

Bulletin of the American Academy of Arts & Sciences



TELLING OUR REGIONAL STORY

Featuring David E. Price, Phoebe Stein,
William Sturkey, John Aldrich,
and Paula D. McClain

DOES MERITOCRACY DESTROY THE COMMON GOOD?

Featuring Michael J. Sandel,
T.J. Jackson Lears, and
Anna Deavere Smith

A CONVERSATION WITH

Astronaut Jessica Meir

WINTER 2021

UPCOMING VIRTUAL EVENTS

February



8 A Timely Confluence: The Backstory of Moderna's COVID-19 Vaccine

Featuring: **Melissa Moore**

11 A Circle of Native American Scholars

Cosponsored with the Harvard University Native American Program and the Stanford American Indian Organization and Native American Cultural Center

Featuring: **Philip J. Deloria, K. Tsianina Lomawaima, Henrietta Mann, Greg Sarris,** and **Robert Warrior**

21 Southern California Members Reception

March

10 Empathy and Our Future

Featuring: **Eric P. Liu** and **Sherry Turkle**

March



24 Honoring Margaret Atwood with the Emerson-Thoreau Medal

Featuring: **Margaret Atwood** and **Gish Jen**

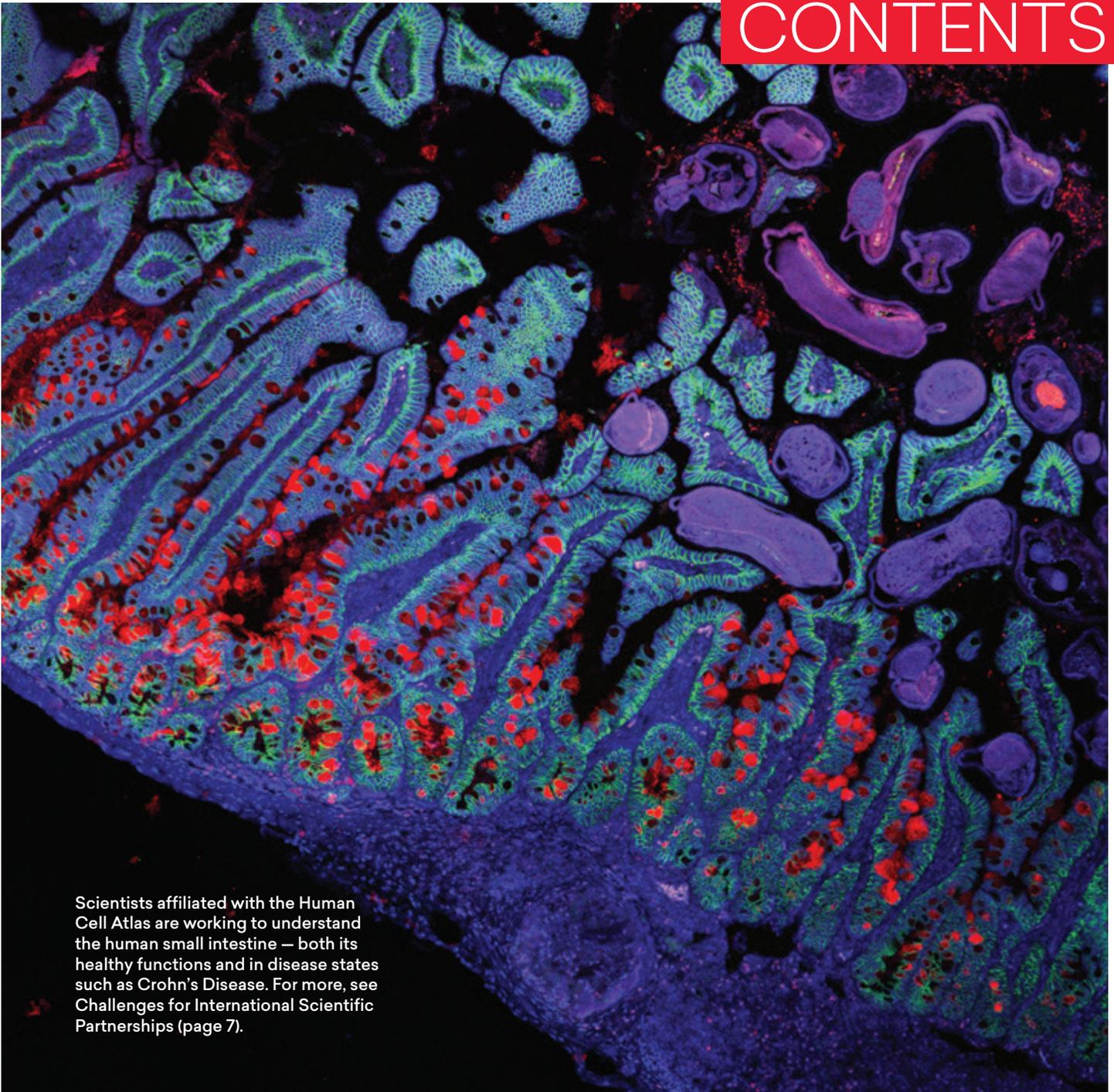
April



6 The American Mythology of Racial Progress

Featuring: **Jennifer A. Richeson**

For a full and up-to-date listing of upcoming events, please visit amacad.org/events.



Scientists affiliated with the Human Cell Atlas are working to understand the human small intestine – both its healthy functions and in disease states such as Crohn’s Disease. For more, see Challenges for International Scientific Partnerships (page 7).

Features

20 A Conversation with Astronaut Jessica Meir

Jessica Meir and Brian Keating

38 Telling our Regional Story: The Narratives that Unite and Divide in North Carolina

David E. Price, Phoebe Stein, William Sturkey, John Aldrich, and Paula D. McClain

50 Does Meritocracy Destroy the Common Good?

Morton L. Mandel Public Lecture
Michael J. Sandel, T.J. Jackson Lears, and Anna Deavere Smith



Our Work

- 4 *Dædalus* Explores the Versatile Literary Form of the Novel
- 7 Challenges for International Scientific Partnerships
- 10 Earning Trust in a COVID-19 Vaccine: Insights from The Public Face of Science Initiative
- 13 New Academy Survey Reveals the Humanities in American Life
- 18 The Limits of Foreign Intervention in Civil Wars and Intrastate Violence



Members

- 62 Celebrating the Newest Members of the Academy
- 64 Noteworthy

Departments

- 3 From the President
- 68 From the Archives

ON THE COVER: Portrait of NASA astronaut Jessica Meir in an Extravehicular Mobility Unit (spacesuit), September 11, 2018.

ON THE BACK COVER: With Earth 250 miles below, NASA astronaut Jessica Meir is pictured tethered to the outside of the International Space Station during a seven-hour, seventeen-minute spacewalk she conducted with fellow NASA astronaut Christina Koch (out of frame), October 18, 2019.



From the President

I hope you are well during this time of both peril and promise for our nation. After a harrowing year that challenged confidence in our public health system, our economy, and our notions of a just and equitable society, our system of democratic government itself came under unprecedented attack. The January 6 insurrection at the U.S. Capitol revealed just how fragile democracy can be. It also underscored the need for constant vigilance to protect our democratic institutions and a renewed commitment to strengthening them in the years ahead.

The Academy is prepared to do its part. On January 25, the Board approved a major initiative to follow up on the work of the Commission on the Practice of Democratic Citizenship, which released its final report, *Our Common Purpose: Reinventing American Democracy for the 21st Century*, in June 2020. Through this new effort, the Academy will lead a process to implement the recommendations in *Our Common Purpose* by the year 2026, the 250th anniversary of the Declaration of Independence. I am grateful to the Commission's cochairs (Danielle Allen, Stephen Heintz, and Eric Liu), the Commission members, and the Academy staff who made *Our Common Purpose* possible and who will be turning the report's recommendations into action in the years ahead.

At the same time, the Academy is exploring questions raised by *Our Common Purpose* about inequality, political economy, and the concept of the "American Dream." Throughout the past year, we have held dozens of meetings with experts about the role the Academy can play in addressing questions of inequality, opportunity, and institutional trust. And through the work of the Academy's Arts Commission, we are exploring issues of equity and access in arts education and examining the ways in which the arts help to bridge divides in our communities.

This focus on democratic citizenship and questions of equity is evident in the projects, programs, and publications detailed in this issue of the *Bulletin*. At the event "Telling our Regional Story: The Narratives that Unite and Divide in North Carolina," the Academy's Research Triangle Local Program Committee took inspiration from one of the recommendations in *Our Common Purpose* to explore their regional history – both the good and the bad – in hopes of creating an honest and inclusive shared narrative. During the event "Does Meritocracy Destroy the Common Good?" Michael Sandel, T.J. Jackson Lears, and Anna Deavere Smith questioned



whether meritocratic systems and institutions are increasingly promoting division and discontent rather than the common good. And in the area of science, activities related to the Academy's projects on the Public Face of Science and Challenges for International Scientific Partnerships explored questions of equity, access, and inclusion in scientific pursuits.

As an organization, the Academy itself made another important step in its journey toward becoming a more open, inclusive, and accessible institution. On January 1, the Academy's quarterly journal *Daedalus* became an open access publication, making all volumes published from 1955 to the present freely accessible. While Academy members have always had free access to *Daedalus*, now faculty, students, researchers, and anyone interested in accessing *Daedalus* content can do so for free. While this change will certainly help to increase the Academy's visibility and impact, it will also allow scholars with limited resources across America and around the world to engage in the Academy's community of knowledge.

As elected members of that community, please know how deeply I appreciate all you have done in the past year to support the Academy, especially at a time when its commitment to knowledge, collaboration, and service could not be of greater importance.

As I close this message, I want to recognize the passing of Louis W. Cabot on January 29, 2021. He was an active member of the Academy for 63 years, served as Chair of the Board and Chair of the Trust, among other positions, generously supported our work, and guided the Academy to fulfill its mission and reach its goals. We will miss his wisdom, generosity, and friendship. A full remembrance of him will be included in the next issue of the *Bulletin*.

David W. Oxtoby



Novel Insights: New *Dædalus* Issue Examines This Versatile Literary Form

We know what *a* novel is, but can we say the same about *the* novel?

E. M. Forster called it “any fictitious prose work” “over 50,000 words.” Dictionaries describe it using terms like complexity, invented, imaginative, and degrees of realism. Georg Lukács asserted that, “The novel is the epic of a world that has been abandoned by God.” Others suggest that the worlds of the novel (the one it lives in and the

one it presents) are zones of contingency, places where Providence has no jurisdiction. But each definition will eventually fail us; for each attempt, there are exceptions. So rather than contemplate what the novel *is*, a more interesting question here might be: what does the novel *do*?

How each author and text deals with “the real” (or avoids it) offers the reader the opportunity to reflect on their own perception. Henry

Fielding’s avoidance of the truth, for example, asks us to think about our various distances from it. (It is not that he does not believe in virtue. He just cannot see any direct connection “in this world” between virtue and reward: he thinks we need a novelist and a fictional plot for that.) And Jane Austen saw the author’s role as one to resolve discrepancies while allowing the readers to see, if they so choose, what the resolution costs. Some novels



seek our assent: the world is like this, is it not? Others ask us to speculate and report on our findings. They say, what if the world were like this? Novels may correct, invert, or replace the real or go out of their way to reproduce its minute details, but the engagement with the missing or magnified referent will always be a part of the reader's experience. This is as true of the novels of Ursula Le Guin as those of Tolstoy.

The Winter 2021 issue of *Dædalus* "On the Novel," guest edited by Michael Wood, features fourteen essays that, rather than surveying or summarizing the fate of the novel, offer remarkable insights into the behavior of this versatile literary

The Winter 2021 issue of *Dædalus* "On the Novel" features the following essays:

Introduction: In This World

Michael Wood (Academy Member; Princeton University)

What Is It Like to Write a Novel?

