to rising costs of living and the encroachments of gentrification. In "Landscapes of Inequality: New York City No. 2, 2019," digital artist Herwig Scherabon visualizes income segregation boundaries as wall-like structures, a metaphor for how residents in the same city can live in very different worlds, cut off from each other by walls of inequality. The height of the extruded cubes corresponds to median household incomes, with higher sections of the matrix of cubes representing higher incomes and lower areas representing lower incomes. The artist's intention is to show income segregation while retaining "the visual footprint of the city's street grid." CREDIT: COURTESY OF HERWIG SCHERABON





EMERGING GLOBAL ORDER Launched in 2013 and conceptually based on the fabled Silk Road, China's Belt and Road Initiative (BRI) is a foreign investment and infrastructure program meant to enhance China's connectivity to the world and advance economic cooperation. Projects in the BRI primarily include infrastructure and energy production. In "Understanding the Belt & Road," Peiyong Loh visualizes infrastructural projects along the BRI as of November 2018. Moving people, goods, and energy, these projects graphically document China's increasing international presence. While some have lauded China for impressive development projects constructed through the Belt and Road Initiative, others raise concerns about its widening technological influence, as well as the increasing debt levels that developing countries are taking on due to Chinese loans. Technology infrastructure development led by Chinese companies like Huawei has stirred debates around national security in the U.S. and elsewhere. When working with firms like Huawei, how do countries ensure confidentiality and privacy while advancing affordable technological development? Do maritime port infrastructure projects signal a Chinese monopoly on international shipping? What about new military installations like those in Djibouti? The physical reach of such investment and infrastructure projects prompts these questions and more. CREDIT:

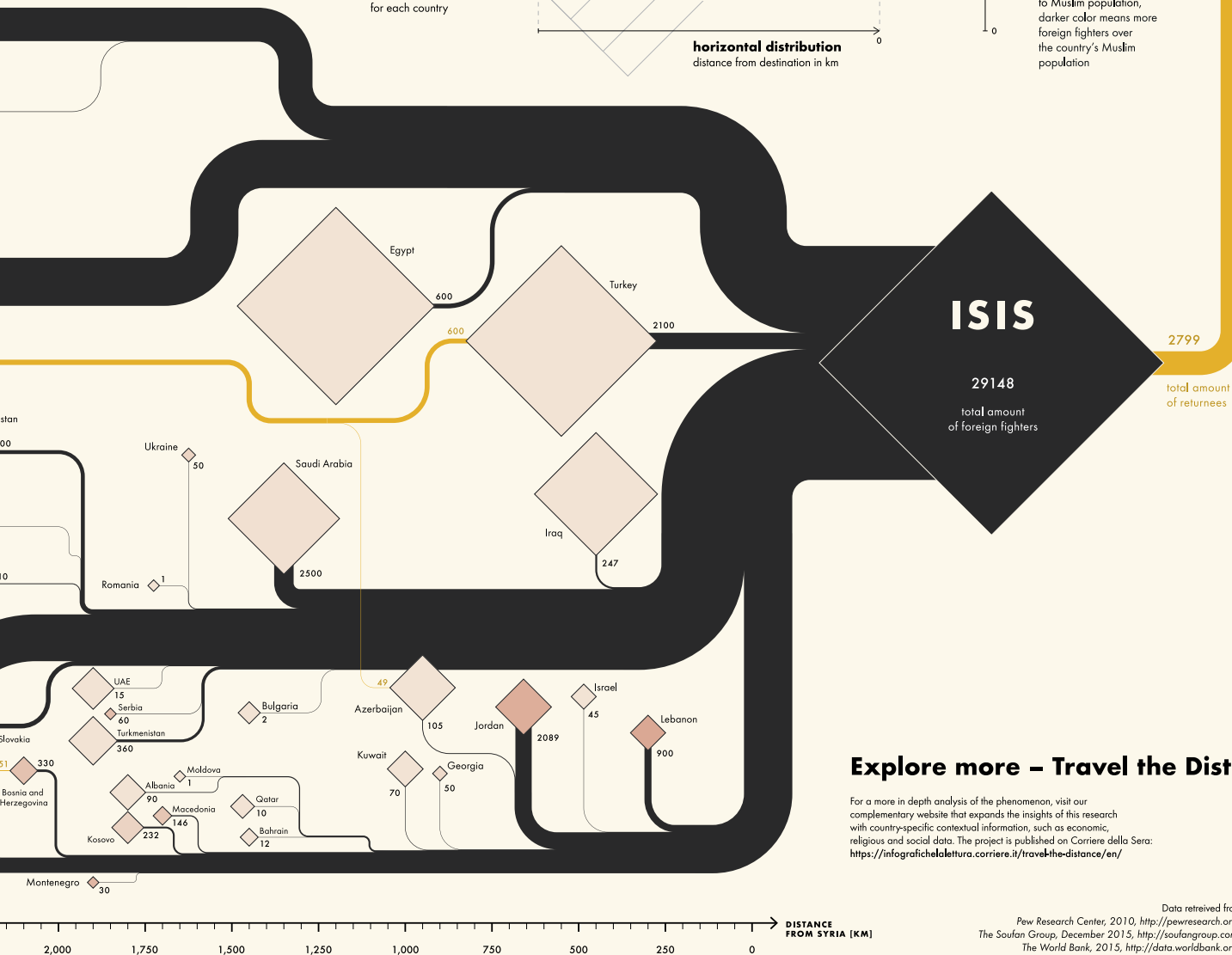
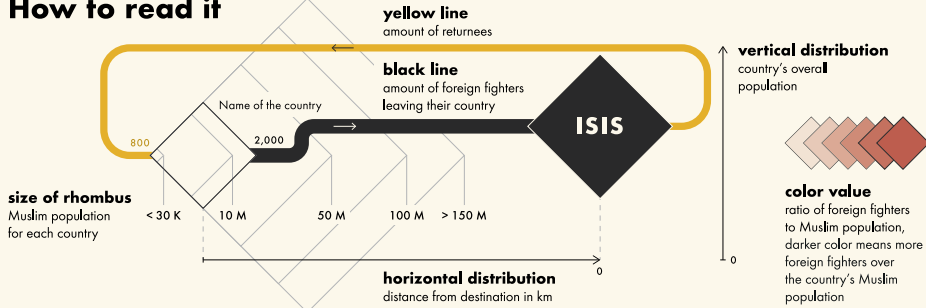
THE DATA ON THIS MAP WAS PRODUCED BY KONTINENTALIST, SINGAPORE



Project

- Rail lines
- Oil lines
- Gas lines
- Ports

How to read it



Explore more – Travel the Distance

For a more in depth analysis of the phenomenon, visit our complementary website that expands the insights of this research with country-specific contextual information, such as economic, religious and social data. The project is published on Corriere della Sera: <https://infografichelettura.corriere.it/travel-the-distance/en/>

Data retrieved from
 Pew Research Center, 2010, <http://pewresearch.org/>
 The Soufan Group, December 2015, <http://soufangroup.com/>
 The World Bank, 2015, <http://data.worldbank.org/>

TERRORISM GOES WHOLESALE Improved connectivity means that goods, peoples, and ideas are increasingly transportable. That mobility comes with a range of consequences, including the easy movement of – and organization around – violent ideologies. In June 2014, the Islamic State of Iraq and the Levant (ISIL, or ISIS) proclaimed itself a caliphate. In addition to leveraging traditional media, the militant terrorist group adopted advanced Internet-based strategies to gain notoriety and increase recruitment. Alessandro Zotta's infographic "On Their Way" presents the result of ISIS's successful tactics and the consequences. As military interventions began to weaken the group's territorial hold, ISIS's foreign fighters began to return home. This reverse migration brought forward a range of difficult questions about citizenship, freedom of movement, and societal acceptance with which societies – in the Middle East, Europe, and beyond – continue to grapple. CREDIT: THE AUTHORS OF THE VISUALIZATION ARE SERENA DEL NERO, MARCO MEZZADRA, CLAUDIA PAZZAGLIA, ALESSANDRO RIVA, ALESSANDRO ZOTTA. THE WORK WAS DEVELOPED FROM SCRATCH DURING THE DENSITYDESIGN FINAL SYNTHESIS STUDIO COURSE AT POLITECNICO DI MILANO

POVERTY IMMOBILIZES, MONEY MAKES MOVING POSSIBLE

Bangladesh. Millions fled conflict in the 1970s, and in the 1980s millions more began to leave for work in the Gulf states. Remittances from overseas fuel the economy.

Mexico. Higher incomes have encouraged many to seek U.S. jobs. Factors such as a weak U.S. market and stronger border enforcement after the 9/11 attacks slowed migration.

Vietnam. Economic growth since the end of the war, in 1975, has spurred in- and out-migration. Nearly half the four million Vietnamese living abroad are in the U.S.

STRONG LABOR MARKETS DRAW MIGRANTS

Thailand. Migrant workers and refugees are attracted to Thailand's wages and unfilled jobs. There was a brief outflow in 1992 of refugees who went home to Cambodia.

Spain. Economic growth, rising demand for labor, and integration into what became the EU led to a surge in migrants from developing countries in the 1990s.

Saudi Arabia. Oil boom brought in migrant workers to the Kingdom. The 1990s saw a surge in revenues and an expansion on undocumented workers.

HIGHER EMIGRATION

More people leaving a country than foreign-born residents staying



Top 10 net-emigration countries

20 other selected countries

Charts track net emigration (black) or immigration (white), 1967 to 2017.



Nation in conflict **Destination**
Larger refugee crises shown above

INSTABILITY FORCES PEOPLE OUT

Syria. Unrest and civil war have pushed millions into countries such as Turkey, Jordan, and Lebanon. Syria's outflow in 2012 is mirrored in Turkey's inflow.

Afghanistan. The Soviet Union's 1979 invasion sent millions into Pakistan and elsewhere in the region. Many later returned, only to face further violence.

Sudan. Refugees from neighboring countries have contributed to Sudan's inflows, but cycles of civil war in the mid-1990s created greater net outflows.

Iraq. Instability following the 2003 U.S.-led invasion displaced millions of Iraqis. More recently, Iraq has taken in some 250,000 refugees from war-torn Syria.

Nigeria. A surge in arrivals in the 1980s and departures since then are spurring migration.

China. The 1970s brought foreign investment to the kingdom. A slow, dwindling oil price and a crackdown on unskilled migrants.

U.A.E. Oil wealth, political stability, and a construction boom in the 2000s drew foreign workers. But soon after that, when oil prices fell, many of them left.

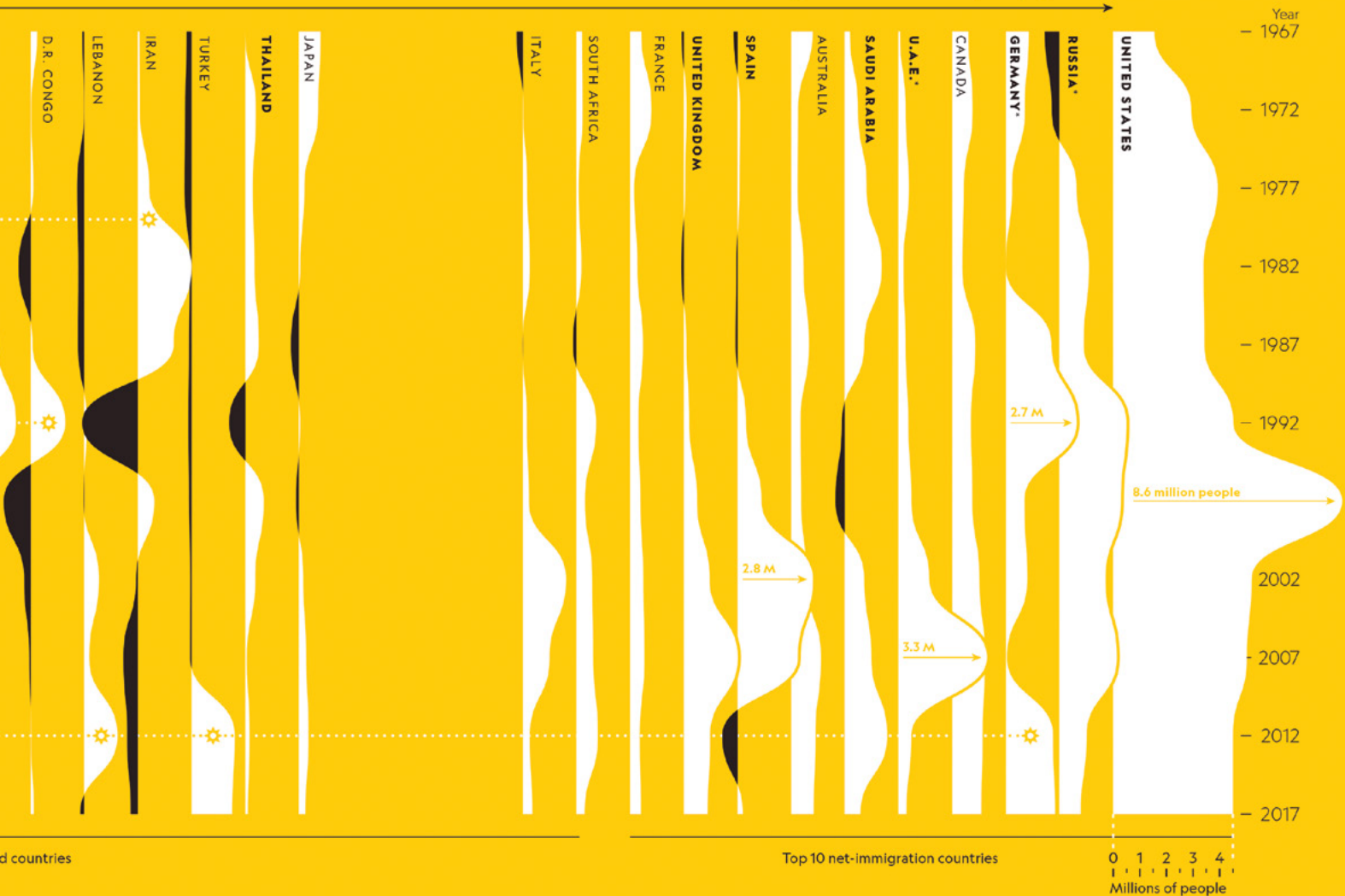
Germany. Millions of Eastern Europeans arrived when the Iron Curtain was lifted. The next surge came in the late 2000s as the robust economy drew migrants and refugees.