Lorrie Moore (Academy Member; Vanderbilt University)

Two Theories

Franco Moretti (Academy Member; Stanford University)

Finding the Time for Ancient Novels

Simon Goldhill (Academy Member; University of Cambridge)

Some Endangered Feeling

Nancy Armstrong (Duke University)

Henry James in – and out of – the Classroom

Ruth Bernard Yeazell (Academy Member; Yale University)

The Hole in the Carpet: Henry James's *The Bostonians*

Sharon Cameron (Academy Member; Johns Hopkins University)

"A Woman Is a Sometime Thing": (Re)Covering Black Womanhood in *Porgy and Bess*

Daphne A. Brooks (Yale University)

We "Other Victorians"? Novelistic Remains, Therapeutic Devices, Contemporary Televisual Dramas

Rey Chow (Academy Member; Duke University; University of Hong Kong) & Austin Sarfan (Duke University)

The Survival of the Unfit

Wai Chee Dimock (Yale University)

Poets in Prose: Genre & History in the Arabic Novel

Robyn Creswell (Yale University)

Organic Reformations in Richard Powers's *The Overstory*

Garrett Stewart (Academy Member; University of Iowa)

Video Games & the Novel

Eric Hayot (Pennsylvania State University)

Losing Track of Time

Jonathan Greenberg (Montclair State University)

CHAPTER VI.

It was eight o'clock when we landed; we walked for a short time on the shore, enjoying the transitory light, and then retired to the inn, and contemplated the lovely scene of waters, woods, and mountains, obscured in darkness, yet still displaying their black outlines.

The wind, which had fallen in the south, now rose with great violence in the west. The moon had reached her summit in the heavens, and was begin-

prayed with a feeling of bitter tenderness, that she might never suffer ill. Thus we entered the ~~our~~ mansion - and still not speaking, for both our hearts were too full, we went to a balcony that overlooked the lake

the lake reflected the scene of the busy heavens, rendered still busier by the restless waves that were beginning to rise. Suddenly a heavy storm of rain descended.

I had been calm during the day; but so soon as night obscured the shapes of objects, a thousand fears arose in my mind. I was anxious and watchful, while my right hand grasped a pistol which was hidden in my bosom; every sound terrified me; but I resolved that I would sell my life dearly, and not relax the impending conflict until my own life, or that of my adversary, were extinguished.

Elizabeth observed my agitation for some time in timid and fearful silence; at length she said, "What is it that

Rather than contemplate what the novel is, a more interesting question here might be: what does the novel *do*?

form, glimpses of where and what it has been and where it may go in the future.

Simon Goldhill explains that the novel is much older than scholars used to think. Jonathan Greenberg describes a recent attempt not to write a novel (or to write a non-novel) that happily failed in the end. Nancy Armstrong and Wai Chee Dimock in different ways trace shifts in dominant patterns. Sharon Cameron and Garrett Stewart follow the movements of language and the inescapability of word-play. Rey Chow and Austin Sarfan show us surprising connections between

the novel and the television serial. Eric Hayot wonders whether video games, like many novels, are condemned to their violent happy ends. Daphne Brooks shows how a novel can become an opera that in turn begets an unfinished cultural narrative full of racial mythologies. Ruth Yeazell reports and reflects on many years of reading the novels of Henry James with undergraduate students. Robyn Creswell shows how the novel in Arabic uses poetry as its foil and secret companion. For Franco Moretti, the theory of the novel diverges in novelistic ways from the theory of tragedy. And Lorrie

Above: Mary Wollstonecraft Shelley's annotated first edition of *Frankenstein; or, The Modern Prometheus* (London: Lackington, Hughes, Harding, Mavor, & Jones, 1818). This copy, held at the Morgan Library & Museum in New York City, includes extensive hand-written additions and emendations, revealing Shelley's dissatisfaction with parts of her novel.

Page 4: William Frederick Lake Price, *Don Quixote in His Study* (1857). Photograph; Albumen silver print from glass negative. Image courtesy of the Metropolitan Museum of Art.

Moore, a novelist and a short story writer, suggests that the novel, however faithful it tries to be to the etymology of its name, cannot shake off its sense of history, and does not really try.

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"On the Novel" is available for free on the Academy's website at www.amacad.org/daedalus. In January 2021, *Dædalus* became an open access publication.

Challenges for International Scientific Partnerships

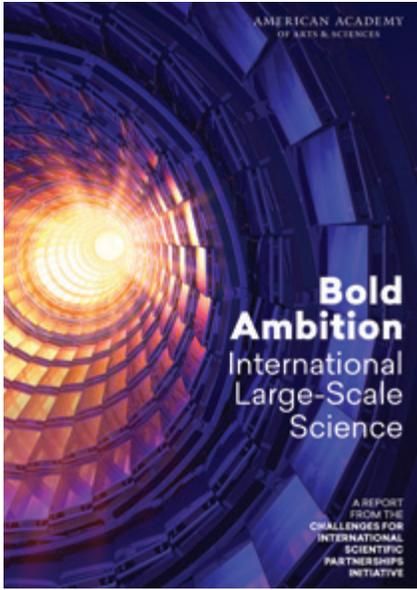
Global challenges, like the COVID-19 pandemic, underscore the value of international coordination and collaboration. In the case of pandemics, this need comes into play not only in managing and mitigating the spread of the disease, but also in the development of treatment therapies and vaccines. Indeed, the first COVID-19 vaccine approved by the U.S. Federal Drug Administration in December 2020 arose from an international collaboration between U.S. and German-based biotech companies, each led by immigrants from Greece and Turkey, respectively.

The American Academy's initiative on Challenges for International Scientific Partnerships began

before the world knew about the SARS-CoV-2 virus and was designed with the understanding that the world would face such global challenges. Since launching in 2018, the initiative, cochaired by Arthur Bi-
enenstock (Stanford University) and Peter Michelson (Stanford University), has engaged with scientists and policy-makers from around the world and consulted numerous leaders, administrators, and representatives of U.S. federal agencies, scientific societies, and international governments. Overseen by leading U.S. and international scientists and science policy experts, the project's work is concentrated in two areas: 1) the establishment of principles for U.S.

participation in large-scale scientific endeavors, including large-scale facilities and distributed networks, and 2) the development of recommendations to strengthen and build equity in U.S. collaborations with emerging science partners, including partners in the Global South. The findings of the working groups in these two areas will be presented in two forthcoming reports to be published in 2021.

A newly released report from the initiative, *America and the International Future of Science*, bridges these two working groups by articulating the importance of international scientific collaboration across disciplines and at all scales. Once the dominant funder of science in the world, the



These two forthcoming reports support the case presented in *America and the International Future of Science* and build more specifically on two areas requiring further thought and attention: large-scale scientific endeavors and collaborations with emerging scientific partners.

U.S. share of research and development (R&D) funding is diminishing as more countries invest in science. Additionally, this expanding global investment indicates that the best scientific talent and partners may be increasingly located in other countries than the United States. As U.S. scientists seek to produce the best possible science, the United States should strongly consider investing in R&D and approving policies that facilitate, support, and foster its scientists in collaborating internationally.

In line with these observations, the report identifies six imperatives for international collaboration:

1. the global nature of scientific questions;
2. competition for global talent;
3. U.S. economic competitiveness;
4. U.S. national security;
5. funding realities, particularly for large-scale science projects; and
6. the development and application of international ethical norms and scientific guidelines.

Drawing on historical and current examples of scientific collaboration and discovery, *America and the International Future of Science* offers a sweeping look at the various ways that science has benefited the United States and its citizens and presents an appeal to U.S. federal agencies and policy-makers to continue prioritizing U.S. leadership of, participation in, and commitment to international scientific endeavors.

Among the many examples of collaboration highlighted in the report is that of the Laser Interferometer Gravitational-Wave Observatory (LIGO), which was designed to detect gravitational waves predicted by Einstein’s General Theory of Relativity. On September 14, 2015, the U.S.-based LIGO detectors in Louisiana and Washington made the first observation of a burst of gravitational waves – coming nearly one hundred years after the publication of Einstein’s theory that predicted the existence of both black holes and of gravitational waves. Two years later, on August 17, 2017,

LIGO and its European counterpart, Virgo, detected gravitational waves from the collision of two neutron stars – an event anticipated for decades (see image on next page). These discoveries provided information to solve decades-old mysteries and unproven theoretical speculations in the astrophysical sciences, an accomplishment that could not have occurred without internationally based facilities and massive collaboration with scientists from around the world.

The report also looks at key challenges facing the United States that demand continued investment in international scientific endeavors, especially those regarding economic and national security concerns. These challenges include, for example, ensuring continued global surveillance and vigilance of emerging infectious diseases; responding to the impacts of climate change, including issues of water and food security; and utilizing science to promote diplomacy despite strained international relations. In a special section, the report offers recommendations for the United States to balance and manage wisely both collaboration and competition with China (see sidebar: *The Perils of Complacency*). The report calls for robust scientific collaboration between American and Chinese researchers, including through visa policies that would encourage Chinese nationals to study and reside in the United States, while ensuring adherence to domestic university policies.

America and the International Future of Science was released on December 14, 2020, at an event that featured project cochairs Arthur Bienenstock and Peter Michelson in conversation with Shirley Malcom (American Association for the Advancement of Science). The discussion was moderated by

The Perils of Complacency

In recent years, China has increasingly invested in its R&D enterprise, and its science and technology (S&T) funding levels are rapidly approaching those of the United States. Meanwhile, the United States has not meaningfully increased its own spending on R&D in decades. A new report, *The Perils of Complacency: America at a Tipping Point in Science & Engineering*, released in September 2020 by the American Academy in partnership with Rice University's Baker Institute for Public Policy, surveys and compares the S&T landscapes of China and the United States. The report focuses on four key ingredients of innovation: human capital, knowledge capital, innovation ecosystems, and financial capital. The report finds that China is increasingly making strides in its domestic R&D, and that if the United States is to remain competitive, it must increase its own investment and significantly strengthen its S&T enterprise.

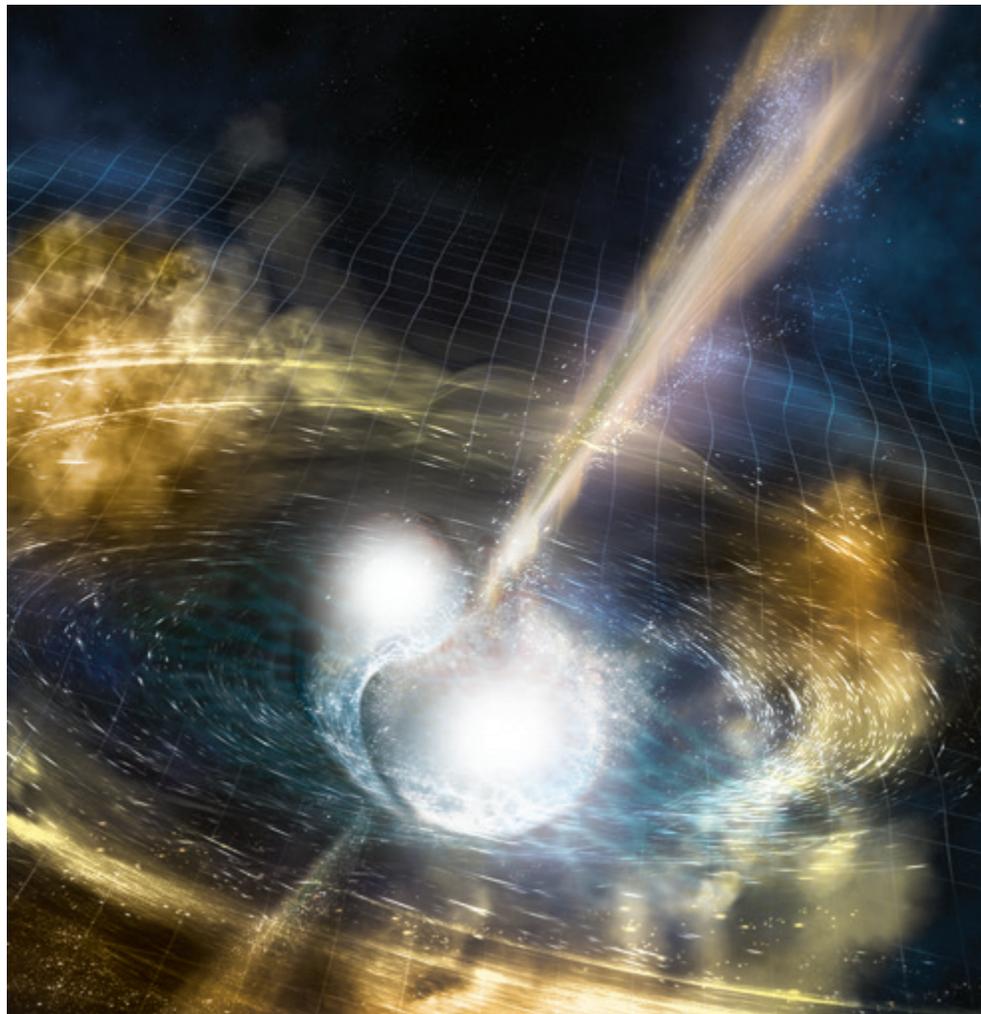
The Perils of Complacency is available on the Academy's website (www.amacad.org/publication/perils-of-complacency) and print copies are available upon request.