Russia. An exodus was reversed in the 1970s with the discovery of resources such as oil and gas. The 1991 Soviet collapse brought new arrivals from former republics.

United States. Some 1.6 million new jobs came with a strong postrecession economy in the 1990s. In 2002 a slowdown slashed both jobs and immigration.

HIGHER IMMIGRATION

More foreign-born residents in a country than people leaving



Other countries

Top 10 net-immigration countries

0 1 2 3 4
Millions of people

Rwanda. A violent uprising curbed migrant outflow. Today terrorist groups like Boko Haram are prompting outflow.

Rwanda. Nearly two million Rwandans fled during the genocide that took some 800,000 lives in 1994. The conflict fueled war in the Dem. Rep. of the Congo.

POLICIES SHIFT MIGRATION FLOW

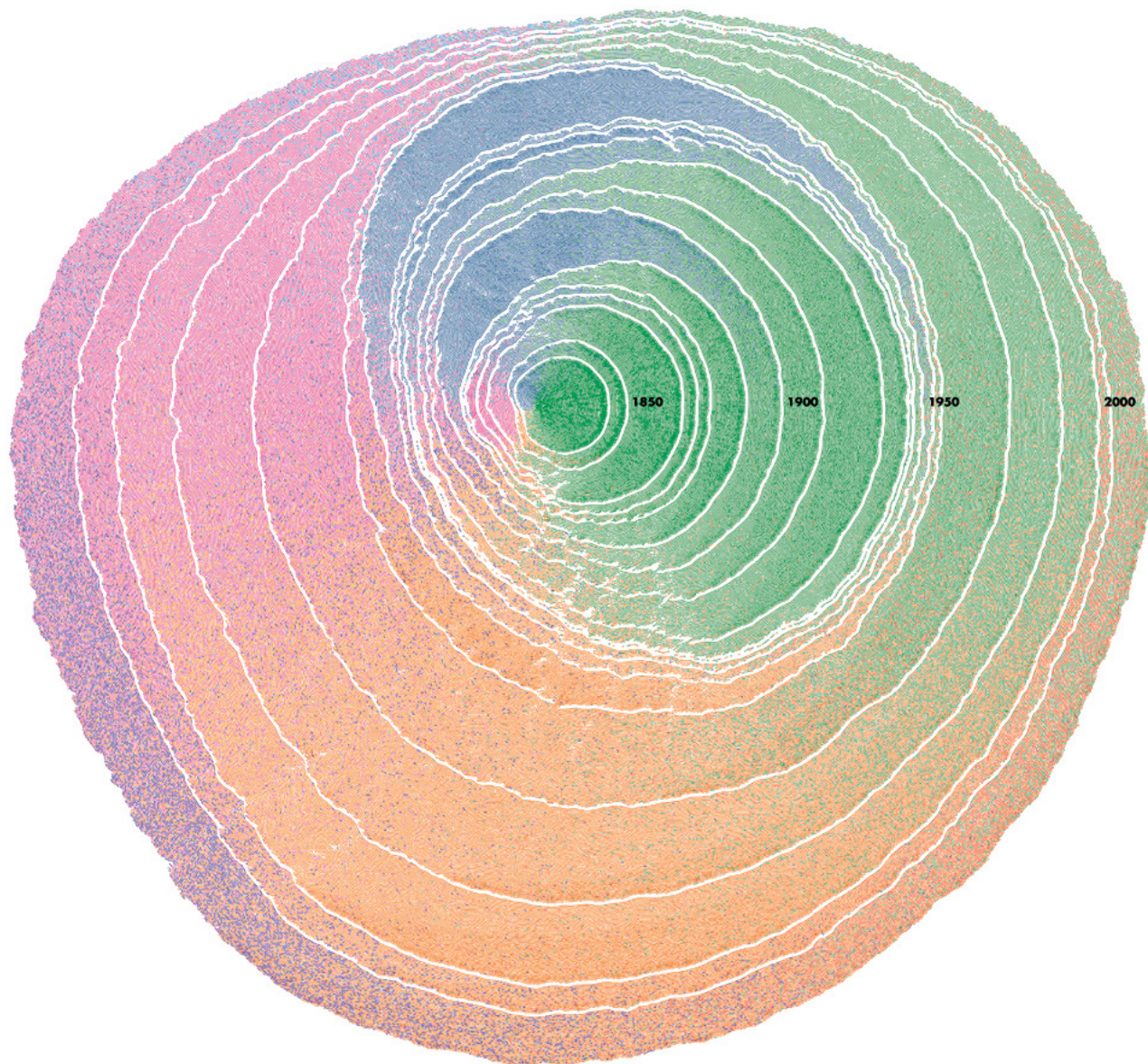
China. An end to “whites only” policies overseas that had long blocked migration, and emigration reforms at home in the 1980s opened the world to Chinese workers.

Ethiopia. The government outlawed emigration in 1981 after famine and revolution forced people out of the country. Many returned once the regime fell, in 1991.

United Kingdom. A change in policies in the 1990s eased restrictions on immigration and asylum. By 2002, a skilled immigrant could get a visa without a job offer.

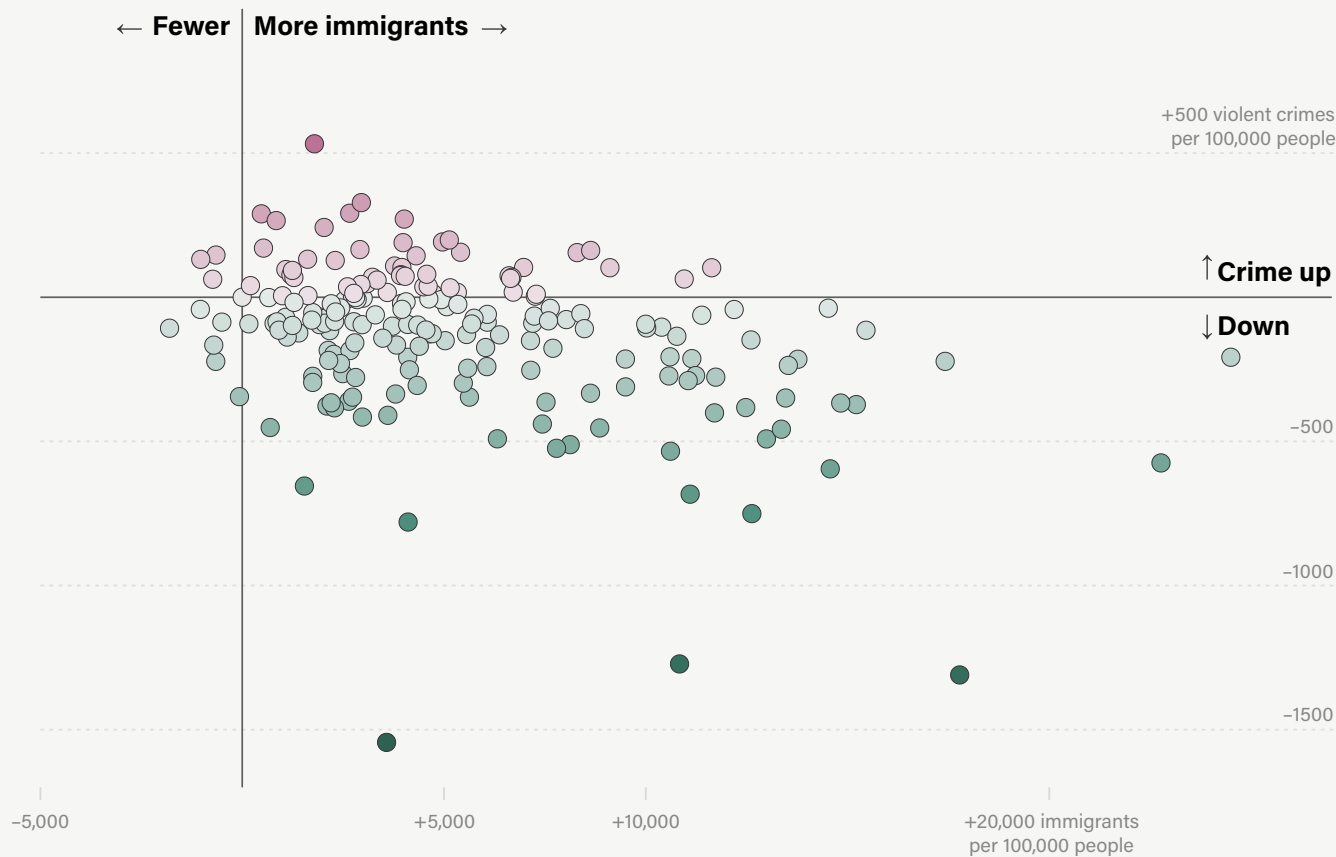
*NET MIGRATION DATA BASED ON CURRENT COUNTRY BORDERS. SOURCES: WORLD BANK, IOM, UNHCR, ILO, MIGRATION POLICY INSTITUTE, PEW RESEARCH CENTER, SONJA FRANSEN AND HEIN DE HAAS, INTERNATIONAL MIGRATION INSTITUTE

PEOPLES ON THE MOVE While the sophisticated recruitment strategies of ISIS presented new challenges for an increasingly connected world, our understanding of the traditional drivers of migration has increased dramatically over the past 50 years. Conflict and instability, immigration policy shifts, and a combination of poverty and lack of economic opportunity are the vital elements that affect the levels of emigration and immigration worldwide. The images are stark and all too familiar: economic migrants from Africa attempting to cross the Mediterranean in makeshift boats; caravans of people moving through Central America on their way to seeking asylum in the United States; and the humanitarian horrors of Syrian refugee camps. While intercontinental migration makes the headlines, one takeaway of this *National Geographic* infographic is that most migration is regional. For example, the majority of Syrian refugees have fled to the neighboring states of Jordan, Lebanon, and Turkey, rather than to Europe or the United States. CREDIT: ALBERTO LOPEZ, NG IMAGE COLLECTION



■ Canada
 ■ Europe
 ■ Latin America
 ■ Africa
 ■ Asia
 ■ Middle East

NYC IMMIGRATION BY THE SLICE Immigration has been an integral factor in the growth of America’s cities. In New York City, immigrants have shaped the political, economic, and cultural dynamics of the city in countless ways. The shifting dynamics of immigration over the decades have left watermarks across the city – from landmarks like McSorley’s Old Ale House, Lombardi’s Pizza, and the Apollo Theater, to icons of New York’s history of immigration like the Statue of Liberty and Ellis Island, two of the city’s most popular tourist destinations. Today, the borough of Queens is believed to be the most diverse county in the entire United States. A team at Northeastern University conceptualized the history of New York City immigration as rings in a growing tree trunk in “Simulated Dendrochronology of Immigration to New York City, 1840–2017.” Each ring equals a decade of immigration to New York City, each cell representing 40 people. The team color-coded the cells by geography and positioned them in the direction of the immigrants’ home countries in relation to the continental United States. For example, rings that skew more to the east show immigration from Europe, while rings skewing more to the west represent arrivals from Asia. CREDIT: COURTESY OF PEDRO CRUZ, JOHN WHIBEY, AND FELIPE SHIBUYA



AMERICAN CRIME For over 50 years, the United States has been the largest immigrant-receiving country in the world. This status has not been without controversy. Debates over levels of immigration and the status of immigrants continue to spike, growing ever more vitriolic. While one side points out the positive impacts of immigration, the other highlights the perceived negatives. Nor is the controversy unique to the United States, as Germany, for example, debates the impact of the influx of over 1 million Syrian refugees to that country. In 2018, The Marshall Project developed an interactive data visualization that parses the relationship between the size of immigrant populations and crime levels in U.S. cities. Overall, the data shows that as cities receive more immigrants, their crime rates decline. CREDIT: THIS STORY WAS ORIGINALLY PUBLISHED BY THE MARSHALL PROJECT, A NONPROFIT NEWSROOM COVERING THE U.S. CRIMINAL JUSTICE SYSTEM

CARNEGIE ON THE GROUND



What is a household? Published in 15 languages, the *We Count!* book is illustrated with portraits of diverse American families by different artists, each representing their own cultural heritage. In this illustration by Peru-born, Michigan-based artist Elisa Chavarri, María (in the yellow dress) poses with her parents, her brothers, Carlos and Juan, and her foster sister, Rosa. Who should be counted? Carlos is in the army, so he'll be counted by the military. Juan lives with his aunt, and he'll be counted there. So the total census count for this household is: four! CREDIT: COURTESY SIMPLY PUT MEDIA

Children Are Counting on the 2020 Census

An accurate 2020 U.S. Census count, currently underway, will ensure that communities receive necessary resources, allocations, and representation

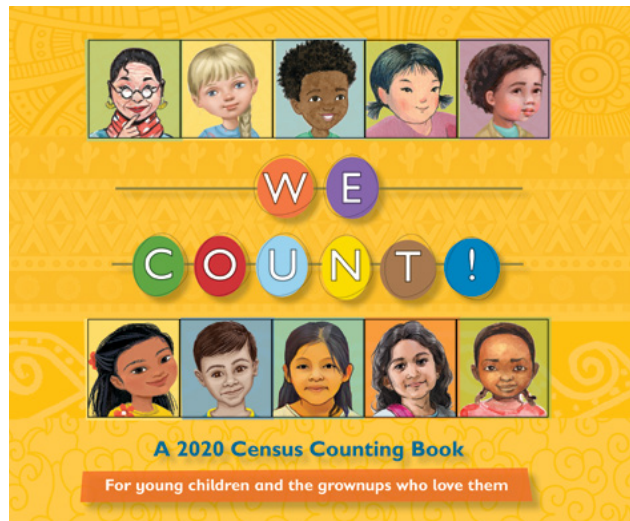
By **Geri Mannion** and **Ambika Kapur**

As the COVID-19 pandemic spreads throughout the United States, our urgent needs for health and stability are paramount. We must continue to work together to minimize transmission and flatten the curve.