Olufunmilayo Olopade (University of Chicago). Malcom and Olopade are members of the initiative's steering committee and coauthors of the project's working group on collaborations with emerging science partners.

In the coming months, the project will be engaging in strategic outreach with key audiences that include the incoming presidential administration, congressional supporters of a strong U.S. scientific enterprise, and groups working to develop careful policies regarding U.S.-China scientific collaboration. Through this engagement, the Academy plans to convey the report's findings as well as lay a strong foundation for continued discussions upon the release of the initiative's two forthcoming publications.

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Challenges for International Scientific Partnerships is generously funded by the Alfred P. Sloan, William and Flora Hewlett, and Gordon and Betty Moore Foundations. *America and the International Future of Science* is available in full online (www.amacad.org/publication/international-science) and print copies are available upon request.



Artist's illustration of two merging neutron stars. The rippling space-time grid represents gravitational waves that travel out from the collision, while the narrow beams show the bursts of gamma rays that are shot out just seconds after the gravitational waves. Swirling clouds of material ejected from the merging stars are also depicted. The clouds glow with visible and other wavelengths of light. Illustration by Aurore Simonnet. Image courtesy of the National Science Foundation, Laser Interferometer Gravitational-Wave Observatory, and Sonoma State University.



Army Spc. Angel Laureano holds a vial of the COVID-19 vaccine, Walter Reed National Military Medical Center, Bethesda, Md., December 14, 2020.

Earning Trust in a COVID-19 Vaccine: Insights from the Public Face of Science Initiative

In August 2020, the Public Face of Science initiative published its final report, *The Public Face of Science in America: Priorities for the Future*, which outlines recommendations for strengthening the relationship between science and society. The first two reports released by the project, *Perceptions of Science in America* (2018) and *Encountering Science in America* (2019), show the heterogeneity of current attitudes toward science and the great breadth of experiences that can influence those attitudes. The final report takes a multifaceted approach and identifies three high-level areas for change that can, over the long term, shape attitudes toward science and people's experiences with it.

PRIORITIES FOR SHAPING THE PUBLIC FACE OF SCIENCE

Priority 1: Building Capacity for Effective Science Communication and Engagement in the Scientific Community

Priority 2: Shaping the Narrative around Science

Priority 3: Developing Systemic Support for Science Engagement Efforts

Though the research and recommendations from the initiative were completed before the start of the COVID-19 pandemic, the findings are more important than ever. As

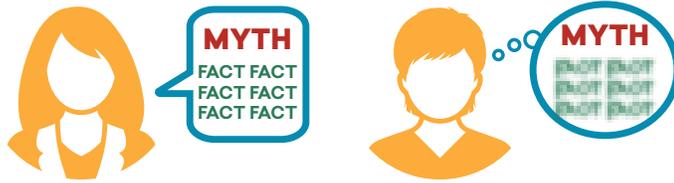
Academy President David Oxtoby and project chair Richard Meserve observed at the time of the release of the final report, “COVID-19 reinforces the need for continuing thoughtful work to address public access to reliable scientific content and to enhance the public’s capacity to identify and reject misinformation and disinformation (intentionally false information).”¹ The pandemic has also highlighted the crucial role of the behavioral and social sciences to ensure clear communication of public

1. American Academy of Arts and Sciences, “Implications of COVID-19 and the Public Face of Science,” August 2020, <https://www.amacad.org/covid-public-face-of-science>.

PROBLEM

Familiarity Backfire Effect

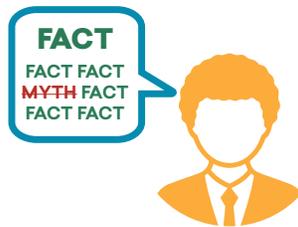
Repeating the Myth Increases Familiarity, Reinforcing It



SOLUTION

Emphasis on Facts

Avoid Repetition of the Myth;
Reinforce the Correct Facts Instead



Preexposure Warning

Warn Upfront That Misleading
Information is Coming



Source: Adapted from Stephan Lewandowsky et al., “Misinformation and Its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest* 13 (3) (2012).

health information. Disciplines like the cognitive sciences can provide insight into effective visual and verbal communication by studying how information is processed or spread within society. For example, research indicates that repeating a myth reinforces the falsehood, so a speaker should focus on repeating the correct facts or provide a warning that misinformation is being shared.²

Given the timely nature of the insights from the Public Face of Science initiative, the American Academy and the National Academies of Sciences, Engineering, and Medicine (NAEM) cohosted in September 2020 a webinar on “Earning Trust in the Age of the Pandemic.” The webinar featured opening

remarks from David Oxtoby and Victor Dzau, president of the National Academy of Medicine, a presentation from Francis S. Collins, director of the National Institutes of Health (NIH), and a panel discussion with Evelyn Hammonds (Harvard University), Seth Mnookin (Massachusetts Institute of Technology), and Monica Schoch-Spana (Johns Hopkins University).

The speakers discussed the nuances associated with the public’s perception of a COVID-19 vaccine and the importance of building and maintaining trust during the vaccine’s dissemination. In framing the societal context for engagement on a COVID-19 vaccine, Dr. Hammonds reminded the audience that pandemics do not produce inequalities; they reveal inequalities. She also outlined the deep, long, and persistent roots of mistrust within African American communities. The Pew Research Center published data in December

2020 that show that while six in ten Americans say they definitely or probably would get a vaccine for COVID-19 if one were available today, only 42 percent of Black Americans said they would.³ It should be noted that the data were collected prior to the Food and Drug Administration’s Emergency Use Authorization for two vaccines following the completion of phase 3 clinical trials.

Given this historical context, the speakers addressed the importance of working with community leaders when addressing mistrust. Dr. Collins mentioned the NIH’s launch of Community Engagement Alliance (CEAL) against COVID-19 disparities. Dr. Schoch-Spana spoke about the need for local, community-based research that is transparent and that creates collective ownership over the outcomes, which is based on insights from *The Public’s Role in COVID-19 Vaccination: Planning Recommendations Informed by Design Thinking and the Social, Behavioral, and Communication Sciences*, a report published by the Johns Hopkins Center for Health Security. In the months since the webinar, Dr. Schoch-Spana has become one of the principal investigators for CommuniVax, a national alliance of social scientists and public health experts working with local teams that have long-standing community relationships

Seth Mnookin added further context to the communications landscape in his discussion of the distinction between COVID-19 vaccine skepticism and the anti-vaxxer movement. He described the role of elected leaders in eroding trust in institutions and the scientific process behind

2. Stephan Lewandowsky et al., “Misinformation and its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest* 13 (3) (2012): 106–131.

3. Cary Funk and Alec Tyson, *Intent to Get a COVID-19 Vaccine Rises to 60% as Confidence in Research and Development Process Increases* (Washington, D.C.: Pew Research Center, 2020), <https://www.pewresearch.org/science/2020/12/03/intent-to-get-a-covid-19-vaccine-rises-to-60-as-confidence-in-research-and-development-process-increases>.

vaccine development. Political divides are also apparent in polling data, with 50 percent of Republicans saying that they would get vaccinated compared to 69 percent of Democrats. Throughout the discussion, the speakers reiterated the importance of listening and they reinforced Dr. Collins’s warning in his opening remarks that we must not “ridicule people or put them down,” because it will only “further polarize the situation.”

The lack of a one-size-fits-all engagement strategy for earning trust in a COVID-19 vaccine mirrors the nuanced attitudes toward science discussed in the Public Face of Science’s report on *Perceptions of Science in America* as well as the need to engage people where they are and in a manner that is informed by insights from the social sciences.



For more on the Public Face of Science Initiative, please visit www.amacad.org/project/public-face-science.

For more information and resources on promising practices for COVID-19 vaccine communication and engagement, see:

REPORTS

COVID-19 Vaccination Communication: Applying Behavioral and Social Science to Address Vaccine Hesitancy and Foster Vaccine Confidence (National Institutes of Health)

A Practitioner’s Guide to the Principles of COVID-19 Vaccine Communications (Center for Public Interest Communications at the University of Florida College of Journalism and Communications)

The Public’s Role in COVID-19 Vaccination: Planning Recommendations Informed by Design Thinking and the Social, Behavioral, and Communication Sciences (Johns Hopkins Center for Health Security)

VACCINE DISTRIBUTION

Framework for Equitable Allocation of COVID-19 Vaccine (NASEM)

Effective Ways to Increase Vaccination Rates: What the Evidence Tells Us (Wellcome Trust)

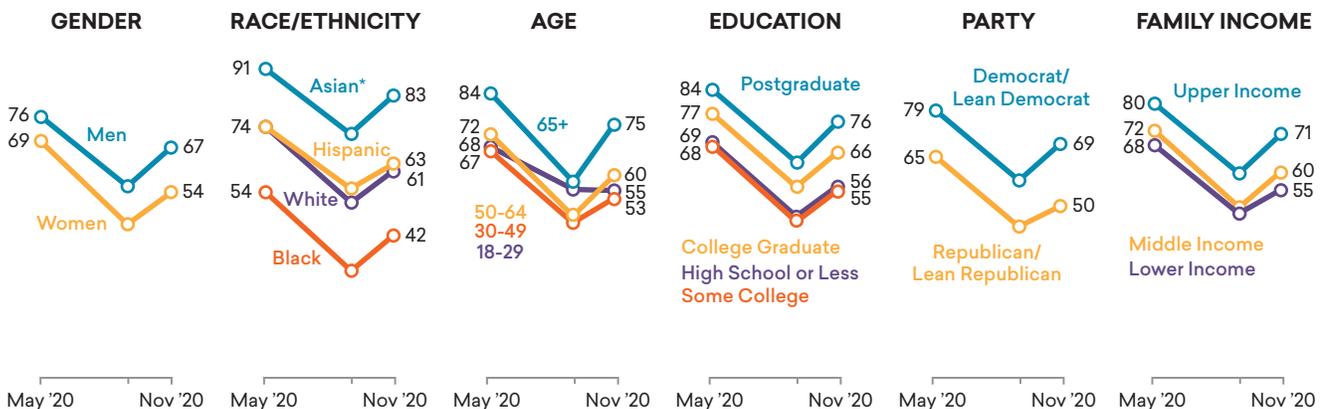
DATA SOURCES

COVID-19 Vaccine Monitor (Kaiser Family Foundation)

Intent to Get a COVID-19 Vaccine Rises to 60% as Confidence in Research and Development Process Increases (Pew Research Center)

Growing Share Intend to Get a COVID-19 Vaccine, Though Fewer than Half of Black Adults Say They Would

Percent of U.S. adults who say they would definitely/probably get a vaccine for COVID-19 if one were available today



* Asian adults were interviewed in English only. **Note:** Respondents who gave other responses or did not give an answer are not shown. White, Black, and Asian adults include those who report being only one race and are not Hispanic. Hispanics are of any race. Family income tiers are based on adjusted 2019 earnings. **Source:** Survey conducted November 18–29, 2020. “Intent to Get a COVID-19 Vaccine Rises to 60% as Confidence in Research and Development Process Increases,” Pew Research Center.



New Academy Survey Reveals the Humanities in American Life

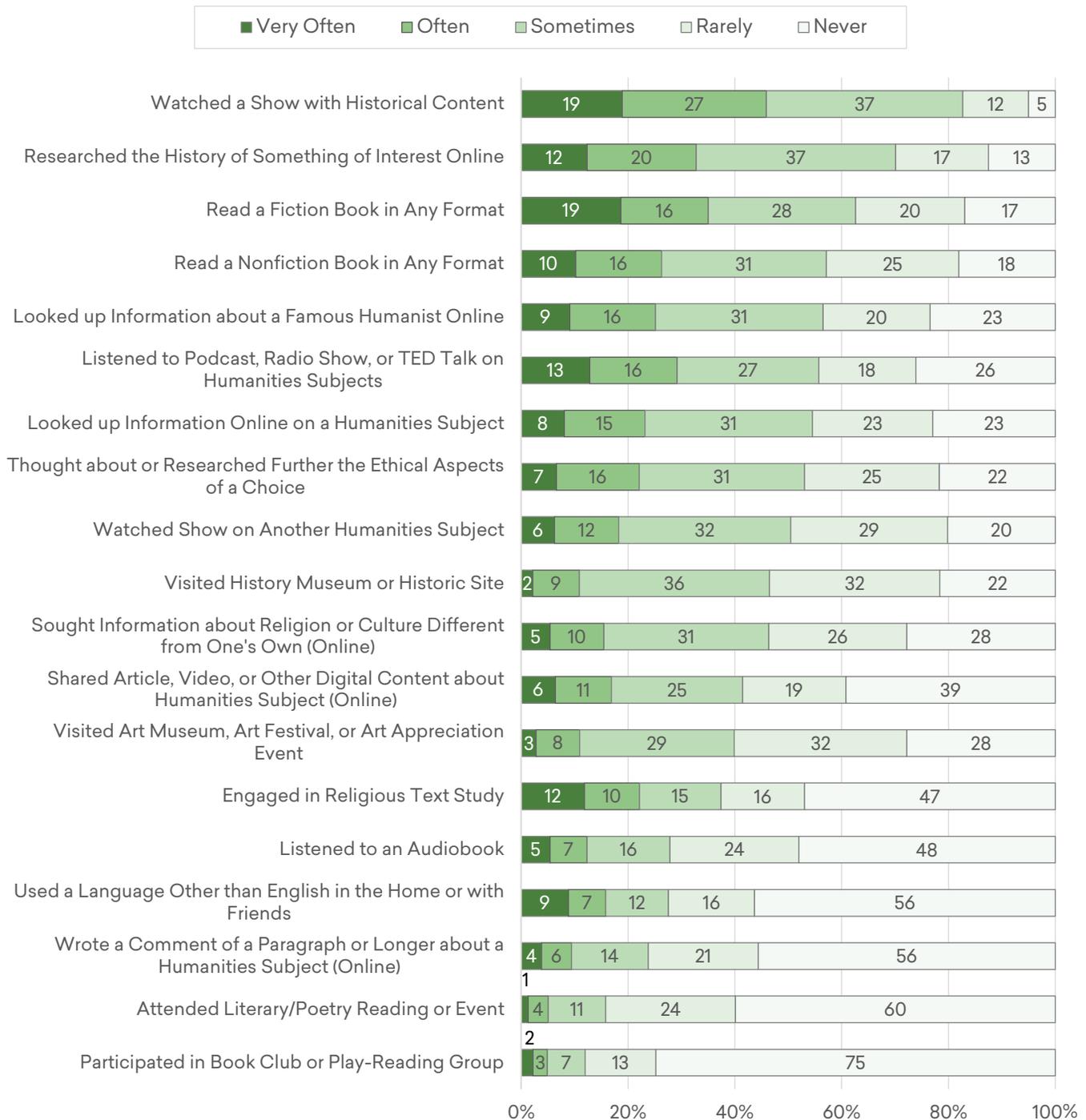
The American public holds the humanities in high regard, and most people engage in one or more humanistic activities at work and in their leisure hours, according to a recent national survey by the Academy’s Humanities Indicators project (available at <https://bit.ly/HumSurvey>). The survey, conducted with generous funding from the Andrew W. Mellon Foundation, asked 5,015 Americans age eighteen and older who participate in NORC at the University of Chicago’s nationally representative AmeriSpeak Panel about their

engagement in a variety of humanistic activities, as well as their beliefs about the personal, societal, and economic benefits of the humanities.

While many in the field will find positive takeaways from the survey, asking the public directly about “the humanities” as a concept proves quite challenging. Preliminary testing for the survey found that some Americans connect the term to activities and notions that have little relation to the field (such as “giving blood” or science, “since that is about humans, right?”). To address that concern,

and in keeping with the Indicators’ understanding of the field, the survey was structured to ask first about the *what* and *where* of engagement in humanistic activities without ever employing the term. It was only at the end that the survey pointed respondents back to the earlier practices to introduce the term *humanities* and underlined the definition as “studying or participating in activities related to literature, languages, history, and philosophy.” Only then were respondents asked about their opinions of the field.

Figure 1: Estimated Frequency of Adult Engagement in Humanities Activities in the Previous 12 Months, Fall 2019



Source: Survey of the Humanities in American Life, 2019.

ENGAGING WITH THE HUMANITIES IN EVERYDAY LIFE

The ambiguous understanding of the field among Americans also extended to their daily activities: the survey found very few Americans engage in a wide range of humanistic activities, or even showed much tendency to engage in activities related to a specific discipline. For instance, adults who watch history shows were not much more likely to research history subjects online than other Americans. Instead, the engagements tended to cluster by mode of activities, as readers of fiction were more likely also

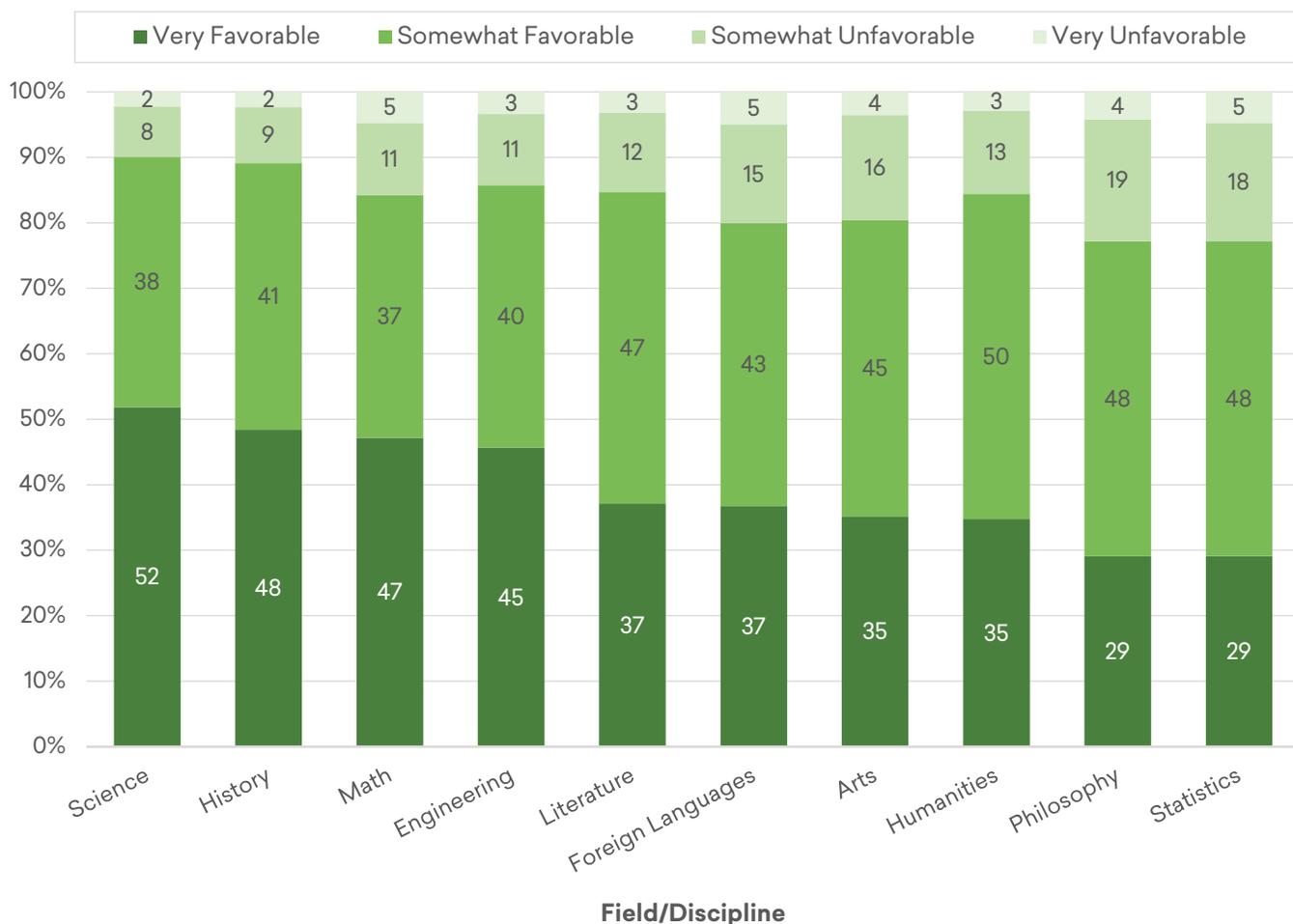
to be readers of nonfiction, people who watched history shows were also more likely to watch shows on other humanities subjects. So, while humanities insiders often treat the field as a unified concept, that is not how it is experienced by most Americans.

While the mix of activities appears rather eclectic from a content perspective, the survey did find that almost all Americans (97 percent) occasionally engage in one or more of these activities. What is also notable is that while reading is often depicted as the most fundamental of humanistic activities, watching shows with historical content proved to be the most

popular form of humanities engagement (see Figure 1). Forty-six percent of adults watched such shows often or very often in the previous twelve months. In comparison, 35 percent read fiction and 26 percent read nonfiction at a similar rate. The humanities activities with the lowest levels of engagement generally had a social, travel, or cost component, such as sharing humanities content online, or going out to museums and historic sites. For instance, 60 percent of Americans rarely or never visited an art museum or attended an art festival or art appreciation event.

Similar to the engagement in leisure activities, the survey found

Figure 2: Estimated Shares of Adults with Favorable and Unfavorable Impressions of Academic Fields and Disciplines, Fall 2019



Source: Survey of the Humanities in American Life, 2019.

most Americans use humanistic skills and practices in the workplace. Of seven skill areas included in the survey (ranging from reading and writing to working across cultural differences and using a language other than English), Americans used an average of four of them at least sometimes in the workplace, and 81 percent often used at least one of these skills in their jobs. More than half of Americans reported they worked with people from different cultures often or very often as part of their work, and about as many engaged in descriptive writing. And for almost every

skill included in the survey, roughly one in four Americans believed a deficiency had hampered them in their job.