Yet even as we secure the basic safety of our homes and communities, we cannot forget the once-a-decade importance of the 2020 U.S. Census, currently underway. The information collected by this nationwide counting effort will shape public spending, research, and decision-making for the next 10 years, from federal education, health, and infrastructure allocations to the number of seats each state occupies in Congress. An accurate census count ensures communities have the resources they need to respond to emergencies as well as to thrive in less turbulent times.

This is especially important for young children. The 2010 census missed as many as two million children under the age of five — the biggest undercount in a half-century — and we have been living with the impact ever since. Undercounted communities will get less than their fair share in \$800 billion in annual federal spending over the next decade, including more than \$160 billion for programs vital to children, from health insurance and food stamps to special education and Head Start preschools.

Census letters have been mailed to most households, and a new online response form can make participation relatively quick. But that won't be enough to gather accurate data on young children from complex or fluid households in communities that are traditionally hard to count, such as dense urban neighborhoods, rural regions, and immigrant populations. Advocates had planned robust



An interactive counting book for children (“and the grownups who love them”), *We Count!* offers clear and comprehensive guidance on counting households for the 2020 U.S. Census, including the complicated living arrangements that researchers have identified as most likely to cause confusion when filling out census forms. wecountkids.org CREDIT: COURTESY SIMPLY PUT MEDIA

in-person campaigns to guide these families to participate, but such gatherings are not possible, for now.

Now those same advocates are quickly turning to online resources to encourage all families to take part. For example, Carnegie Corporation of New York is among those supporting the publication of *We Count!*, a children’s book and adult education program about the census available online in 15 languages. The We Count! campaign was inspired by interviews about the census with nearly 200

parents and social service workers in immigrant communities around Paterson, New Jersey, where just 60 percent of residents responded to the 2010 census.

“In New Jersey, 27,000 kids were missed in the last census — that’s enough to fill 1,350 more classrooms than we were ready for,” said Lisa Bernstein, whose nonprofit organization Simply Put Media conducted the interviews and wrote the book. “The census is at the core of our democracy, and we are going through a time when who counts in America is really important.”

Bernstein and child development researcher Faith Lamb-Parker studied changes in families’ perceptions of the census based on their reading the book, and found that relevant, direct information from a trusted source made a big difference.

Initially, 85 percent of families said they knew little to nothing about the census and only half said they were likely to take part. They were confused about how to report complex living situations and hesitant to share details of their lives, citing worries about law enforcement and immigration raids, despite the confidentiality of all responses. Critically, Simply Put also found that two-thirds of the “trusted messengers” that families typically rely on for assistance, such as teachers, librarians, and social service workers, felt ill-informed and unprepared to help fill out census forms accurately. The cheerful, diverse We Count! materials were designed to give both messengers and families a common source of relevant information, and after reading the *We Count!* book, 80 percent of families said they would participate.

Advocates like Simply Put are using digital and other tools to provide direct, relevant information in hard-to-count communities, including phone calls, text messages, and social media campaigns. While moving outreach online has its limits — one in 10 Americans does not use the Internet and a similar share of low-income residents do not carry mobile devices — it can serve as a bridge until community hubs reopen and in-person messengers reengage. Because of COVID-19, the Census Bureau extended the deadline for data collection, with in-person enumerators starting their visits in August and the count extended through October 31.*

The coming weeks and months will determine the course of federal dollars over the next decade — nearly an entire childhood. As our current crisis shows, every family needs and deserves its fair share of federal support. We can all do our part and fill out our forms, and tweet, post, and promote the importance of the census using the technologies that are keeping us connected in these difficult days, taking our cue from local partners working to provide helpful information in undercounted communities nationwide. Our children are counting on us to get it right. ■

CENSUS COUNTS 2020

TO DO LIST:
Good Neighbor Edition

- 1 Stand six feet apart from other people.
- 2 Wash hands. Repeat. Repeat. Repeat.
- 3 Stock up on groceries, but never hoard them.
- 4 Fill out the 2020 Census to bring in community resources.

THREE OPTIONS:

- 2020Census.gov
- (844) 330-2020
- Mail back the census form you received in your mailbox

Shaping America’s Future The Census Bureau’s “Shape Your Future. START HERE” communications campaign includes television and radio commercials; digital, social media, and print advertising; and messaging on billboards and at bus stops. The massive public education effort encourages participation among multicultural and hard-to-count populations, with ads in English and 12 other languages, from Arabic to Vietnamese.

*On Aug. 3, the Census Bureau confirmed that all counting efforts would end on Sept. 30. — rather than Oct. 31.

The Making of a Humanities Scholar: Beyond STEM in Africa

A distinguished African professor argues that the humanities together with STEM are necessary to build Uganda and infuse its development with values and ethics

By **Dominica Dipio**

When I was young, having finished school with very high marks on my A-levels, people asked me what I wanted to study at university. I had never been interested in fields that involved numbers, graphs, maps, and calculations. I wanted literature, languages, history, religion, and the fine and performing arts. I did not yet have a sense that the subjects I was most passionate about were at the core of the humanities. I only knew that they centered around creativity, expression, and narrative. But as I worked through my bachelor's and master's degrees at Makerere University, and then my PhD at the Pontifical Gregorian University in Rome, where I studied women in African cinema, I began to realize that even though my research was centered on the humanities, it was dependent on components of STEM (science, technology, engineering, and mathematics) — and most especially on the technical medium of film, which today I use to document oral histories, engage rural communities in conversation, and convey my findings to audiences.

There is no doubt that STEM is crucial to the goal of creating a self-sufficient and thriving Uganda. In a country where demand for higher education is booming, with a demand 50 percent higher than the global average, our universities can offer only a limited number of seats for STEM training, and as a result we find an unfortunately high unemployment rate for university graduates. In this context, it is not surprising that six years ago, President Yoweri Museveni called for universities to close down their humanities offerings entirely in favor of an almost exclusive focus on science and technology. Luckily for me and my colleagues who work in the humanities, this did not



Dr. Dominica Dipio is a professor at Makerere University in Uganda, where she heads the Department of Literature. Her current areas of research are in ritual performance and conflict resolution, folktales and legends, and ethnic stereotypes. CREDIT: COURTESY SR. DR. DOMINICA DIPIO

come to pass. On the contrary, since President Museveni made that statement, political leaders and educational policymakers have embraced the idea that genuine development must have at its heart the arts as well as the sciences.

In my humanities work, the technology of film is crucial to my success. It allows for a popular version of my research,

Just as my research in the humanities is augmented by my work with technology, the best STEM scholars I know draw upon their excellent writing and storytelling skills to convey the importance and urgency of their research to specialist and nonspecialist audiences alike.

a form that everyone can access. I take my films to villages and rural communities so that people can gather, watch, and discuss the subjects at hand. Recently, these conversations have centered on my observations and interviews with women around the country about the increasing absence of men in families these days. I have received requests to come to parishes, to show my film and prompt conversations about the health and progress of their communities.

In the past, my humanities-focused research was supported by foreign funding agencies, such as the African Humanities Program (AHP) and the Cambridge-Africa Partnership for Research Excellence (CAPREx). But a new Ugandan government initiative is funding my current project, which involves adapting and animating Ugandan and other African folktales to provide local content for schools and television. The Research and Innovation Fund (RIF), established in 2019, will provide 30 billion Ugandan shillings (more than \$8 million US dollars) for scholars at Makerere University to sustain work that will drive the country's development agenda. This new approach to research funding extends across disciplines, encompassing both STEM subjects and the humanities.

The marriage of STEM and humanities represented by my new research and many other endeavors supported by the RIF is the result of a growing realization in Uganda that in a truly cultured society the two disciplines must not be separated. Where STEM disciplines represent the shell/structure/body, the humanities encompass the gel/software/soul. Even the most famous scientist of the modern era, Albert Einstein, insisted that "all religions, art, and sciences are branches of the same tree."

Just as my research in the humanities is augmented by my work with technology, the best STEM scholars I know

Africans Telling Their Own Stories

Since its launch in 2008, the African Humanities Program (AHP), funded by Carnegie Corporation of New York in partnership with the American Council of Learned Societies (ACLS), has grown a community of more than 400 humanities scholars to ensure that African history and stories are told by Africans. The program, which has invested more than \$14 million to develop the network of humanities scholars through pre- and postdoctoral fellowships, aims to deepen the development of Africa's histories, arts, philosophies, literatures, and musical and cultural traditions through the eyes of its native scholars rather than colonizers or researchers from outside the continent. Sister Dominica Dipio, professor of literature at Makerere University in Uganda, was among the first African Humanities Program fellows. In her essay and an accompanying video, Dipio underscores the importance of the humanities as an essential complement to efforts to advance science, technology, engineering, and mathematics (STEM) education in Africa. | Watch the video at: carnegie.org/dipio. | Read more about the African Humanities Program (AHP) at: acls.org.

draw upon their excellent writing and storytelling skills to convey the importance and urgency of their research to specialist and nonspecialist audiences alike. The mutually dependent relationship between the two disciplines is important. If STEM trains our young people to quite literally build our country, the humanities infuse those structures with values and ethics. Arts, literature, history, and religious studies are particularly suited to express such principles. Teaching humanities subjects to students means they will emerge not just as productive, technically proficient workers but also as thoughtful citizens.

This marriage of disciplines is crucial for how I think my own research can help to shape the future of Uganda. Local knowledge, whether in the form of personal stories or traditional folktales, is important. Our history, our traditions, our values can energize our present, lead us to new forms of development, and clarify our collective values. A humanities-STEM partnership that integrates our human ideals with the structures that house them will really take us far. ■

This is an edited version of an essay that was first published on AllAfrica.com, a pan-African news source that receives philanthropic support from Carnegie Corporation of New York.



INTERNATIONAL PEACE AND SECURITY

How to Hack Your Foreign Policy

Against the backdrop of the COVID-19 pandemic and the upcoming 2020 presidential election, what's next?

By **Noelle Pourrat**

Search, Destroy, Hubris American soldiers watch combat helicopters landing as part of Operation Pershing, a “search and destroy mission” on the Bong Son Plain and An Lao Valley of South Vietnam, January 3, 1967. For Peter Beinart, the Vietnam War is a case study in a nation ignoring the “sober judgment of allies.” He writes, “Before Vietnam, and again before Iraq, French leaders urged the United States to learn from France’s imperial misfortunes in Southeast Asia and the Arab world.” But the failures of our allies were irrelevant. After all, we were America. CREDIT: PATRICK CHRISTAIN/GETTY IMAGES

Since Donald Trump’s election in 2016, broad public opinion on foreign policy has been perceived as no longer generally aligning with the prevailing preferences of the policymaking community. Trump’s foreign policy, as presented in his campaign and as president, has been most commonly framed as challenging the central tenets of the post-World War II “liberal international order” led by the United States. In response, intellectuals and practitioners have produced a deluge of books and articles offering competing visions for U.S. foreign policy at a time when debate about it is more vigorous than it has been in decades.

Peter Beinart, journalist and author of *The Icarus Syndrome: A History of American Hubris* (2010), argues that U.S. foreign policy has gone through three distinct periods since the early 20th century and the presidency of Woodrow Wilson. Each period cycled through three phases: first, a core idea gains traction and becomes the driving logic for policy; next, initial successes gradually lead to overconfidence; finally, this overconfidence results

in a major failure that in turn spurs fundamental change in how foreign policy is framed and implemented.

Can You Hack It? According to Wikipedia, a *life hack* is “any trick, shortcut, skill, or novelty method that increases productivity and efficiency, in all walks of life.” The Internet is full of lists like “The 16 Best Life Hacks of All Time That Will Make Your Life Easier”: little tricks using common household items for quick and simple solutions to everyday problems. Frozen grapes to keep wine chilled. Plastic bread clips to repair flip flops. Soda tabs on hangers to maximize closet space. Hacks can range from the ingenious to the downright weird. But it doesn’t end there. There are also countless articles on some of the more important aspects of life, such as “how to hack your diet,” “how to hack your career,” and “how to hack your happiness.” In cases like these, one must not confuse what might be good advice with a be-all and end-all solution guaranteed to resolve an inherently complex issue. If a hack sounds too simple to be true, it probably is.



Icarus In this 1960 photograph by Adger Cowans, a figure is silhouetted against the sky, with the sun blazing above, at Orchard Beach in the Bronx, New York City. CREDIT: ADGER COWANS/GETTY IMAGES

Who Was Icarus? And What Can Policymakers Learn from His Fate?

In classical mythology, the story of Icarus is a cautionary tale about the dangers of hubris, perhaps most famously recounted in Ovid's *Metamorphoses*. Daedalus, Icarus's father, builds wings for himself and his son to escape from the island of Crete. He warns Icarus not to fly too low or too high, but "to take the middle way." Yet, once in the air, "the boy began to delight in his daring flight, and abandoning his guide, drawn by desire for the heavens, soared higher." As his father had feared, the wax holding the wings together melts, and Icarus plummets to his death in the sea. Peter Beinart draws upon this mythic figure in identifying moments over the last century when American foreign policy has fallen prey to what he calls "the Icarus syndrome," the title of his 2010 study of "American hubris." In his introduction, Beinart cautions: "There's nothing intrinsically American about hubris. As Aeschylus and Ovid testify, it's a vice that long predates us. But since it's an affliction born from success, we've been especially prone."

The first period was the idealistic "hubris of reason," which sought to eliminate international conflict through objective analysis and dispassionate mediation but was crushed by the rise of Hitler and the outbreak of World War II. Next came the anti-appeasement "hubris of toughness," which maintained that the U.S. could and should stop the spread of Communism anywhere in the world but was thwarted by the quagmire of Vietnam. Finally, since the end of the Cold War, the ambitious "hubris of dominance" aimed to remake any country in the image of the U.S., only to be undercut by the "endless wars" of Iraq and Afghanistan and other struggles to manage outcomes in strategic regions.

According to Beinart, each period initially began with increased caution and more circumscribed goals, but things started going wrong when "politicians and intellectuals took ideas that had proved successful in certain, limited circumstances and expanded them into grand doctrines, applicable always and everywhere." One idea became accepted as the ultimate foreign policy *hack*, short-circuiting nuanced deliberation of domestic capacity and critically oversimplifying analysis of places abroad.

Now, against the backdrop of the COVID-19 pandemic and the upcoming 2020 presidential election, what's next? The program on U.S. Global Engagement (USGE) at the Carnegie Council for Ethics in International Affairs is looking at the different foreign policy narratives that are emerging in the intellectual field. An October 2019 report identifies several broad categories, ranging from a return to "traditional" robust engagement, to largely "transactional" policies, to various forms of "restraint." (Beinart's personal view on how U.S. foreign policy should be recalibrated, discussed in a recent *None of the Above* podcast episode, falls among those calling for "restraint.") The project is now exploring how these narratives intersect with the stated positions of the 2020 presidential candidates (including those who have suspended their campaigns) and which ones seem to be resonating most strongly with the public, whose support is essential to the long-term viability of any policy narrative.

Polls remain one of the main tools for gauging public opinion on foreign policy. However, as project director Nikolas Gvosdev explains, questions in these polls are often presented as isolated issues in which "it's possible to have everything and everything is achievable." This does not reflect the reality of tough decision-making based on limited resources. Instead, "a foreign policy narrative should set out which coalition of interests and values it will prioritize, provide the outlines of the domestic political bargains it requires, and present the outline of central organizing principles." That's why the U.S. Global Engagement Survey does not allow responders the option of getting everything they'd like to see in an ideal world. Instead, choices involve trade-offs that make the

responder think about “how they may have to compromise and where they are willing to accept consequences.”

Although the survey remains open, USGE began analyzing the first batch of responses in a March blog post. Overall, “respondents rejected isolationism by an overwhelming majority, and wanted the United States to continue to play a leading role in world affairs.” This baseline finding aligns with results from surveys conducted by other organizations such as the Chicago Council on Global Affairs and the Eurasia Group Foundation. At the same time, while respondents want to “amend or fine-tune” the role of the U.S. in the world, the survey also reveals “a good deal of uncertainty with the extent to which U.S. foreign policy ought to always prioritize values, or when, in pursuit of a foreign policy objective, domestic interests ought to be subordinated.” This level of uncertainty reflects the degree to which the fundamental guiding principles of foreign policy are up for debate in the minds of the public. As more people participate in the survey, USGE will also look at how responses may vary according to age, political preferences, and location.

That initial survey analysis was posted on March 9, just over a week after the first case of COVID-19 was confirmed in New York City (where the Carnegie Council is located) and less than two weeks before the Empire State went into lockdown. In a series of reflections, Gvosdev considers the pandemic’s possible implications for foreign policy, such as Americans’ views on “whether the default state of international affairs is competition or cooperation,” and whether their priorities on how to spend national resources will shift toward “reconsidering U.S. intervention and activism abroad to focus on internal reconstruction and development.” Though too early to know what the sustained impact will be, as the number of cases rise, the pandemic continues to shine a spotlight on the United States’ standing and role in the world in the minds of the public. Using the survey, as well as through online events and conversations around the country, the USGE project seeks to draw out the calculus and ethical orientations of individual Americans and illuminate how different discourses on foreign policy may align with their personal views. As the project continues its research and analyzes incoming survey responses, additional narratives may be added to the mix. It’s far from a clear-cut exercise because multiple narratives can support the same policy choice but for different reasons, and individuals may hold and defend positions on separate issues that are best explained by different narratives.

Public discourse on foreign policy often boils down to bare essentials and slogan-length arguments. The results can sound like a national contest over how to hack our foreign policy, in which one simple, core idea is presented as the essential key to success. By deconstructing grand ideas into their possible rationales and considering

their application in specific and realistically challenging contexts, the USGE project takes the conversation beyond clean, surface-level solutions and helps its audience — or, rather, audiences — grapple with the inherent complexity of foreign policymaking.

Gvosdev sets three interlinked goals for the project’s three main audiences: the nongovernmental foreign policy community, the average American voter, and policymakers. First, the project wants to help “the foreign policy community to better understand how the general public perceives foreign policy intersecting with their pocketbook and doorstep issues, and to be able to frame their foreign policy advice to elected leaders in terms of connecting with those aspirations.” Rebuilding this understanding is a necessary corrective to the growing disconnect between the public and foreign policy experts highlighted by the 2016 election and all that has followed.

The second goal is for “the American voter to consider the importance of foreign policy as part of the choice of selecting representatives and elected officials.” As USGE is well aware, this is an uphill battle. Although 91 percent of survey respondents in the initial analysis said that foreign policy is important to them, when asked if they “would vote for a candidate whose domestic agenda they supported but with whose foreign policy they disagreed,” there was a roughly even three-way split among those who said yes, no, or unsure. Whether and how the pandemic crisis could influence that breakdown remains to be seen.

Finally, USGE hopes to “help leaders and politicians to better frame choices” in a moment when foreign policy could plausibly move in significantly different directions, with each option offering a different package of costs, benefits, and ethical implications that the American people need to understand and accept. In Gvosdev’s view, “a successful outcome is one where the voters are able to identify with a narrative that explains how they expect the U.S. to interact with other countries and the international system and then to trust that the leaders they elect are able to develop and execute policies that align with that overall framework.”

A successful foreign policy narrative must communicate a coherent vision that is understandable and compelling to the average citizen. At the same time, this clarity must not come at the expense of the analytical depth needed to navigate distinct and evolving trends and circumstances around the world, as demonstrated in the cautionary tales of Beinart’s absorbing study of America’s past hubristic errors. Remember the fate of Icarus. Whatever narrative becomes the next driving logic for U.S. foreign policy, it must strike this balance. Otherwise, it risks devolving into a mere hack, offering an oversimplified solution that cannot live up to its promises. ■

NOTABLE **EVENTS**



A Seat at the Table Kim Lew discusses investment opportunities and markets with former U.S. treasury secretary Larry Summers (facing Lew on the left) and TIAA president and CEO Roger Ferguson (sitting next to Lew) on the January 10 inaugural edition of Bloomberg Television's new show, *Bloomberg Wall Street Week*. She later said of the experience, "After the show aired, someone sent me a note that said, 'Oh my God, you literally had a seat at the table.' That was wonderful to hear." CREDIT: LORI HOFFMAN FOR BLOOMBERG



Honored by Her Peers The New York chapter of the National Association of Securities Professionals inducts Kim Lew into the Wall Street Hall of Fame, along with fellow honorees Michael Nairne (back row, left) of Chicago Equity Partners and David Kazansky (front row, second from right) from the United Federation of Teachers. CREDIT: WADE IRBY PHOTOGRAPHY

HONORS

The Corporation's Kim Lew Inducted into Wall Street Hall of Fame

On February 25, Carnegie Corporation of New York vice president and chief investment officer Kim Lew was inducted into the Wall Street Hall of Fame by the New York chapter of the National Association of Securities Professionals (NASP). This year, Lew was one of three individuals inducted into the Hall of Fame — the highest honor bestowed by NASP New York to individuals committed to encouraging diversity in the financial industry.

Lew oversees the Corporation's \$3.5 billion endowment and manages a team of six investment professionals. A few days after her Wall Street Hall of Fame induction, she received another accolade, one dear to her heart: the Kenneth A. Powell Award for Professional Achievement, jointly conferred by the Harvard Business School African-American Alumni Association (HBSAAA) and the African American Student Union at Harvard Business School (HBS). The Powell Award recognizes HBS graduates who have made significant contributions to both their companies and their communities over the course of their distinguished careers.

Another unique opportunity for Lew at the start of 2020 came on television. On January 10, she was interviewed on the inaugural edition of Bloomberg Television's *Bloomberg Wall Street Week*, appearing alongside Larry Summers, former U.S. treasury secretary, and Roger

Ferguson, TIAA president and CEO, in a roundtable discussion moderated by host David Westin. Among other topics, Lew spoke about investing in China as a crucial emerging-market opportunity.

Lastly, Lew and her team were recognized for their commitment to diversity in a first-of-its-kind report by Knight Foundation. Released in mid-February, *Diversity of Asset Managers in Philanthropy* assessed the representation of women and racial or ethnic minorities among investment firms used by the top charitable foundations in the United States, ranking Carnegie Corporation of New York fifth among 26 foundations by the percentage of assets invested with women- and minority-owned asset management firms.

Lew and colleague Alisa Mall, who heads the investment team's diversity and inclusion efforts, coauthored an essay that was published by Knight Foundation in conjunction with the release of its report. Why do they prioritize diversity? Lew and Mall write: "Because we believe it is a performance imperative. As the U.S. population becomes increasingly diverse and international markets become more accessible to investors, firms employing individuals with varied backgrounds will have a competitive advantage in understanding the nuances of investing opportunities."



Corporation president Vartan Gregorian and Saskia Levy Thompson (right), program director in the Corporation’s Education program, meet with students and staff at BHSEC Queens in Long Island City. CREDIT: CELESTE FORD



Geri Mannion, director of the Strengthening U.S. Democracy program, speaks at a Corporation-sponsored reception for secretaries of state from across the country, held at the National Archives Museum in Washington, D.C. CREDIT: COURTESY NATIONAL ASSOCIATION OF SECRETARIES OF STATE

TOUR

Corporation President Vartan Gregorian Visits Innovative Early College Program

In early December 2019, Corporation president Vartan Gregorian visited the Queens campus of Bard High School Early College (BHSEC), which offers New York City public school students the opportunity to earn both a high school diploma and a Bard College associate’s degree in four years at no cost to students or their families. He was joined by Saskia Levy Thompson, who oversees the New Designs to Advance Learning portfolio within the Corporation’s Education program.

Gregorian wanted to hear directly from students and staff about the unique BHSEC program. With the support of Carnegie Corporation of New York, the promising model began in 2001 with the founding of BHSEC Manhattan. Throughout his tenure, Gregorian has supported the design and implementation of innovative school models that prepare students for academic success, active citizenship, and participation in the global economy.

BHSEC, which now has six campuses in five cities, grew out of a partnership between Bard College and the New York City Department of Education to create an alternative to the traditional high school. Aimed at highly motivated students who are eager to do serious college work at age 16, the program has proved successful, with, for example, 95 percent of graduates at the Queens campus moving on to a four-year college.

RECEPTION

Corporation Hosts Reception at Secretaries of State Conference

In January 31, Carnegie Corporation of New York sponsored a reception marking the 100th anniversary of the 19th Amendment, which granted women the right to vote. The gathering was held at the National Archives Museum in Washington, D.C., as part of the National Association of Secretaries of State (NASS) 2020 Winter Conference.

Geri Mannion, director of the Strengthening U.S. Democracy program at the Corporation, gave brief remarks at the reception, which was attended by 250 people, including a bipartisan representation of secretaries of state from across the country. The Corporation-produced report *Voting Rights Under Fire: Philanthropy’s Role in Protecting and Strengthening American Democracy* was distributed at the reception, along with a personal note from Mannion thanking the secretaries of state for their work in protecting our elections and our democratic institutions.

Reception attendees were able to take in the National Archives Museum’s celebratory exhibition *Rightfully Hers: American Women and the Vote*, which commemorates the centennial anniversary of the 19th Amendment “by looking beyond suffrage parades and protests to the often-overlooked story behind the landmark moment in American history.”



New York City schoolchildren working from home during the coronavirus lockdown, April 6, 2020. CREDIT: PETER TITMUSS/EDUCATION IMAGES/UNIVERSAL IMAGES GROUP VIA GETTY IMAGES

110+
million dollars raised

110+
million dollars distributed

768
nonprofits supported

**NYC COVID-19
RESPONSE & IMPACT FUND**
IN THE NEW YORK COMMUNITY TRUST

The NYC COVID-19 Response & Impact Fund provided support to the Bronx Children’s Museum, the International Center of Photography, PEN America, Safe Horizon, God’s Love We Deliver, and hundreds of other small and midsize arts and social service organizations in New York City.

COVID-19

AFT/PTA Town Hall: Addressing Students’ Social and Emotional Needs During the Pandemic

In mid-April, Carnegie Corporation of New York sponsored “Strategies for Parents and Teachers Grappling with COVID-19 Stress,” a town hall to help guide parents and teachers during the COVID-19 pandemic, which has led to school closures and made remote learning the new norm across the country. Hosted by the American Federation of Teachers (AFT), the town hall was open to the public nationwide — and some 59,000 people attended the virtual event.