Engagement with the various humanities skills and activities in both the home and at work were strongly associated with income and education. Americans with either college educations or in the top income brackets were significantly more likely to make use of the humanities in their lives. Curiously, however, college graduates in engineering and computer sciences were among the least likely to engage in humanities activities in their private lives,

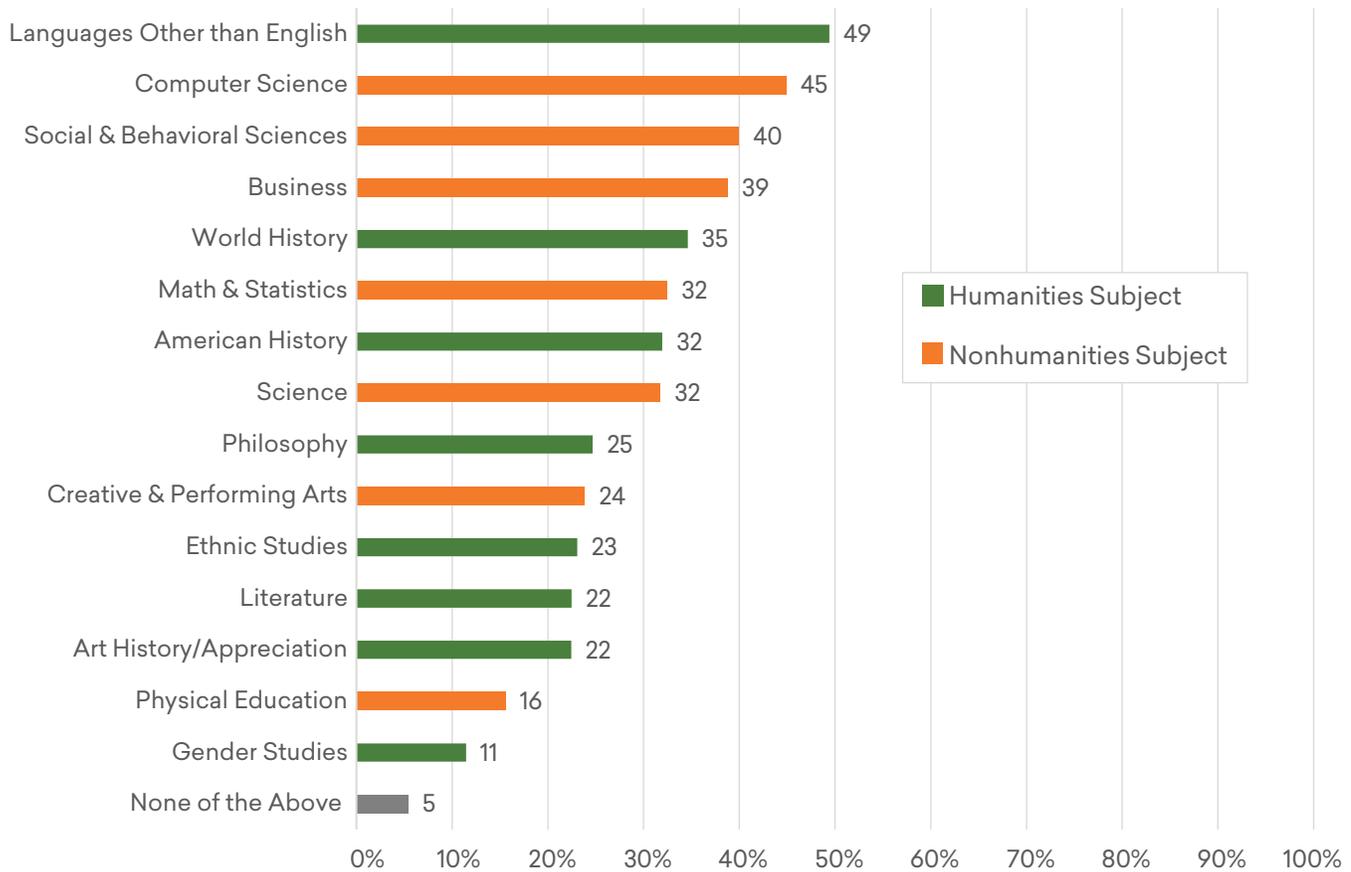
but they appeared to be among the most likely to use humanistic skills at work, such as writing.

ATTITUDES ABOUT THE HUMANITIES

Despite the differences in engagement with the humanities, the survey found that once the concept of the humanities has been explained, most Americans hold favorable views of the humanities and the potential benefits of the field.

For example, the share of Americans who had a favorable reaction to the term *humanities* was similar to

Figure 3: Estimated Share of Adults Who Wish They Had Taken More Courses in Selected Subjects, Fall 2019



Source: Survey of the Humanities in American Life, 2019.

the response for *science, engineering, and math*, as 84 – 90 percent viewed all of them at least somewhat favorably (see Figure 2). However, *science, engineering, and math* were substantially more likely than *humanities* to be viewed *very* favorably. While 35 percent of Americans had a very favorable impression of *humanities, science* was viewed very favorably by more than half of Americans, and *engineering and math* were viewed very favorably by approximately 46 percent of Americans. In most cases, the public responded as favorably, if not more so, to particular humanities disciplines than to the broader field. Notably, *history* was especially popular, with 48 percent of Americans viewing it very favorably, similar to the share for *science* (52 percent).

Perhaps unsurprisingly, the survey also found notable divisions between college graduates from the humanities and the STEM fields. Almost 70 percent of humanities majors had a very favorable impression of the humanities, while only 28 percent of engineering and computer science graduates held a similar view. Conversely, less than half of humanities graduates had a very favorable impression of engineering and computer science. And while 63 percent of humanities majors were very favorably disposed toward science, that percentage was smaller than the share of graduates from the natural sciences who held that view.

While the response to the term *humanities* was somewhat ambivalent, more than 80 percent of American adults agreed with an array of positive statements about the field. First among these was the statement that “the humanities should be an important part of every American’s education,” with 56 percent of Americans agreeing strongly and another 38 percent agreeing somewhat. And with one notable exception, at least 60 percent of Americans disagreed with a corresponding set of negative statements about

the humanities. The exception was the observation that “the humanities attract people who are somewhat elitist or pretentious.” While only 12 percent of adults strongly agreed with this sentiment, another 39 percent agreed somewhat.

THE HUMANITIES IN EDUCATION

Even before the recent challenges from the COVID-19 pandemic, many in the field had been expressing growing alarm about the decline in college majors and enrollments. While the survey did not ask specifically about the choices that might be causing those declines, it did ask when, where, and what people value in humanities education. For instance, the study found that 78 percent of Americans wished they had taken more courses in at least one humanities subject during their studies, with languages other than English garnering the most interest. Given a range of humanities and nonhumanities subjects to choose from (and allowed to select more than one), almost half of Americans (49 percent) chose languages, followed by computer science (45 percent), social and behavioral sciences (40 percent), and business (39 percent; see Figure 3). History was the second most popular among humanities subjects (with about a third of adults wishing they had taken more courses in either American or world history, and 42 percent wishing they had taken more history courses). More than 20 percent of adults wished they had taken more classes in philosophy, ethnic studies, literature, and art history/art appreciation.

While 35 percent of Americans had a very favorable impression of *humanities, science* was viewed very favorably by more than half of Americans.

For most of the humanities school subjects included in the survey, at least 80 percent of Americans felt that teaching these subjects to children was important or very important. But when it came to teaching young people languages other than English, differences in religious thought, and art history/art appreciation, substantially smaller shares of Americans were as supportive. Once again, education level played a substantial role in American attitudes. Adults with college degrees were more likely than those with a high school diploma or less education to affirm the importance of teaching young people the humanities subjects mentioned in the survey.

Given the scale and cost of the survey, it is unclear whether the Humanities Indicators will be able to undertake a similar study in the future. This was the first national survey that explored broadly the humanities in American life; the only previous survey, which asked just a single question specifically about the humanities, was conducted in the early 1990s. But the Humanities Indicators project will continue to track data and report on the health of the field (at www.amacad.org/humanities-indicators) and seek other opportunities to explore public attitudes about the humanities.



For questions about the findings from the Survey of the Humanities in American Life, ideas for another iteration of the survey, or general inquiries about the data, please contact Robert Townsend, codirector of the Humanities Indicators, at rtownsend@amacad.org.



The Limits of Foreign Intervention in Civil Wars and Intrastate Violence

Civil wars can give rise to major threats to international stability, including transnational terrorism, pandemics, mass migration and refugee flows, and regional instability. While these complex threats do not arise solely from civil wars, the severe risks that they present call for careful evaluation of U.S. approaches to preventing and mitigating intrastate violence. Particularly serious concerns, which require more attention, include the ways that civil conflict can contribute to the emergence of infectious diseases, undermine efforts to respond to pandemics – such as

through vaccine distribution – and generate transnational terrorism with a global reach.

These are among the key findings shared in a new policy paper, “*Good Enough*” *Governance: Humility and the Limits of Foreign Intervention in Response to Civil Wars and Intrastate Violence*. Building on the Academy’s Civil Wars, Violence, and International Responses project, the paper provides a practical road map to articulate under what conditions the United States should intervene in civil wars and with what tools, and offers recommendations on cooperating with allies and empowering

friendly domestic actors to address issues internally. The project, which was launched in 2015, has produced two issues of *Daedalus* that explore the transnational security threats emanating from civil wars and weak states, and identify policy options for mitigating these threats and for addressing civil wars where U.S. national security interests are at stake. “*Good Enough*” *Governance* builds on that research as well as on feedback received during consultations with policy-makers in the United States, internationally, and at the UN. Written by project cochairs Ambassador Karl Eikenberry and Professor

Stephen Krasner, the paper includes their reflections on the project's policy implications, with a particular focus on the most relevant areas for the United States.

FINDINGS AND RECOMMENDATIONS

“Good Enough” Governance: Humility and the Limits of Foreign Intervention in Response to Civil Wars and Intrastate Violence identifies some of the major issues that policy-makers should consider when designing their responses. For instance, civil wars vary significantly based on the participants' motivations. When combatants are motivated by material objectives and accept the principles of the existing international order – especially state sovereignty – the “standard treatment” (a combination of mediation and UN or regional peacekeeping forces, along with foreign assistance) can be effective. This is especially true if the great powers are in agreement and if the combatants have reached a stalemate, or if one combatant wins, as was the case in Sri Lanka in 2009. But the standard treatment will not work in cases in which combatants reject the existing international order, like some transnational ideological movements.

In addition, intervention presents a variety of potential pitfalls for foreign powers who set goals that are unrealistic, overly ambitious, or not shaped by local political realities. This is true not only for interventions employing military force but for other types of intervention, including technical assistance and foreign aid. Ambitious efforts to sustain and increase economic growth, eliminate corruption, and consolidate democracy may be counterproductive if they are incompatible with the interests of local elites.

Taken together, this means that even in places where the standard

treatment is likely to be successful, the ability of external interveners to put countries on the path to consolidated democracy and economic prosperity is seriously limited. In some cases, especially where parties to the conflict cannot be reconciled with the international system, achieving complete, “positive peace” may not be feasible in the short term. This presents the United States, its partners, and multinational and international organizations with difficult choices. In the paper, Eikenberry and Krasner recommend a set of policy principles that should guide international responses:

- Goals should be set with modesty and humility, recognizing the limits to what external intervention can achieve. Goals must be realistic and attainable.
- Even modest goals should come with strict periodization to avoid overreach.
- Military development assistance, diplomatic doctrines, and associated training should be revised in accordance with this emphasis on modest, realistic goals.
- When conditions make the prospects for success realistic, the United States should support application of the “standard treatment,” led by the UN, and should persuade its allies and partners to do so as well.
- The United States should prioritize what is realistically achievable: “good enough” governance, focusing on security and stability, essential institutions, and economic growth.