Randi Weingarten, president of the AFT, introduced the event by saying parents and educators need to “find ways to deal with the anxiety and the trauma that we’re facing and that our students are facing.... We have to figure out how to help our kids engage as we’re building the plane and flying it at the same time.”

Through its grantmaking, the Corporation supports organizations that are helping educators and families meet the social and emotional needs of students during this time of unprecedented stress. Navigating the challenges exacerbated by the COVID-19 crisis, grantees are working to support the “whole student” and develop sustainable solutions that empower families as true partners in their children’s education.

COMMUNITY

COVID-19 Response: Philanthropic Collaboration Awards Grants in Support of NYC Nonprofits

In March, Carnegie Corporation of New York joined 18 lead funders in launching the NYC COVID-19 Response & Impact Fund to support New York City–based social service and cultural nonprofits affected by the pandemic. “We are grateful that once again the New York philanthropic community has come together to do its best in response to a catastrophe,” said Vartan Gregorian, president of Carnegie Corporation of New York.

Administered by the New York Community Trust, the fund extended grants ranging from \$8,000 to \$250,000 and no-interest loans ranging from \$100,000 to \$3 million to help vital community organizations across the city’s five boroughs pay rent, make payroll, and fulfill their public service missions.

The NYC COVID-19 Response & Impact Fund raised more than \$110 million from 1,300 donors, distributing over \$73 million in grants and over \$37 million in no-interest loans to 768 small to midsize NYC-based nonprofits across all five boroughs. The fund helped organizations with a variety of needs, including protective equipment, cleaning supplies, technological assistance to enable work to be done remotely when possible, and support to reduce the impact of financial losses. ■



Gods of the Upper Air: How a Circle of Renegade Anthropologists Reinvented Race, Sex, and Gender in the Twentieth Century

Charles King

The Knowledge Gap: The Hidden Cause of America's Broken Education System — and How to Fix It

Natalie Wexler

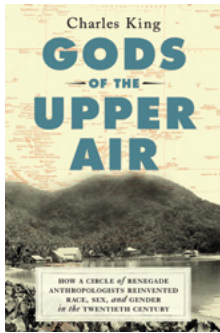
The Years That Matter Most: How College Makes or Breaks Us

Paul Tough

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

Katherine Eban

Double Portrait Margaret Mead took up a curatorial position at the American Museum of Natural History in New York in September 1926, going on to publish her landmark study, *Coming of Age in Samoa*, two years later. As Charles King writes, “Mead was trying something new. Samoa was a mirror that she aimed to hold up to her own society.” The solution was not to make “Americans into Samoans,” but “rather to begin to see one’s own logic and common sense as only a sampling of the many ways of shaping the social world, each with consequences that got played out in the lives of real people.” In 1930 the now celebrated cultural anthropologist was photographed at the museum by Irving Browning Studio. CREDIT: IRVING BROWNING/NEW-YORK HISTORICAL SOCIETY/GETTY IMAGES



**Gods of the Upper Air:
How a Circle of Renegade
Anthropologists Reinvented
Race, Sex, and Gender in the
Twentieth Century**

Charles King

Doubleday. 431 pp. 2019.

The Power of Knowledge Production

In the 1920s a group of daring thinkers, mostly women, began to question – and then help overturn – the tenets of scientific racism that had long dominated intellectual thought in the West

By **Nehal Amer**

By the turn of the 20th century, Western societies generally embraced the belief that all peoples could be categorized into a hierarchy of fixed races. In *Ancient Society* (1877), the prominent American ethnologist and anthropologist Lewis Henry Morgan argued that all human societies exhibit the same linear sequence of evolutionary stages, progressing from savagery to barbarism – and, finally, to civilization.

In *Gods of the Upper Air*, historian Charles King takes the reader on a dazzling intellectual journey. The volume’s subtitle spells out his thesis: *How a circle of renegade anthropologists reinvented race, sex, and gender in the twentieth century*. In this landmark study, King offers an enthralling narrative of a group of scholars who “found themselves on the front lines of the greatest moral battle of our time: the struggle to prove that – despite differences of skin color, gender, ability, or custom – humanity is one undivided thing.”

German-born American anthropologist Franz Boas (1858–1942) and a group of female anthropologists that he mentored at Columbia University, including Margaret Mead, Zora Neale Hurston, Ruth Benedict, and Ella Cara Deloria, are the central characters of King’s story. First and foremost, *Gods of the Upper Air* chronicles the rich intellectual history of the Boasian^{*} anthropologists and the mark they left on the world. At the same time, King produces vivid descriptions of time and place, detailing the cold logic and harsh realities of the world order – patriarchal, racist, culturally essentialist – against which these female social scientists struggled. This vital account demonstrates the power of knowledge production, which challenges what everyone had just assumed to be true, generating new and critical ways of understanding our vastly different but intimately connected lived realities.

By the turn of the 20th century, Western societies generally embraced the belief that all peoples could be categorized into a hierarchy of fixed races. In *Ancient Society* (1877), the prominent American ethnologist and anthropologist Lewis Henry Morgan argued that all human societies exhibit the same linear sequence of evolutionary stages, progressing from savagery to barbarism – and, finally, to civilization. Evolutionist thinkers like Morgan evaluated non-European societies against a European model, which, for them, constituted the apex of progress. At the time, Morgan himself was writing against the more virulent forms of scientific racism espoused by theorists like the French aristocrat Arthur de Gobineau, best known for his *Essay on the Inequality of Human Races* (1853–55). As King writes, Gobineau posited “an ancient ‘Aryan’ population from which modern white people were descended and decried its spoliation through inbreeding with lesser types.”

Racial science was widely accepted not only in the field of anthropology, but it permeated virtually every other discipline and school of thought, profoundly shaping institutions and their legacies. As King notes, “The idea of a natural ranking of human types shaped everything,” from school curricula to court decisions and policing tactics to popular culture. Indeed, even as Boas and his circle were meticulously debunking the pseudoscience behind racism, U.S. colonial administrators in the Philippines were operating within the logic of racial hierarchies. The U.S. was not alone. France, Germany, and Britain propagated



Bold Women (left) Zora Neale Hurston photographed by Carl Van Vechten in 1938. Charles King observes that Hurston’s work as a folklorist “wasn’t so much about capturing a dying culture as trying to understand the here-and-now of a ferocious, angular way of being.” As Hurston herself later wrote, “Negro folk-lore is still in the making.” (right) Ruth Benedict in 1924, when she served as Boas’s assistant in his lecture courses at Barnard College. “The discovery of anthropology — and Dr. Boas — proved to be her salvation,” her sister would recall. CREDITS: (LEFT) LIBRARY OF CONGRESS, PRINTS AND PHOTOGRAPHS DIVISION; (RIGHT) LIBRARY OF CONGRESS, MARGARET MEAD PAPERS

scientific racism throughout their empires, and its legacies remain with us to this day. As Lisa Lowe writes in *The Intimacies of Four Continents* (2015), “The operations that pronounce colonial divisions of humanity — settler seizure and native removal, slavery and racial dispossession, and racialized expropriations of many kinds — are imbricated processes, not sequential events; they are ongoing and continuous in our contemporary moment, not temporally distinct nor as yet concluded.”

Franz Boas turned to anthropology in the 1880s, and the battle he and his students took on would prove long and arduous. He lived to see Nazism prevail in the country of his birth. His final words were spoken at a gathering at the Columbia Faculty Club, on December 21, 1942. To a distinguished visiting scholar who had fled Paris following the German occupation, Boas said: “We should never stop repeating the idea that racism is a monstrous error and an impudent lie.” Attempting to rise, the great anthropologist fell back in his chair. His heart had stopped.

King chillingly draws out the links between the rise of Nazism in Europe and the long and sordid history of white supremacy in the United States. He writes, “At the time, any right-thinking American took many of the basic ideas the Nazis espoused as natural and well proven, even if they weren’t accompanied by a swastika. The Germans had spent the 1930s not so much inventing a race-obsessed state as catching up with one.”

The American eugenicist Madison Grant is one of the characters that makes an appearance in King’s book. He believed that immigration would push the country into a “racial abyss,” leading to its ultimate decline. As King notes, Grant’s *The Passing of the Great Race; or, The Racial Basis of European History* (1916) was “hailed as a milestone in the application of scientific ideas to history and public policy.” Recent scholarship demonstrates how such ideas about race informed the logic and practice of numerous disciplines and institutions in the United States — and at every level of society. For example, in *White World Order, Black Power Politics: The Birth of American International Relations* (2015), Robert Vitalis demonstrates that the field of international relations is historically rooted in spurious theories of race development as well as in anxieties about rising challenges to the white world order. He traces the genealogy of *Foreign Affairs*, the esteemed journal of the Council on Foreign Relations, which was originally established in 1910 as the *Journal of Race Development*. This is but one thread of many in this all but forgotten history unraveled by Vitalis, illustrating how international relations was designed to maintain white dominance in a changing world.

Gods of the Upper Air captures the immense impact that the Boasian anthropologists exerted through their research and their advocacy. As King shows, thanks to them, most anthropologists today reject the linear evolutionary model of progress, which sees peoples

moving *upward* from “primitive” to “civilized” societies. Their interventions challenged and forever transformed academic, political, and social debates around race, gender, and culture by decoupling cultural difference from biology while directly confronting the fallacies of scientific racism. Notably, their work insisted on relativizing Western thought and social organization, forcing American intellectuals — and later, publics — to contend with the notion that their realities, rather than being based on objective science, are socially constructed.

In Boas’s seminal essay, “The Limitations of the Comparative Method of Anthropology” (1896), he calls on anthropologists to renounce the idea of any standardized evolution of societies. He directly confronts claims made by evolutionary anthropologists, such as the idea that peoples that inhabit similar climates share cultural attributes and kinship systems. Instead, the Boasian project was one that highlighted the plurality of cultures. Boas worked at the American Museum of Natural History in New York from 1896 to 1905, rearranging artifacts to reflect specific cultural and geographic groupings. Until that point, objects in the museum were displayed to reflect broad stages of human or social development. This was a radical shift, and it laid the foundation for the essential contributions that were to come from the students of the Boasian school, including, most notably, Ruth Benedict, Zora Neale Hurston, and Margaret Mead.

Mead’s *Coming of Age in Samoa* (1928) contended that many widely held beliefs about sexuality and adolescence were culturally contingent. King describes how Mead herself felt constrained by the austere strictures of her own cultural background. Benedict’s *Patterns of Culture* (1934) is arguably the most cited and taught work of anthropological theory in the history of the field. Its impact has been profound. The notion of cultural relativism was popularized by Benedict’s pioneering work, which illustrates the wide arc of human variation, detailing the social norms, customs, and values of vastly different societies. It is not a stretch to say that Benedict relativized Western cultural norms.

King also writes about Zora Neale Hurston, the great writer and folklorist who did significant fieldwork among African Americans across the American South. A Black female anthropologist in a white man’s world, Hurston died in obscurity and penniless in 1960, her work deeply undervalued if not forgotten for years following her death. Hurston’s contributions to the anthropological canon have only recently begun to be integrated into curricula across American universities. Of note: King takes his title from a deleted chapter of Hurston’s autobiography, *Dust Tracks on a Road* (1942): “I have walked in storms with a crown of clouds about my head and the zig zag lightning playing through my fingers. The gods of the upper air have uncovered their faces to my eyes.”

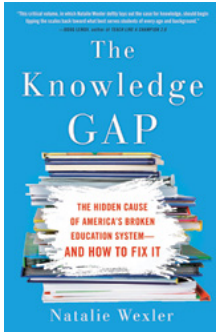
////////////////////////////////////
The Boasian anthropologists were not without their faults. Later scholars would go on to significantly critique this generation of anthropological researchers, while building upon their groundbreaking work. Despite its anti-essentialist intent, for example, Benedict’s *Patterns of Culture* ascribes psychological attributes to societies, homogenizing traits across a group as though intracultural variations did not exist.

////////////////////////////////////
██████████

To be fair, the Boasian anthropologists were not without their faults. Later scholars would go on to significantly critique this generation of anthropological researchers, while building upon their groundbreaking work. Despite its anti-essentialist intent, for example, Benedict’s *Patterns of Culture* ascribes psychological attributes to societies, homogenizing traits across a group as though intracultural variations did not exist. Moreover, Mead and colleagues worked on behalf of the federal government during and after World War II to produce national character studies, which identified peoples and nations with defining cultural characteristics. Controversies within the field continue to exist around their purported role in aiding Cold War American imperialism. Others have praised them for their attempts to influence policy and emphasize cultural pluralism.

As King notes, the story of this circle of anthropologists is worth spending time with not because they were the first people to challenge misconceptions about race, gender, and sex. Rather, Boas and his students were unusually attuned to sensing *the gap between what is real and what is said to be real*. King illustrates this powerfully by interweaving the deeply personal stories of these cultural radicals throughout his narrative. This line of inquiry will resonate with readers who today are enduring a climate in which the boundary between fact and fiction is ever more blurred.

King eloquently draws connections from Boas’s time to our own, underscoring the racialized discourse that characterizes current debates on immigration, race, and nationalism. *Gods of the Upper Air* masterfully illustrates how a group of mavericks influenced generations of scholars to come on questions of race, gender, and sex. At the same time, the undying power of debunked ideas — about race and culture, difference and hierarchy — illustrates the limitations of bare facts in challenging dominant ideologies and powerful interests. ■



The Knowledge Gap: The Hidden Cause of America's Broken Education System — and How to Fix It

Natalie Wexler

Avery, an imprint of Penguin Random House. 336 pp. 2019.

How to Get Kids Excited about Reading

It's elementary (school)! Education journalist Natalie Wexler argues that providing the youngest learners with knowledge-rich content is the key to improving reading achievement, setting students up for success — in school and in life

By **Elise Henson** and **Constanza Lafuente**

Wexler makes the case that the content-agnostic skills-based approach has exacerbated, rather than alleviated, the gap between low-income and wealthier students.

Education reform over the past several decades has had as a primary goal the elimination of the achievement gap. This gap refers to persistent disparities in academic outcomes between groups of students, commonly measured by standardized test scores. The fact that such gaps persist — between white students and minorities, between wealthier students and their less affluent peers — deeply challenges the American ideal of public education as an engine of social mobility. These disparities have long lent urgency to ongoing efforts to improve education in this country, and their elimination has served as a unifying goal for many of the people involved in that enterprise, including teachers, administrators, parents, and policymakers.

How then have we gone about addressing that gap? That has depended on how we have understood it. In her latest book, *The Knowledge Gap*, education journalist, novelist, and historian Natalie Wexler argues that what has largely been seen as a *skills* gap has actually been driven, as the book's title states, by a gap in *knowledge*.

Since elementary school instruction has “focused on ‘learning to read’ rather than ‘reading to learn,’ educators have overlooked the fact that part of ‘learning to read’ is acquiring knowledge.” Wexler makes the case that the content-agnostic skills-based approach has exacerbated, rather than alleviated, the gap between low-income and wealthier students. As she writes, “skipping the step of building knowledge doesn’t work. The ability to think critically — like the ability to understand what you read — can’t be taught directly and in the abstract. It’s inextricably linked to how much knowledge you have about the situation at hand.”

The Knowledge Gap is an engaging resource for education funders, district and school leaders, teachers, parents, and anyone who wants to learn about the current state of elementary school education and, in particular, reading instruction. The reader gets a front-row seat to two early elementary classrooms whose experiences Wexler weaves throughout the book.

On the first page, we meet Ms. Arredondo, a first-grade teacher valiantly trying to teach her students the concept of a caption, while their enthusiasm and curiosity are instead focused on what the pictures *show* — could it be the moon? Mars? something else? By contrast, Ms. Masi’s second graders listen to her read aloud detailed texts about Buddhist enlightenment one day, and civilization in ancient Greece on another. The students build knowledge *while* they are learning how to identify the main idea and organize their thoughts.

The two examples side by side bring to life the difference between a skills-focused literacy approach (e.g., what is a caption?) versus a knowledge-focused model (e.g., what is enlightenment?), both used in today’s elementary schools.



The Joy of Learning Is it possible, asks Natalie Wexler, to provide all students “with the kind of education that enables them to enjoy learning, understand and retain what they read, become responsible citizens – and even increase test scores? What if it turns out that the best way to boost reading comprehension is not to focus on comprehension skills at all but to teach kids, as early as possible, the history and science we’ve been putting off until it’s too late?” CREDIT: FANG XIA NUO VIA GETTY IMAGES

Vignettes such as these allow Wexler to more aptly illustrate the impact these two distinct approaches have on student learning, as well as make the research and debate behind them more interesting and accessible to readers.

Wexler argues that the two approaches diverge by either delaying or enabling students to access complex discipline-related content. In the first approach, students learn foundational reading skills and read authentic texts limited to their own reading levels. Depending on their individual readiness, students may need to wait until they reach higher grades to access subject content, such as history or science.

In the second approach, students also learn foundational reading skills. Yet, in addition, with their teacher’s support, they access higher-level content and vocabulary that they may not yet be ready to understand independently. Wexler highlights one example of this method, the Core Knowledge Curriculum, in which teachers focus on building content knowledge while providing targeted skills instruction where appropriate, such as in phonics. Through phonics, students learn to decode the relationship between the letters of the alphabet and their corresponding sounds.

While either approach may seem reasonable on its face, Wexler anchors her discussion in the “abundance of research showing that background knowledge [is] the most important factor in understanding any text.” She

begins with the results of a study conducted in 1987 by Donna Recht and Lauren Leslie, which aimed to determine to what extent a child’s ability to comprehend a text depended on prior knowledge of the topic. In the experiment, each student read a passage about baseball and attempted to reenact the action described in the text using a model baseball field. They found that “prior knowledge of baseball made a huge difference in students’ ability to understand the text – more of a difference than their supposed reading level.” Wexler concludes that “reading ability” in the abstract is a misleading concept, since students’ ability to comprehend any text will depend substantially on their preexisting knowledge of the subject.

This leads to the central reflection of the book: “What if it turns out that the best way to boost reading comprehension is not to focus on comprehension skills at all but to teach kids, as early as possible, the history and science we’ve been putting off until it’s too late?”

Why does it matter so much how reading and other subjects are taught in the earliest grades of a student’s educational journey? The achievement gap, after all, attracts the most attention in later grades (though it is also discernable in earlier indicators such as kindergarten readiness). Wexler argues that it is because “elementary school is where the real problem has been hiding, in plain sight.”

She points out that building student knowledge can’t be evaluated based on the progress of one school year; rather,

////////////////////////////////////
Reading about science is important, but it is not the same as learning science. While the former will introduce higher-level vocabulary, the latter involves explaining and understanding phenomena, asking relevant questions, conducting investigations, analyzing and interpreting data, and using evidence to build models to explain phenomena. It entails a deeper, richer, and more holistic learning experience.

////////////////////////////////////
it's a cumulative, multiyear effort in which the effects of the early grades may not become apparent until later years. As a result, Wexler posits that "even those who have studied the K-through-12 system as a whole have failed to notice that what seems like success in elementary school is only planting the seeds of failure in high school."

The focus in elementary school has long been on building foundational skills in literacy and numeracy that will enable later learning. But the enormous pressure that the high-stakes accountability measures of recent decades put on schools and teachers to improve in math and reading often result in a narrowing of the elementary school curriculum, with subjects such as science and social studies receiving decreasing time and attention.

Wexler argues that this is problematic because accessing rich, discipline-related texts in later grades is far too late for students from low-income backgrounds. Middle-income and higher-income parents can often more easily reinforce and extend what their children learn at school by reading aloud advanced texts, participating in social and informal networks with other highly educated individuals, visiting museums, and traveling. By contrast, lower-income families tend to rely heavily on schools to help build their children's foundational subject knowledge. In her view, content-free curricula and purely skills-based instruction end up "denying less-privileged children access to knowledge."

The central irony, in Wexler's view, is while the hyperfocus on reading, math, and skills-based instruction within the current policy context is aimed at closing the achievement gap, it effectively continues to move that goal ever further out of reach. As a result, the very education policies intentionally designed to increase student learning conspire to exacerbate educational inequity.

The Knowledge Gap makes a persuasive case for attending to the importance of rich content and high-quality curricula in elementary classrooms. However, the book does raise a few questions. First, and most importantly, providing access to complex texts is a necessary condition, but not a sufficient one, for improving student learning and setting students up for success.

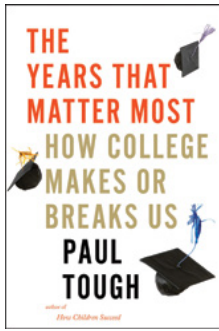
Take science instruction. *Reading about science* is important, but it is not the same as *learning science*. While the former will introduce higher-level vocabulary, the latter involves explaining and understanding phenomena, asking relevant questions, conducting investigations, analyzing and interpreting data, and using evidence to build models to explain phenomena. It entails a deeper, richer, and more holistic learning experience.

Another central issue that is only modestly addressed in the book is what teachers themselves need to learn in order to employ a knowledge-focused reading curriculum. Professional learning for teachers often focuses on building skills that will be useful in any classroom. However, some research shows that it is more effective to focus on building knowledge and skills within the specific curriculum the teacher is using with their students, suggesting that it is not enough to just have good curriculum — teachers also need to be supported in learning how to best teach it with diverse students.

The Knowledge Gap also pays far less attention to the other ways that schools, classrooms, and teachers can support student learning. These include the intentional integration of social and emotional development into academic learning; well-prepared and supported teachers and leaders; engaged parents; culturally responsive practices and school cultures that foster a sense of belonging and affirm students' identities; and supporting the whole child.

Finally, by keeping the focus on the *why* of content-rich curriculum, Wexler gives somewhat short shrift to *how* changes in curriculum and instruction will happen at scale, given the substantial shifts in educator mindset and behavior that are required to achieve that goal. She acknowledges that efforts to improve education have a complicated and often fraught history, one laden with cultural, political, and social considerations, writing that "far too often, teachers are simply told to do things without having the underlying reasons explained — and without enough of an opportunity to explore and investigate these reasons for themselves."

That said, the more complex understanding of the role of high-quality curriculum in acquiring literacy skills offered by *The Knowledge Gap* might give educators and decision makers the inspiration they need to introduce those very important changes in curriculum and instruction. ■



**The Years That Matter Most:
How College Makes or
Breaks Us**

Paul Tough

Houghton Mifflin Harcourt. 390 pp.
2019.

Are Colleges Fulfilling the Promise of Social Mobility?

A new book from Paul Tough takes a hard look at the socioeconomic barriers to entering college, staying at college, and graduating from college

By **Marisa Siroka** and **Alexandra Cox**

Today's society is characterized by vast disparities in wealth and opportunity that create obstacles to college access and completion for many students. In fact, research shows that affluent college students are significantly more likely to earn a college degree than their less wealthy peers.

KiKi Gilbert will be the first in her family to graduate from college, but her path to and through Princeton University has been riddled with obstacles. After being uprooted several times throughout her childhood, KiKi landed in Charlotte, North Carolina, for her sophomore year of high school. Her family of five took up residence in the Arlington Suites, a low-budget motel astutely chosen by her mother for its proximity to the academically rigorous Myers Park High School. That year, KiKi found herself sitting in the bathroom each night, typing her homework assignments on a cracked phone while her family slept in a shared single room.

KiKi's hard work was undertaken in pursuit of a brighter future, with the hope that a college degree would serve as her springboard. Her faith that a college education could lift her family out of poverty reflects an American ideal that emerged in the second half of the 20th century when veterans returning from World War II availed themselves of the free education provided by the GI Bill. As the country increasingly shifted toward a knowledge economy, a college education became a reliable pathway to a better life.

Today, the picture is more complicated. Educational attainment and future earnings are more tightly connected than ever: college graduates earn 84 percent more on average than nongrads.

However, today's society is characterized by vast disparities in wealth and opportunity that create obstacles to college access and completion for many students. In fact, research shows that affluent college students are significantly more likely to earn a college degree than their less wealthy peers. One study found that among enrolled college freshmen, nearly 90 percent from the top income quartile will earn a degree by age 24, whereas only about 25 percent of students from the bottom half of the income distribution will do the same. This data suggests that the promise of social mobility through higher education is not being fulfilled for all students.

This is the central issue of Paul Tough's latest book, *The Years That Matter Most: How College Makes or Breaks Us*, and his analysis suggests that, while college may work for some, the system is not functioning as a reliable engine of social mobility for all. Grounding his book in national research and illuminating it with individual student experiences, Tough presents a compelling narrative about both the structural deficiencies of America's higher education system and the personal circumstances that complicate college access and success for many young people.

The Years That Matter Most is most engrossing, and often heart-wrenching, on those pages that recount the lived experiences of young people. On the first page, we are introduced to Shannen Torres, a senior at a public high school in Harlem anxiously awaiting an admissions



Culture Clash In *The Years That Matter Most*, Paul Tough presents vivid portraits of students like KiKi Gilbert, who struggles to reconcile her position as an Ivy League student with the harsh reality of her family's continued poverty while simultaneously forging her own identity in an alienating environment.

CREDIT: RICK FRIEDMAN/CORBIS VIA GETTY IMAGES

decision from the University of Pennsylvania, her dream college. Like KiKi, Shannen believes that an Ivy League education is her ticket into the middle class, and she has worked hard to get there. When her rejection email comes just a few pages later, the reader feels a kind of empathetic indignation as Shannen experiences profound heartbreak. Shannen's devastation is not only a response to personal rejection but also recognition that her opportunity for social mobility has been lost: "As far as she could tell, there was no room for error in the new system of American class mobility. Young people from her corner of the Bronx didn't often get second chances." If the system really worked, how could it not work for someone like Shannen?

Some version of this question is implicit in each of the stories Tough shares, which interweave to form a coherent narrative about the structural forces that have come to dictate college admissions, enrollment, and experiences in recent years. While a student's academic merit is not unimportant, Tough leads us to conclude that it is the interaction between a student's luck — including the student's socioeconomic status — and these broader systemic realities that is at least equally important in determining the student's access to and success in college.

Shannen's experience of rejection is soon countered by her acceptance to Stanford University, where she had applied as an afterthought. While the news is welcome, it is also confusing. To be accepted by one elite institution a mere 24 hours after rejection from another lent credence to a friend's words of comfort from the previous day: "It's all about luck."

Students who lack family wealth are particularly susceptible not only to the apparent capriciousness of the modern-day college admissions process but also to the emphasis that that process places on SAT and ACT scores. Tough devotes several pages to a discussion of test prep and its role in perpetuating unequal access to high-quality colleges, making real the persistent correlation between family income and student test scores.