KEY POLICY RECOMMENDATION: AIM FOR “GOOD ENOUGH” GOVERNANCE

Given the threats that civil wars and fragile states can pose for major

powers, U.S. policy-makers should not ignore these issues, but the potential pitfalls associated with efforts to produce good governance from the outside mean policy options are often limited. Eikenberry and Krasner argue that the United States should focus on what is most realistically achievable: that is, “good enough” governance. They define this as designing policies that prioritize generating relative security and stability; improving the function of some essential institutions, especially healthcare (with systems that can help prevent the emergence of pandemics); taking into account the political realities of states experiencing civil war and internal violence; and creating moderate economic growth. The authors argue that pursuing this more realistic goal is likely to improve not only the security of the United States but the living conditions of individuals in places susceptible to civil wars.

OUTREACH PLANS

The Academy is planning a series of virtual activities designed to share the paper and its recommendations with key audiences, particularly U.S. policy-makers. The events include briefings to members of Congress and their staff, especially among relevant committees in the House and Senate, as well as briefings with the Department of State, Department of Defense, and the National Security Council. The Academy is also planning some virtual events to engage with policy audiences in Europe and with several UN agencies that consulted on the project.



To read the policy paper and to learn more about the project on Civil Wars, Violence, and International Responses, visit www.amacad.org/civilwars.





A CONVERSATION WITH

Astronaut Jessica Meir

NASA astronaut **Jessica Meir** made history in October 2019 when she participated in the first all-female spacewalk. After 205 days in the isolation of space, she returned to a planet experiencing its own form of isolation: the global COVID-19 pandemic. As an astronaut and a marine biologist, Dr. Meir's research into the impact of extreme environments has brought her to the depths of the Antarctic and the heights of space. At a virtual program, hosted by the Academy's San Diego Program Committee, Dr. Meir described her research and her experiences in space and participated in a conversation with **Brian Keating** (University of California San Diego) about the perspectives that her work provides about our world. The program included opening and closing remarks by the San Diego Program Committee cochairs **Geoffrey Wahl** (Salk Institute for Biological Sciences) and **Thomas Levy** (University of California San Diego) and an introduction by Academy President **David Oxtoby**. An edited version of Dr. Meir's presentation and conversation with Professor Keating follows.

2093rd Stated Meeting | December 2, 2020 | Virtual Event

NASA astronaut Jessica Meir waves at the camera during a spacewalk with fellow NASA astronaut Christina Koch (out of frame) on October 18, 2019. They ventured into the vacuum of space for seven hours and seventeen minutes to swap a failed battery charge-discharge unit with a spare during the first all-woman spacewalk.



Jessica Meir

Jessica Meir was selected by NASA in 2013. She holds a Bachelor of Arts in Biology from Brown University, a Master of Science in Space Studies from the International Space University, and a Doctorate in Marine Biology from Scripps Institution of Oceanography (UCSD). From 2000 to 2003, Dr. Meir worked for Lockheed Martin's Human Research Facility, supporting human physiology research. During this time, she also participated in research flights on NASA's reduced gravity aircraft and served as an aquanaut in an underwater habitat for NASA Extreme Environment Mission Operations (NEEMO). Dr. Meir most recently served as flight engineer on the International Space Station for Expedition 61 and 62.

One of the best parts about being in space is just the simple fact of living up there and floating all the time. Everything is so much more fun when you're floating. ”

I was on the International Space Station for almost seven months: 205 days. I launched on a *Soyuz* spacecraft with the Russian Space Agency. (*Soyuz* is the name for both the rocket and the spacecraft.) I flew with my commander, Russian cosmonaut Oleg Germanovich Artemyev, as well as with the first astronaut from the United Arab Emirates, Hazzaa Al Mansoori, a historic component to our mission.

I was pretty excited. I don't think my smile left my face for the whole, amazing seven months. Looking through the hatch and seeing all these familiar faces felt like home. One of the best parts about being in space is just the simple fact of living up there and floating all the time. Everything is so much more fun when you're floating, like making a little charcuterie board. I'm a bit of a foodie down here on Earth. So in addition to all the rehydratable food and food that we heat up, I created a little charcuterie board with some extra cheese that had been sent up on a visiting vehicle. But everything is more fun: from eating and throwing food at your friends to drinking water. Some people think the gel-like substance they see floating in space can't be water, but it is – there's just no gravity to disrupt that surface tension.

Exercise is a very important part of working in the International Space Station. We would have significant bone density loss and muscle atrophy without it. We had a weight-lifting machine, treadmill, and cycle ergometer, and that is in addition to the daily life functions you might wonder about, like washing our hair and brushing our teeth in space. We had fun too: a few costumes for Halloween, a tribute to the Apollo 12 mission, and we celebrated the holidays up there as well. But, of course, the most important thing we do on the space station, and why I'm here tonight, is the science. The space station is a world-class international laboratory. We do scientific experiments ranging from physiological and medical experiments to combustion science, because even flames burn differently in space. We also support other projects, such as launching and deploying small satellites into Earth's orbit.

We had a crop of mizuna lettuce on the space station. We were growing lettuce under two different

wavelengths of light and using different fertilizers to assess their capabilities, which has a lot of applications for future sustainable food sources on long-duration missions. And in our life sciences glove box, we had lots of different types of experiments, from looking at bone cells to miniaturized muscles. We studied fluid shifts to the upper body in space and how this adaptation to space flight affects changes in vision. This research on the physiological effects of space flight will help prepare us for human travel to Mars. We had our own -80°C freezer, just like you might have in the lab, where we keep all of our samples. We did a lot of spacewalks during my mission, more than the usual. We did nine spacewalks in about a four-month period, which was really intensive, given the amount of maintenance that had to be done.

These included the first all-female spacewalk. I heard a rumor that Kathryn Sullivan might even be listening in tonight. I really need to pay homage to Kathryn and to all of the forerunners before us who paved the way. She was the first American woman to do a spacewalk many years ago. My walk with Christina Koch was the first time there were two women outside the space station at once. Christina and I did an upgrade for the batteries on the space station, replacing the older batteries with some newer lithium-ion batteries, just like the newer types of batteries you find in your cell phones and computers. We did three spacewalks together.

How do we resupply the space station? With visiting vehicles. Cargo resupply vehicles come up regularly to bring us food, new science, and supplies and hardware that we need. We capture those visiting vehicles using the Canadarm, a robotic arm on the space station. It's kind of like flying an airplane while you're driving a car, to grab a bird. We use the Canadarm to grab the vehicles and bring them in to dock with the space station, before unloading all of the cargo. We had a lot of visiting vehicles: Japanese cargo, SpaceX, and the *Cygnus* vehicles. And those vehicles become our trash cans when they depart, with the exception of SpaceX. SpaceX is the only one that can return samples and other hardware back to Earth. It splashes down in the ocean, while the other two

burn up in the atmosphere. So we fill those ones with trash before we let them go.

Any free time we have is spent looking out the window and marveling at and taking photographs of the beauty of Earth below. We do that for science as well. We take Earth observation photos for different scientific imaging opportunities, including regular photos of the recession of glaciers. We flew periodically over Patagonia, so I was able to document some of that glacial retreat, comparing those images to the decades of imagery that we have now. And there are some really awe-inspiring views. It never gets old: flashes of lightning, all of the different city lights laid out, the Nile, the water source around which all nearby civilization is crowded. The Northern and Southern Lights are one of the most impressive things to see from the space station. It is like an otherworldly alien dance.

Unfortunately, the seven months passed much too quickly for my liking. I wasn't ready to leave. But when it was time for our vehicle to depart, I had to get in. We landed in the *Soyuz* on land in Kazakhstan. Then we were picked up and flown back to Houston. I felt a little bit wobbly coming down the steps as I readjusted to gravity – and I was back.

Now I want to share a little bit from my perspective of what I call experimenting in microgravity and how, for someone like me who was a scientist with a scientific career on the ground before I became an astronaut, this really came full-circle.

Slide 1 (S1) shows a view from the International Space Station taken years before I was there. You can see that familiar shape of Cape Cod up there in the right corner as well as Caribou, Maine, where I was born. From the time that I was five years old, I wanted to be an astronaut. And the important thing here is that there wasn't a particular event that made me say, "I know I want to be an astronaut." It was really for me a combination of things. One being my love for nature and for biology and this fascination with the world around me. Growing up in a remote area surrounded by trees, outside skiing from early childhood, I was really fascinated by the diversity of the animal kingdom and the plants around me. And I just wanted to know more; I started asking those kinds of questions. It was that kind of inherent spirit of exploration that led me toward wanting to be an astronaut.

Of course, growing up as a child in the 1980s, we saw all of the shuttle launches on the evening news. We didn't have the Internet then. We got our news

sources either from the radio, the newspapers, or the evening news. And the shuttle program, rightly so, received a lot of attention. So it was a combination of those factors that really set that goal in my mind from the time I was five years old. In 1999 when I was a student about to graduate from Brown University, I had my first foray into microgravity research, and I began to connect my studies with my childhood love for biology. And even though it might not have been what people thought of as the most traditional path to becoming an astronaut, it was what I was passionate about. That's what made it so important for me to pursue.

My undergraduate work at Brown was through NASA's Reduced Gravity Student Flight Opportunities program, an incredible opportunity for undergraduate students to design an experiment and, if selected, fly their experiment on NASA's Vomit Comet (S2). That is the airplane that flies in a parabola-type pattern in order to achieve brief segments of microgravity, about thirty-five seconds worth. And back in 1999, I had my first experience in weightlessness. It certainly was much different than the prolonged weightlessness of the space station. But in coming full-circle, this was a transition for me from being a student scientist at Brown and doing my first biological experiments for my honors thesis to then working in a laboratory as an undergraduate toward becoming a science coordinator (S3).

“ The space station is a world-class international laboratory. We do scientific experiments ranging from physiological and medical experiments to combustion science, because even flames burn differently in space.

One of my first jobs was at the NASA Johnson Space Center. I worked as a support scientist organizing and coordinating experiments that were done on a space shuttle and the International Space Station.

So that was one of my first transitionary periods, moving from scientist to coordinating science that was led by other investigators all around



the country and around the world that astronauts would perform in space. I had three years of experience and a lot of exceptional opportunities, including living, working, and training with astronauts underwater as a scientific representative in an underwater laboratory. But I got to the point where I thought, okay, I want to go back to school. I wasn't sure exactly what it is I wanted to pursue. But after being underwater in this mission, doing some research in what was going on, thinking about pursuing a Ph.D. or going to medical school, and given my interest in biology, I found my next great interest: studying the physiology of animals in extreme environments.

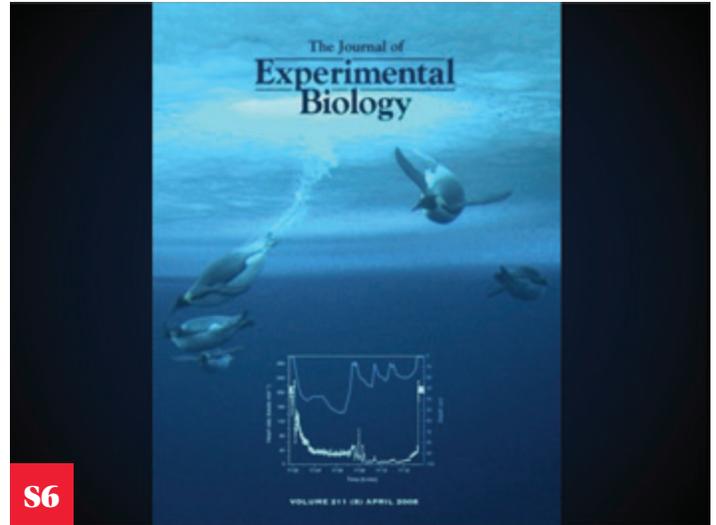
So I moved on. I left NASA and all these exceptional experiences after three years and went to the Scripps Institution of Oceanography, where I pursued my Ph.D., looking at the diving physiology of exceptional divers, like deep-diving emperor

penguins and elephant seals (S4). And those are the best divers in their categories. Everybody seems to be quite familiar with the harsh climate that emperor penguins deal with and their exceptional natural history; they're pretty popular these days (S5). But I was most interested in them for their exceptional diving behavior. When you are lucky enough to see these animals diving beneath the sea ice in the Antarctic, they become different creatures. It is like watching a ballet underneath the surface of the ice. In particular, I was fascinated by these extreme behaviors. An emperor penguin can dive deeper and longer than any other bird: thirty minutes on a single breath of air.