The primacy of test scores in the college admissions process, however, is just one element that helps to facilitate a "meritocratic system of selective advancement" that largely excludes low-income students from the country's most selective institutions of higher education (institutions that, incidentally, tend to do the best job propelling their students up the socioeconomic ladder). If there are any holes in Tough's narrative, it is the lack of explicit

discussion of the myriad other discrepancies in student experiences throughout their early childhood and K–12 education. College admissions do not exist in a vacuum, and Tough’s earlier books, *How Children Succeed: Grit, Curiosity, and the Hidden Power of Character* (2012) and *Helping Children Succeed: What Works and Why* (2016), are helpful companions to this most recent release in illuminating the intersection of poverty and education.

The role of family wealth in college admissions is now part of a national conversation; Tough’s primary contribution in *The Years That Matter Most* is to provide the potent stories and statistics that can advance that conversation further. But Tough also spotlights another, less often discussed barrier to economic diversity on college campuses: the financial pressures that all but the most elite colleges have increasingly begun to face over the past few decades. Tough gives us a behind-the-scenes look at the “admissions-industrial complex,” a term that describes the precarious balancing act between the admission of academically deserving students versus the admission of high-income students who can pay the tuition necessary to keep the institution afloat.

In his profile of Trinity College, a selective liberal arts college in Connecticut, Tough paints a disillusioning picture of the impact this balancing act can have on student admissions and campus culture. Despite the best intentions of the admissions team, the financial pressures faced by the college necessitate the rejection of highly qualified, low-income applicants in favor of less qualified, high-income applicants. This results not only in less opportunity for those denied admission but also in a campus that is less welcoming to and supportive of the low-income students that it does serve.

Among the many emotional tales of individual student experiences, this section of *The Years That Matter Most* is perhaps the hardest to read in that it so starkly depicts the systemic barriers with which low-income students must contend in pursuit of social mobility through education. There are some exceptional students for whom the system can work, and Tough provides nuanced depictions of those students’ experiences, but there are so many more students, exceptional and otherwise, for whom college is not a tool but rather a barrier to social mobility. We meet some of those students in the pages of this book, but their relative underrepresentation in *The Years That Matter Most* is itself a poignant echo of their exclusion from educational opportunity in our society.

One of the most insightful aspects of the book is the way Tough explores not just the interplay between economic circumstances and education but also the way that culture impacts a student’s college decision and experience. Tough writes, “Upward mobility is not simply a question of earning more money than one’s parents. It is also, for many people, a process of cultural disruption: leaving behind



“Upward mobility is not simply a question of earning more money than one’s parents. It is also, for many people, a process of cultural disruption: leaving behind one set of values and assumptions and plunging into a new and foreign one.”

– Paul Tough, *The Years That Matter Most*



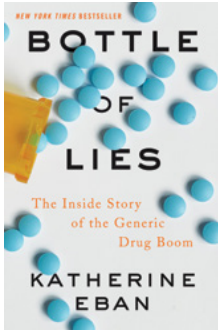
one set of values and assumptions and plunging into a new and foreign one.”

We get glimpses of this struggle in KiKi’s experience at Princeton where only 2.2 percent of students come from the bottom fifth of the income distribution. Unlike wealthier students, for whom college is generally a way to weave themselves more tightly within the fabric of their families, KiKi’s decision to attend college is one that tears at that fabric and strains her familial relationships. She struggles to reconcile her position as an Ivy League student with the harsh reality of her family’s continued poverty while simultaneously forging her own identity in an alienating environment. For example, she realizes her experience living at the Arlington Suites was a valued commodity when she wrote about it in her college application, but it is also one that leaves her socially stigmatized among her peers on the wealthy Princeton campus. The irony is not lost on her.

Like KiKi and Shannen, many of the students included in *The Years That Matter Most* have chosen to pursue a college degree because they believe it will be a pathway to a better life. Are they right? Does college still work?

Tough presents a complicated picture. KiKi and Shannen have overcome myriad obstacles to access two of this country’s most elite institutions. Their stories seem to validate the idea that students of all backgrounds can enter and succeed in those settings. At the same time, we understand these students to be exceptional, both in terms of their individual qualities and within the context of a larger system that is stacked against them.

And a system that only works for some students — students who are both exceptionally hard working and exceptionally lucky — is not a system befitting of a society that purports to believe in an American Dream linked to educational attainment. While students like KiKi and Shannen may continue to defy the odds, we must recognize the need to transform the system so that they don’t have to. ■



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

Katherine Eban

Ecco, an Imprint of HarperCollins Publishers. 482 pp. 2019.

POISON PILLS

In a tour de force of investigative reporting that reads like a medical thriller, Katherine Eban exposes the deceit and rampant fraud behind the global generic drugs industry

By **Anita Jain**

The book opens with a chase. Arriving at a complex through an unused hallway, a wily investigator notices a man with a garbage bag full of crumpled paper walking toward him a little too quickly. When the investigator locks eyes with the man, he abruptly pivots and bolts down the hallway as the investigator sets off in pursuit. The man opens a side door and throws the bag onto a pile of garbage before disappearing into the maze of the building. Retrieving the bag, the investigator discovers a trove of incriminating documents.

The investigator is not from the FBI, the location is not a covert military facility in an enemy country, and the book is not a novel in Robert Ludlum’s Bourne series. The investigator is from the Food and Drug Administration (FDA), the site is a pharmaceutical factory in India, and the book is Katherine Eban’s *Bottle of Lies: The Inside Story of the Generic Drug Boom*.

With the help of an Andrew Carnegie Fellows grant in 2015, Eban, an investigative reporter who has written for *Vanity Fair*, *Fortune* magazine, and the *New York Times*, has produced a fastidiously researched and doggedly reported exposé of the fraudulent practices and corporate greed that have cast a pall over the \$300 billion global generic drugs industry.

If you are taking drugs prescribed by a doctor, chances are that it is a generic drug, priced at an affordable level far below what you would pay for the branded drug originally produced and patented by a well-known pharmaceutical company like Pfizer or Merck. Generic drug companies step into this breach, reverse engineering medication to match the original in efficacy and dosage once its patent lapses. The entire generics industry benefits from the widespread assumption that the generic form is clinically equivalent to the branded drug, and in many cases it is. Eban devotes more than 400 pages to discovering when it is not. At best, some generic drugs can be ineffective at treating the problem for which they are designed, and at worst, they can be actively harmful to a patient’s health.

Although she writes about the generic drugs industry as a whole, the bulk of Eban’s reporting is dedicated to uncovering examples of dishonest practices in India’s pharmaceutical industry, which produces the largest volume of generic drugs globally, supplying an estimated 50 percent of global vaccines and 40 percent of generic demand in the United States. In particular, Eban closely follows the demise of Ranbaxy, one of India’s most promising drug companies, once on track to reach \$1 billion in global sales, before it pled guilty to seven felony charges in the U.S. in 2013. Indeed, in India the book is marketed under the title *Bottle of Lies: Ranbaxy and the Dark Side of Indian Pharma*.

In one scene near the beginning of the book, Eban describes a meeting in the early 2000s in Boca Raton,



India’s pharmaceutical industry ... produces the largest volume of generic drugs globally, supplying an estimated 50 percent of global vaccines and 40 percent of generic demand in the United States.



Florida, of top executives from Ranbaxy. The executives were there to discuss Ranbaxy's recent U.S. launch of Sotret, the company's version of the brand-name anti-acne drug Accutane produced by Roche. Ranbaxy had rapidly made a dent in the U.S. market by coming out with the first available low-cost version of the popular drug.

Yet, the company had discovered that their drug was failing as a medication. Manufactured in a controlled environment, the batches Ranbaxy submitted for FDA approval worked like the original. However, when production was ramped up to make commercial-sized batches, impurity levels rose and the drug dissolved incorrectly. This type of irregularity was especially fraught for a drug like Accutane, which, even when formulated perfectly, could cause severe side effects like birth defects or suicidal tendencies.

Eban recounts the stark choice the executives faced: "Stopping the launch would mean abandoning the company's financial goals. Continuing it with no further disclosure to regulators would endanger patients and violate the FDA's rules." The result? "The push for profits won out." The author goes on to describe how instead of immediately pulling Sotret off the market, Ranbaxy soft-pedaled the problems to the FDA, withdrawing only a few lots from the market, saying that it planned to fix some issues with the drug in the laboratory.

Bottle of Lies portrays many such cases of Indian drug companies not just skirting FDA rules but actively trying to deceive regulators — like the book's opening scene featuring the shrewd FDA investigator at a factory belonging to Wockhardt Ltd. However, Eban pays far less attention to the legitimate, and in many cases heroic, practitioners of the global generics industry, who have enabled hundreds of millions of patients around the world to access drugs at affordable levels.

In fact, the rise of the Indian generics industry in the 1990s was rooted in humanitarian purpose. As the AIDS epidemic swept the world and especially Africa, Big Pharma set the price of its three-drug cocktail at a prohibitive \$12,000 a year for a single patient. Infuriated, AIDS activists looked to India and prevailed upon one of the country's oldest drug manufacturers, Cipla, to do better. Cipla's chairman, Dr. Yusuf Hamied, did just that, offering the same cocktail for a dollar a day, a mere three percent of Big Pharma's price tag. "It was a number low enough to be world-changing," Eban writes. "It was the \$1 a day figure that changed the calculus of the West — from 'we can't afford to help' to 'we can't afford not to.'"

Notwithstanding this historic episode, the evolution of the generics industry has been somewhat less illustrious, according to Eban. The author's gripping tale is revealed

through the eyes of her main character, Dinesh Thakur, who left a cushy senior position at Bristol Myers Squibb in New Jersey and, along with two other colleagues, joined Ranbaxy in India in the early 2000s. "The three colleagues thought of themselves as setting off on a momentous adventure: to help build an Indian company dedicated to research, a Pfizer for the twenty-first century," the author writes.

Bottle of Lies recounts how Thakur, a few years into his tenure as global head of research at Ranbaxy, had begun to grasp the nefarious practices underpinning the company's outward success, such as falsifying or inventing data for FDA regulators, leading him to discover that these actions weren't singular lapses but rather part of an intentional strategy — one in which Ranbaxy misrepresented itself down to the factory level. Unlike in the U.S., where visits are unannounced, overseas FDA inspections are planned well ahead of time, allowing the drug company ample time to prepare for the inspectors' arrival. Eban's sources tell her how senior executives would descend on a Ranbaxy factory days, or weeks, before an inspection and dispose of unapproved materials and ingredients, whitewash evidence of changes in drug formulations, and plagiarize data from trials of brand-name drugs, passing them off as their own.

One particularly egregious Ranbaxy practice involved senior executives toting suitcases stuffed with brand-name prescription drugs when they traveled back to India. Of course, they could have been using the brand-name medications for research and development of the generic form. But Ranbaxy's motivation was much darker, as Eban learns from several of its former employees: the company substituted the brand-name samples for their own in order to generate data showing how clinically equivalent the generic was to the original. With a front-row seat to these shenanigans, Thakur's conscience forced him to resign. He alerted the FDA and became a whistleblower in a case that would, over the course of a decade, eventually bring down the company.

In many places, Eban's tale of deception and intrigue unfolds like a thriller, replete with buccaneering investigators adept at rooting out the secrets that some generics companies have gone to great lengths to hide. But *Bottle of Lies* is not just a rollicking good read; it shines a much-needed light on the potential dangers of an industry all of us use. On first hearing, Thakur's lawyer, Andrew Beato, thought the whistleblower's story sounded utterly implausible, even impossible. Eban channels Beato's amazement: "Fraud was typically limited and select — a rogue employee, a single incident, or a poorly managed plant. How could *everything* at a company be fraudulent?" ■

CARNEGIE MELLON'S CREATE LAB: BUILDING THE TOOLS THAT COMMUNITIES ACTUALLY NEED

The innovative lab uses robotics, education, and technology to help empower communities to address real problems – and create real change

By **Aruna D'Souza**



Pandemics CREATE Lab's EarthTime project enables users to view compelling animations that draw upon its vast data library to tell stories that illuminate our collective impact on the planet. Here, "The Pandemic and the City" story captures the spread of COVID-19 as of February 29, 2020.

CREDIT: EARTHTIME.ORG | CMU CREATE LAB

How can science, technology, and engineering serve the needs of people in our communities who are advocating for more perfect justice? That question is at the heart of CREATE Lab (Community Robotics, Education and Technology Empowerment Lab), a unit of Carnegie Mellon University (CMU) in Pittsburgh. Determined to avoid traditional approaches of “community engagement,” where researchers drop in to a place, decide on residents’ needs, and create “solutions” more beholden to their own tech interests than to what might improve the quality of life for the people who actually live there, CREATE Lab seeks to develop meaningful relationships with community organizations and advocacy groups from the get-go. The idea is to allow the people who know their neighborhoods best to decide what might help them in their own advocacy — and develop tech solutions in response.

Founded in 2000 by Illah Nourbakhsh, who was joined in 2009 by two other lead researchers he had collaborated with at NASA’s Ames Research Center, Randy Sargent and Anne Wright, CREATE Lab has taken on a wide range of projects that are notable for their interdisciplinarity and human-centered approach. Some, including Breathe Cam, have used cutting-edge tech to quantify everyday problems. In the face of concerns by Allegheny County Clean Air Now (ACCAN), an environmental group, that a local coke works was violating EPA regulations, a PhD student at CREATE Lab devised an algorithm that used video cameras to detect when the plant was emitting pollutants. This visual data, along with data collected from affordable air quality monitors placed in residents’ homes, as well as real-time reporting of bad smells collected on an app called Smell MyCity, meant that ACCAN’s concerns would be taken seriously by the EPA. (The coke works was eventually shut down.)

Other projects, including Hear Me, are more analogue in orientation. For this project, volunteers spoke to thousands of young people around Pittsburgh, getting a sense of their urgencies and concerns about a variety of issues. Those stories were then made available to the public via kiosks that took the form of a speaker inserted in a soup-can-and-string “telephone” installed in multiple sites around the city, from parks to street corners to coffee shops. When the city was in the process of selecting a new

What this “citizen science” model results in ... is less of a focus on delivering solutions to communities, and more on helping them achieve their goals.

chief of police, the opinions of youth who had taken part in Hear Me were gathered and presented to the selection committee — an important instance of bringing young people into the political process.

What this “citizen science” model results in, says Ryan Hoffman, a project manager at the lab, is less of a focus on delivering solutions to communities, and more on helping them achieve their goals. “We’re not providing solutions,” he says. “We’re providing tools to help people find their own solution. But is there a tool we can provide to help? That’s where the engineers and tinkerers in the lab get to flex their muscles and say, ‘Well, what if we had *this*?’”

The approach also requires a commitment to collaboration among academic disciplines, which means CREATE Lab is transforming the university itself. “What we do is a blend,” says Hoffman. “It’s a blend of hard sciences, engineering, mixed with humanities and arts education. The data piece, the science piece, the engineering piece — each is just one aspect of what we can analyze. Hear Me was very centered on storytelling. The Smell MyCity app relied on human sensors, not machines.”

CREATE Lab’s long-term collaborations with community groups have allowed it to respond to immediate needs, such as the current mandates for social distancing due to COVID-19. Over the last 10 years, the lab has been gathering annual cohorts of teachers from Pittsburgh school districts — as well as from other parts of Pennsylvania, West Virginia, and Ohio — to develop fluency with data and technology that they can then pass on to their colleagues for use in the classroom. So when it was clear that schools would have to move to online instruction, CREATE Lab, collaborating with other CMU units, including the Simon Initiative, the School of Computer Science, and the Entertainment Technology Center, worked to figure out how to continue supporting educators through technology.

One solution has been to host online office hours to help identify issues teachers are having with the shift from in-person to online classrooms, and making available open-source resources for teachers, students, and families. The online office hours have ended up functioning in part as a kind of community forum, connecting individual teachers, schools, districts, and towns that might otherwise feel isolated, both literally and figuratively. One of the biggest concerns teachers and districts had was that some of their students lived in areas where Internet networks were not sufficient to sustain online learning. So the lab joined SEEN (Sustaining Equity in Education Network), and is working in collaboration with a community organization called Meta Mesh to pursue mesh networking solutions in underserved areas — essentially creating a temporary public Wi-Fi by encouraging businesses and other entities to share their connectivity.

Part of the goal of SEEN has been to educate students on the technology that's out there, while giving them the skills to advocate for it in their communities. CREATE Lab turns immediate needs into problem-based learning projects. Jessica Kaminsky, who is a specialist in education at the lab, sees this as an important aspect of creating equity in K-12 education: "It's important to recognize that not all students have equal access. Mesh networking is one of the ways to level the playing field a little bit. It's not a perfect solution by any means, but it is one way to respond to the problem. So we're creating a board game that's going to teach some of the basics of what this network is and what it might look like in my community — what businesses could I approach and who do I need to talk to?"

"I could totally imagine," Kaminsky continues, "a group of students who are learning a little bit about the technical capacity of mesh networking saying, 'Well, if what it takes is for me to put this antenna in a workplace where it can provide access to this neighborhood, why is that business not on board? We can go approach that business about it.'"

Recognizing the very human needs that can be served by high tech is part of what CREATE Lab is about. Anne Wright explains that tools like GigaPan (an open-source program that allows users to create panorama photographs by stitching very high definition images together) was motivated by the desire to find ways to foster connections across the globe. "What was involved in this project was the realization that a big part of what the world needs is increased empathy, and if you can see — and in immersive, intimate detail — the world from somebody else's point of view, it helps fight against all of the forces that are trying to get you to treat other people like inexplicable ciphers. It resists dehumanizing narratives."

GigaPan has been put to many uses, from augmenting classroom experiences to assisting recovery efforts after

Hurricane Katrina and the devastating earthquake in Pakistan.

Another project, EarthTime — which does for real-time moving images what GigaPan does for static snapshots — creates planet-sized time machine videos. EarthTime proved useful in assisting advocates for fair housing in Pittsburgh by overlaying maps of the city with census data, providing a powerful data tool for those seeking economic justice for low-income residents of the city.

Because CREATE Lab put in the community ground-work, when COVID-19 hit, the Lab was able to step in to provide data visualizations to identify the communities — largely peoples of color — that were being hit hardest by the virus. By scraping data from the Allegheny County Health Department and making that data widely available, CREATE Lab is providing tools for advocates in the push to get local health officials to offer more testing and to set up more response centers in the city's most vulnerable areas.

As more and more researchers around the country search for technological solutions free of the kinds of unintended consequences that reduce our quality of life, the CREATE Lab team has been placing human concerns at the center of their thinking for two decades. They are, says CMU president Farnam Jahanian, exactly what the world needs right now: "CREATE Lab's work leverages the power of technology, combined with community-driven engagement, to expand Carnegie Mellon's societal mission in order to promote shared prosperity. Under Professor Illah Nourbakhsh's leadership, the CREATE Lab team's unique, collaborative approach is serving as a model of community engagement for urban research universities across the U.S. I am both proud and humbled by the work they are doing, and I believe their efforts can foment national change at a critical time for our society." ■



Exponential Growth This

EarthTime animation shows that by May 29, 2020, COVID-19 had spread to virtually every country in the world. A little more than two months later, on August 3, the World Health Organization reported that 17,889,134 confirmed cases of COVID-19, including 686,145 deaths, had been reported to the organization.

CREDIT: EARTHTIME.ORG | CMU CREATE LAB

No action more
heroic than that of
doctors and nurses
volunteering their
services in the case
of epidemics.

— **Andrew Carnegie**

Deed of Trust, Carnegie Hero Fund Commission,
March 12, 1904

Contributors

Nehal Amer came to the Corporation from the University of Michigan, where she earned an MA in Middle Eastern and North African studies. A program analyst with the Corporation's Transnational Movements and the Arab Region program, she is currently pursuing a PhD in cultural anthropology at the CUNY Graduate Center.

Michael Connor is a journalist and was a correspondent and editor for the Reuters news agency, where he recently produced and hosted the Global Markets Forum online chat room. A graduate of Fordham University and Columbia University, he was a Knight-Bagehot Fellow at Columbia and has been published in the *New York Times*, *Commonweal*, *Newsday*, and dozens of other news outlets. @mjcl01trrs

Before coming to the Corporation, **Alexandra Cox** worked in education research at Child Trends, where she focused on school climate improvement and access to early childhood education. Cox's interest in education is fueled by time spent in the classroom in New York City and as a Fulbright grantee in Madrid, Spain. A graduate of Duke University, she is now a program assistant in the Education program on the New Designs to Advance Learning team.

Sr. Dr. Dominica Dipio holds a BA in education and an MA in literature, both from Makerere University in Uganda, and a PhD in women in African cinema from the Pontifical Gregorian University (Rome), where she also lectured on film criticism and African cinema. A professor at Makerere University, she heads the Department of Literature. In 2019, she was named to the Vatican's Pontifical Council for Culture.

Aruna D'Souza is a writer based in western Massachusetts. She is the author of *Whitewalling: Art, Race & Protest in 3 Acts*, and cocurator of an upcoming exhibition of the work of artist Lorraine O'Grady at the Brooklyn Museum. She is a regular contributor to and member of the advisory board of 4Columns, and her writings have appeared in the *Wall Street Journal*, *Bookforum*, *CNN.com*, and other publications. arunadsouza.com | @arunadsouza

A program analyst in the Corporation's Education program, **Elise Henson** supports the Integration, Learning, and Innovation portfolio. Prior to joining the Corporation, she worked at generationOn, the youth division of Points of Light. Henson also has four years of experience as a classroom teacher. She holds a master's degree in international educational development from Teachers College, Columbia University, and a bachelor's degree in biology from Williams College.

Anita Jain is a writer, editor, and journalist who has worked in a number of cities, including Mexico City, London, Singapore, New Delhi, and New York, where she currently lives. She is the author of *Marrying Anita: A Quest for Love in the New India* (Bloomsbury, 2008), and her work has appeared in *New York*, the *Wall Street Journal*, *Financial Times*, and the *Guardian*, among other publications. A graduate of Harvard University, she grew up in northern California.

Ambika Kapur is a program officer in the Corporation's Education program where she manages the Public Understanding portfolio. Kapur oversees grant-making aimed at engaging parents, communities, teachers, and policymakers in understanding and demanding changes in education that ensure that all students develop the knowledge, skills, and dispositions they need for future success. Previously, Kapur served as officer of Special Projects in the National Program, and also managed grantmaking and communications activities for Next Generation Science Standards development and mobilization.

Constanza Lafuente is a program analyst in the Corporation's Education program, supporting the Leadership and Teaching to Advance Learning and Public Understanding portfolios. Prior to joining the Corporation, she worked at Bank Street College of Education, where she coached and trained teachers and school leaders implementing New York City's Pre-K for All. Born in Buenos Aires, she obtained her PhD in comparative and international education with a discipline focus in political science at Teachers College, Columbia University.

The director of Carnegie Corporation of New York's Strengthening U.S. Democracy program, **Geri Mannion** has directed the program since 1998, after staffing the Corporation's Special Projects program for almost 10 years. Separately, Mannion continues to direct the Corporation's Special Opportunities Fund. Active in professional organizations that work to advance and strengthen the philanthropic and nonprofit world, she is currently a member of the Council on Foundations' Public Policy Committee and a board member of the Nutrition Coalition.

Based in Montreal, **Pierre-Paul Pariseau** is an award-winning illustrator who has worked for a wide range of clients. Evoking currents of surrealism and pop art, Pariseau's creative work invites one into a world of images where everything is possible. Some of his images were recently chosen to appear in *Creative Quarterly* magazine (NYC), volumes #57 and #58. In 2020, two of his illustrations were chosen to appear online as part of The Archive collection of American Illustration and American Photography (AI-AP).

pierrepaulariseau.com | Insta @pppariseau

A program analyst with Carnegie Corporation of New York's International Peace and Security program, **Noelle Pourrat** focuses on three portfolios: Euro-Atlantic Security, Congressional Knowledge, and Emerging Security Challenges. Prior to joining the Corporation, she earned a dual MA in international affairs and security from Columbia University and the Institut d'Etudes Politiques (Sciences Po) in Paris. Pourrat previously interned at UN Women and coordinated the NGO Working Group on the Security Council.

@noellepourrat

Having previously worked as a translator for the National Security Archive and as a researcher for *Lapham's Quarterly*, **Eugene Scherbakov** is now a research associate with the Corporation's International Peace and Security program, where he played a major role in the production of the online educational series U.S.-Russia Relations: Quest for Stability. A graduate of Middlebury College, Scherbakov holds an MA in Slavic Cultures from Columbia University.

A program analyst in the Corporation's Education program, **Marisa Siroka** supports grantmaking aimed at advancing school and system models, and as a former middle school math teacher, she brings a practitioner's perspective to her work. Prior to joining the Corporation, she served as a Teaching Fellow and Blue Engine teaching assistant in New York City public schools. Siroka holds an MPA from NYU's Wagner Graduate School of Public Service, an MS in teaching special education from Hunter College, and a BA in history from Williams College.

A program analyst with Carnegie Corporation of New York's International Peace and Security program, **Aaron Stanley** focuses on three portfolios: Peacebuilding in Africa, Asian Security, and Bridging the Gap. Currently a PhD student in political science at the City University of New York, he holds an MSc in violence, conflict, and development from the University of London's School of Oriental and African Studies and a BA in international relations and African studies from Boston University. @aastanley

Hillary S. Wiesner is the Corporation's program director for Transnational Movements and the Arab Region. The program supports the activity, connection, and impact of social science and humanities expertise centered in the Arab region. With the aim of increasing the knowledge sector's contribution to public understanding and policy development, she has previously served in international organizations. Prior to joining the Corporation in 2007, she was senior executive officer and secretary of the directorate of the United Nations Educational, Scientific and Cultural Organization (UNESCO) based in Paris.

The views, conclusions, and interpretations expressed in the *Carnegie Reporter* are those of the authors and do not necessarily reflect the views of Carnegie Corporation of New York, or those of the Corporation's staff, officers, trustees, partner organizations, or grantees.

Catholic Sister,
Professor
& African
Humanities
Program (AHP)
Fellow



SISTER DOMINICA DIPIO

AFRICANS TELLING THEIR OWN STORIES

Sister Dominica Dipio, a film scholar and professor of literature at Makerere University in Uganda, is using her work with film to help shape the future of her country. "Local knowledge, whether in the form of personal stories or traditional folktales, is important," she explains. "Our history, our traditions, our values can energize our present, lead us to new forms of development, and clarify our collective values." One of the first fellows of the African Humanities Program, which has been supported by Carnegie Corporation of New York from its inception, Sister Dipio takes her films into villages and rural areas to spark conversations about the health and progress of those communities. Learn more about her extraordinary story inside this issue (see p. 55) and watch the animated short film inspired by her words at: carnegie.org/dipio. FILM STILLS FROM *THE MAKING OF A HUMANITIES SCHOLAR*.

CREDIT: OSMOSIS FILMS



CARNEGIE CORPORATION
OF NEW YORK

437 Madison Avenue, New York, NY 10022

Non-profit Org.
US Postage
PAID
St. Louis, MO
Permit No. 1018



**CARNEGIE
REPORTER**

for the

**Idealist
Thinker
Seeker**

Subscribe today. **IT'S FREE.**

carnegie.org/reporter

Hayat Ahmed, International Rescue Committee (IRC), Atlanta, Georgia / Photo: Pat Mazzer