We were trying to understand more about their physiology that underlies that exceptional behavior. What is unique and special about them that enables that kind of exceptional diving capability? So we were doing things like putting heart rate



S5



S6



S7



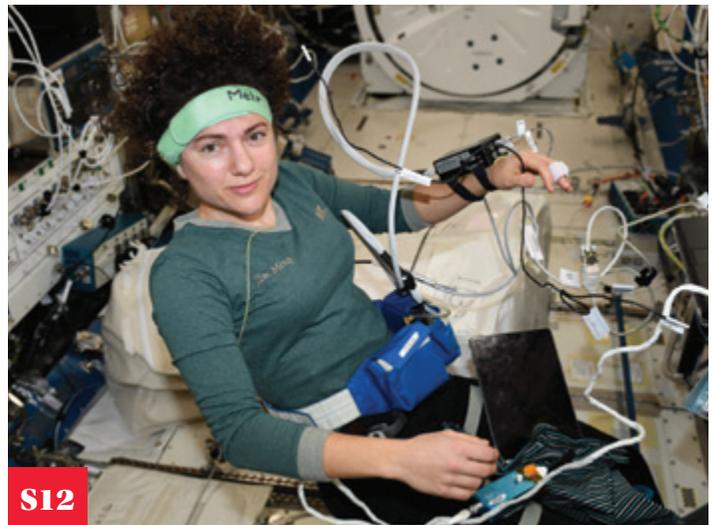
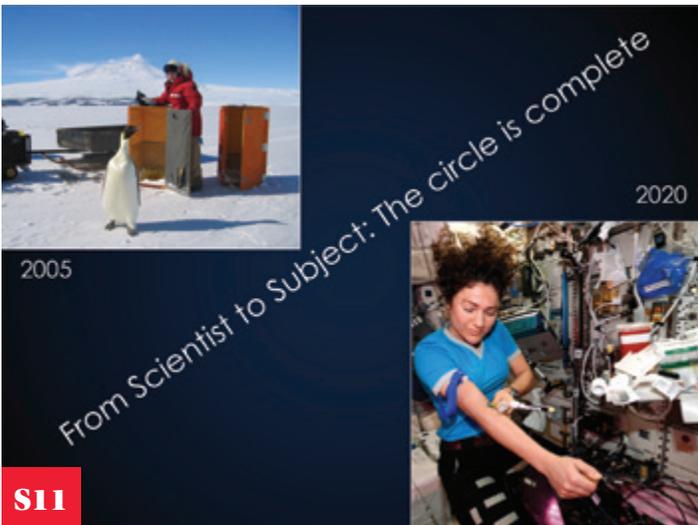
S8

recorders or oxygen electrodes into their blood vessels or into their respiratory system so that we could directly measure some of these parameters, to understand what's going on with their entire physiology during dives (S6). I was fortunate enough to do some diving of my own down there (S7). If you ever have the opportunity, the Antarctic is absolutely the best place to dive on the planet. I also studied elephant seals, another extreme diver. They are the best diver of anyone in the pinniped world: that is, of seals and sea lions. They can hold their breath for two hours. So again, these are breath-holding, air-breathing mammals – just like us – but they can hold their breath for two hours. How is that possible?

We did the same kind of studies putting instruments on these animals, tagging them, and letting them dive in their natural habitats to understand more about these exceptional behaviors (S8). Then

I transitioned in my thinking: I love the field of diving physiology, it's certainly something that I want to study more in the future, but I'm also really interested in broadening my skill set and experience and learning more about another extreme animal, the bar-headed goose (S9). It lives at the other extreme: it is the iconic species that migrates twice a year over the tallest mountains on the planet, the Himalayas. And we know that these animals must have some kind of adaptation to be able to support this flight. Flight is the costliest form of locomotion of any vertebrate. So how do they have this very high oxygen demand flying at an altitude where there is only half to one-third the amount of oxygen at sea level?

So a similar kind of problem. These animals are not, of course, holding their breath like the deep-divers. Instead they're flying at such high altitudes that they only have a very limited oxygen



supply. In order to study this, which I would say is perhaps the most ambitious thing I've ever done, including being an astronaut, I raised geese in order to have them imprint on me. Geese have this very strong imprinting instinct in which the first thing that they look at they see as their parental figure (S10). We took advantage of this in order to eventually train these geese to fly in a wind tunnel. And while I preferred to do these experiments in an animal's natural habitat, some things you can't measure in the wild. We were trying to understand the comprehensive physiology of these animals. What's going on with their respiratory and cardiovascular systems?

We were finally successful in flying these birds in the wind tunnel. And one bird was actually flying at 10.5 percent oxygen: half of what you would have at sea level. We were able to fly them all the way down to 7 percent. They were wearing a small

mask that introduced nitrogen to lower that overall percentage of oxygen. I could talk about my research all night. But let's continue with this scientific journey. And here is where the circle closes. Just in this past year I got my opportunity to go to the International Space Station where, finally, I transitioned from coordinating science and being the scientist who performs all of these elaborate experiments on animals to finally becoming the subject myself (S11).

After all of the experiments that I did on these very willing subjects, it's my turn to be the subject. And that involves a lot of very complicated, elaborate setups sometimes. This year I participated in an experiment called cerebral autoregulation wherein I'm monitoring a lot of different aspects of my physiology in space, mostly looking at the blood flow that's delivered to the brain (S12). This was one of many different experiments that we

did as human subjects on the space station. I used to train astronauts how to use an ultrasound back in 2003, and seventeen years later, here I am using an ultrasound on myself in space. It was another full-circle transition (S13).

I mentioned earlier that we do all kinds of different science on the space station, including physiology medical experiments, combustion science, protein crystal growth, radiation, material science, really any type of system (S14). We have a summary of research statistics with working data as of April 30, 2020, from the International Space Station, representing all venues of science, from all of the International Space Station partners. Luckily for us, scientists need to

publish or perish, and we do have some impressive publication statistics from the International Space Station as well.

One last point: one of the great resources we have through NASA is this space station researcher explorer, which you can download onto your smart devices or access through nasa.gov. You can look up experiments by discipline or by name and find much more information about these particular experiments and opportunities to explore them further through benefits, facilities, and previous publications, as well as other Web resources.

So with that, I will end my portion of the talk, and we can launch into questions.

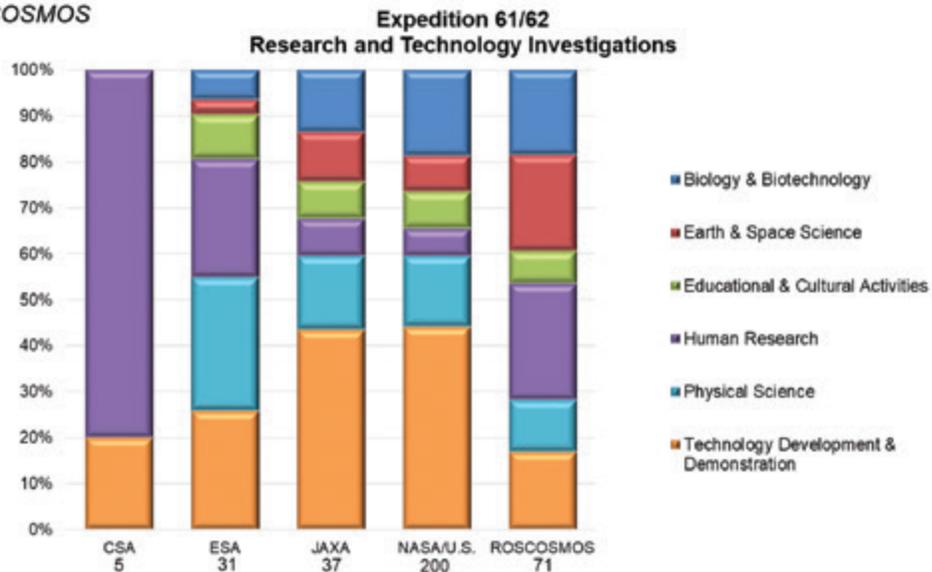


ISS Research Statistics

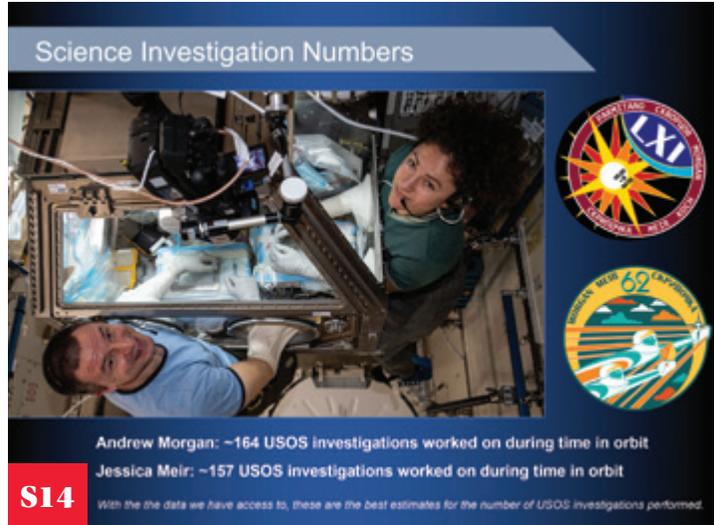
Working data as of April 30, 2020

Number of Investigations for 61/62: 344

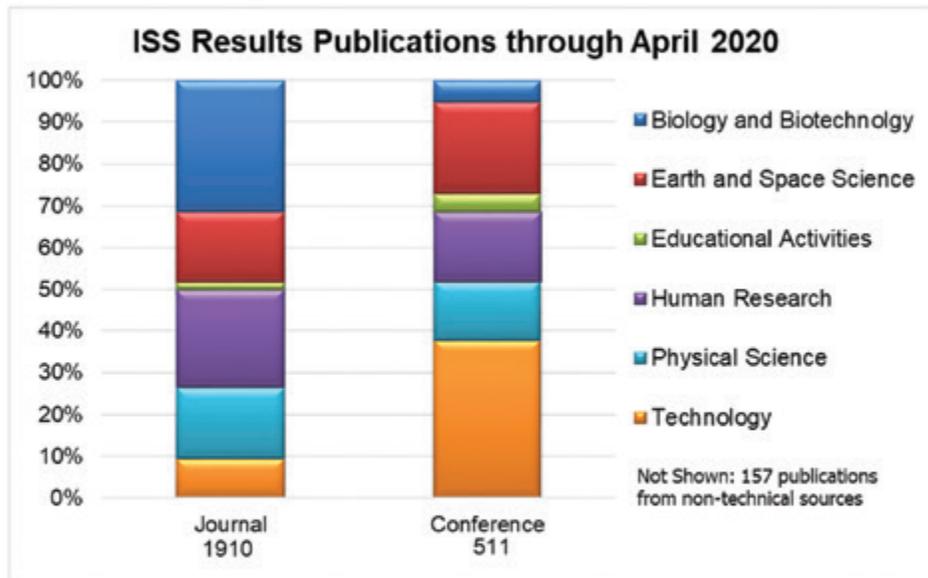
- 200 NASA/U.S.-led investigations
- 144 International-led investigations
- 110 New investigations
 - 0 CSA
 - 7 ESA
 - 8 JAXA
 - 83 NASA/U.S.
 - 12 ROSCOSMOS
- 4269 Investigators represented (Exp 0 – 60)
- 108 Countries/Areas with ISS Research and Educational Investigations (Exp 0 – 60)
- Over 1910 scientific results publications (Dec 1998— Mar 2020)



Estimated Number of Investigations Expedition 0-62: 3058* *Pending Post Increment Adjustments
I-17



ISS Research Publication Statistics



As of April 2020, ISS Research has generated nearly 2,000 peer-reviewed results papers and an additional 500 scientific conference papers. Results publications have been published across all physical biological science categories and many technology areas.

“ If everyone could see Earth as I was lucky enough to from above, it would give us the perspective needed to solve these kinds of problems with the environment and with our current global crisis with this pandemic.



Brian Keating

Brian Keating is Chancellor's Distinguished Professor of Physics at the University of California San Diego's Center for Astrophysics & Space Sciences.

We are now talking at a greater distance than we did when you were on the ISS back in January of 2020. It's great to see you again.

JESSICA MEIR: That's right. I have to tell you, it was much more fun doing an interview with you while I was floating. But this is pretty great, too.

BRIAN KEATING: First of all, I want to recognize that this is the twentieth birthday of the International Space Station. It was launched in 2000. It's also the thirtieth anniversary of the Hubble Space Telescope. And Kathy Sullivan, one of our viewers who you mentioned earlier, is also the author of a phenomenal book called *Handprints on Hubble*. And she wants to say the following to you: "Thanks for the shout-out, Jessica, and kudos on a great presentation. Was super excited to watch your first EVA with Christina Koch." "About time," she adds. "Hope we can get together in person sometime next year to compare notes." And she'll buy the first beer.

Jessica, there are so many questions, but let's start with the one I see the most often in the queue: how do you tweet from space?

MEIR: Great question. Well, we do have the capability to have some normal Internet access. On the space station, we have an internal network that has all of the resources that we need to run the space station and to run our procedures. We can connect to the Internet given the appropriate satellite coverage as well. So we could just take our iPad – we don't have our own phones up there, but we do have iPads – and tweet directly. We have an amazing support person on the ground, though, so what most of us do is, at the end of the day, whatever tweet or Instagram post I have, I will put it together, send it down to her, and then she'll have much better coverage than I do up there. And she'll take a look, make sure everything's correct, and she'll put it out there. So I did do all my own social media but the actual, physical posting was done by our person on the ground.

KEATING: I would hate to see the roaming charges when you came back to Earth. Now, because you're such a high-profile, prominent individual as a scientist and an astronaut, every single thing that you would tweet would be scrutinized by literally millions of people around the world. Before we went live, we were joking even about your sock choice. How did that feel to be in this precious bubble of atmospheric pressure and temperature but also under a different kind of bubble of being scrutinized by everyone around the world?

MEIR: It is interesting to be on that end. And I think it is something that takes a lot of getting used to. But I try to look at it from the positive side: the source that we can be for outreach and for inspiration and hopefully in serving as role models. I think whether we like it or not, when we put this blue suit on, there are a lot of people that listen. And so it's important to try to use that for good and to make a positive impact. Outreach to me has always been something that's very important. When I was a scientist, I was very active in doing that. And because I worked with charismatic megafauna, it made my job even easier. Everybody loves penguins. So it's an important role. But it is something that you have to think about. You have to be much more careful in the kind of things that you post and the kind of reaction that you might receive from that. I certainly didn't expect that it was the post of my Menorah socks right around Hanukkah that would generate so much attention.

KEATING: So speaking of that and of being an ambassador literally around the universe, we have a



NASA astronaut and Expedition 62 Flight Engineer Jessica Meir observes a floating sphere of water formed by microgravity inside the International Space Station's Kibo laboratory module.

question from Azucena, who is in Ms. Meghan's eleventh-grade biology class at High Tech High Mesa campus. She asks: "how can we imitate the international cooperation and problem-solving that is done on the ISS on Earth?" I remember in January you said one of the things you had to do that was a challenge is learn Russian. How challenging is it? And can we learn lessons here on Earth that would be derived from what you experienced in the international environment of the ISS?

MEIR: The ISS is a great example of what we are able to do when we put our differences aside and work together. And I think it can be a very positive role model for many other disciplines and areas on Earth. If you think about the state of our political relationship right now with our main partner on the International Space Station, which is Russia, and all of these international partnerships, to me it is simply an amazing thing and something that I appreciate, to see what we can accomplish when we work together side by side with our Russian

counterparts. As I mentioned, I launched on a Russian spacecraft. I spent a majority of the two years before space flight training, living, and working at the cosmonaut training center outside of Moscow. And it was such an incredible, exceptional opportunity and experience to do that.

I really do hope that this can be a positive model to show what can be accomplished when we work together. And I think when we are up there together as international crews, we immediately, without even a thought, put aside all of those differences. We see ourselves as a crew working together. And that's another thing that the vantage point of space offers. When you look down from above, seeing Earth in all of its entirety and how interconnected it is, it is so easy to see that we're truly one. We're one human. We're all in this together. I do hope that there are many other things that we can do on the ground as scientists, collaborating internationally. I was a student at the International Space University before becoming an astronaut. When we solve a problem with lots of different types of input, that's when we have the best solution.



KEATING: Absolutely. I believe the word “scientist” in Russian translates roughly into “someone who was taught,” or “someone who was instructed.” One of our listeners asks: “what advice do you have for university students or students in general aspiring to have a career like yours?”

MEIR: Well, in terms of becoming an astronaut or working at NASA, you need a degree in a STEM field: science, technology, engineering, math. Whether it’s being an astronaut, being a support person at NASA, working in mission control, being the one to design and build the rocket, or just monitor all the different systems. That’s really the foundation. But I think the biggest piece of advice is making sure that you are following what you are passionate about. I really believe that is the only way to excel. If you don’t love it, you’re not going to excel at it, and you’re not going to be happy doing it. And, of course, you have to persevere. There will be a lot of times when you fail along the way. You have to be willing to take that risk and to push yourself further and go a little bit outside of your comfort zone. That is when the great things really happen and when you learn the most valuable lessons.

KEATING: In the years that I have been doing my podcast, the two most common words a person says before “It was the best thing that ever happened to me” are “I failed.” And that reminds me of

then it will never happen. And I think that’s what kept me motivated in the background, knowing how passionate I was about this and also having the support from my friends, my family, my mentors, and having people reinforce that idea. They knew that this was what I wanted and that if you put your mind to it, you can really achieve anything. I think that process of finding a good mentor and then for people like you and for other scientists to be a good mentor, how truly that can change someone’s course and make the greatest impact.

KEATING: That question was from Herbert Hoover High School here in San Diego. Another student there, Joel in the eleventh grade, asks, “how do you feel about the privatization of the space industry and rockets being manufactured by private enterprises as opposed to NASA?” I have a mug from SpaceX. But I note that most of the popular clothing I see nowadays has NASA emblems. It’s the strongest brand in the universe as far as I’m concerned. How is that affecting NASA?

MEIR: NASA seems so hot right now. And this privatization is very important. I think it’s great that more and more entities are getting involved. I think it’s a little bit of a misnomer in that some people think this privatization is us working against SpaceX or a competition. As you know, we’re really working together. SpaceX is building us these

When you look down from above, seeing Earth in all of its entirety and how interconnected it is, it is so easy to see that we’re truly one. We’re one human. We’re all in this together. ”

something you said back in January, that you actually learned a lot from the failures. And you didn’t let them be final in terms of your aspirations. So how do you stay motivated through setbacks, failures, and just the duration that it takes to get to this pinnacle of becoming a NASA astronaut?

MEIR: I think it goes back to passion. I had this dream since I was five years old. I applied to become an astronaut before I was selected. And I wasn’t selected. I went through the whole interview process, got to the final round, and was rejected that first time, which is a pretty big hit. There’s a big investment there. But if you don’t get back on that horse, as they say, if you don’t apply again,

vehicles right now under a NASA contract. So it’s a NASA-funded mission. And it’s really a partnership between the two of us. And it’s very important in the way that space programs have been doing business. Because space flight is incredibly costly and incredibly risky. I don’t think any country right now has the budget to do everything on its own. So what we have to do is outsource and work together with private companies, including through international agencies and companies.

And it is making space flight more accessible to everyone. Whether it’s a Virgin Galactic suborbital flight, or some of these companies that might not necessarily be sending people to the space station but are making some aspect of space flight

more accessible to more people. The more involvement that we have in this, the better off we are to truly become a space-faring species.

KEATING: This next question is from a student: “Thank you for being a role model. It’s been a privilege to follow your NASA journey. I read your 2019 paper on the way reduced metabolisms support hypoxic flight in bar-headed geese and I’m wondering how do you envision applying your research from the scientific side of Jessica to the astronaut side of Jessica?”

MEIR: I think the most important thing that I can take from my career as a scientist and how I approach things now as an astronaut is really the scientific manner of thinking: meaning, critical thinking, and problem-solving. When we become astronauts, we really do give up our previous career, but we draw from all of those very valuable lessons that we learned along the way. And just being able to stop and think in order to solve a prob-

job as a scientist and as an astronaut, thinking about safety, and so on, but also as a role model. How do you wear so many hats at once? I assume your dive training suited you to high-pressure situations. But how do you handle the added pressure of being a role model as well?

MEIR: It’s hard sometimes to remember and to realize that I am on that side now. Because I remember looking up to so many astronauts when I was a kid and all throughout my life. And it was this iconic blue flight suit that I saw, that was what I wanted to emulate and wear. And when I got my first blue flight suit and put it on, it was shocking to realize that now I’m the person on this side. And sometimes still when I’m doing an event like this or talking to a school, I almost do this little flip in my brain and think, “Wait a minute. I’m the person up there now?” And so I think it’s just a natural transition that happens. That’s what happens in your life when you get to this level. And you need to appreciate that.

“Spacewalks are the most challenging thing that we do as astronauts. They’re the riskiest thing that we do and the most challenging both mentally and physically. They demand all of your concentration.

lem critically and to evoke all of those insights that we had from the scientific method and process I think are really important to how you approach any problem. As a scientist on the space station, we are operators doing different types of experiments, which I showed you briefly earlier. But I hope that as a scientist, if I do need to provide some kind of insight to the investigator on the ground, my scientific background will help me – that power of observation that we are so keen to amplify as scientists.

KEATING: My late colleague Sally Ride was a professor in the physics department with me here at the University of California San Diego. She was the first woman from America in space. And, of course, you did the first all-female spacewalk with Christina. I see a lot of questions coming in about the pressure that you must feel to not only do your

The spacewalk that you alluded to, that was an interesting process for me. Spacewalks are the most challenging thing that we do as astronauts. They’re the riskiest thing that we do and the most challenging both mentally and physically. They demand all of your concentration. When I went out of the hatch that day, especially for my very first spacewalk, I was 100 percent focused on the task, making sure that we are going to get our job done safely and successfully and keep ourselves safe as well. Again, it is the riskiest thing we do. So, at the time, I wasn’t really thinking about that added historical significance. I was able to process that more after the fact. And that’s when it really set in how important it was. Now, at first, I think I kind of shied away from this. Why should it matter? We’re just out there doing our jobs. It doesn’t matter if it’s two men or two women or one woman and one man, we’re all up here with the same amount of training. But then

I really realized how important it was. And I think for both Christina and me, it wasn't a personal achievement for us. It was really an event that paid homage and tribute to these generations of women and other minorities that were the ones truly breaking those glass ceilings and pushing those frontiers. Like Kathy Sullivan, as you mentioned, being the first woman to do a spacewalk; it was those genera-

You look at Earth, and you don't see any of these man-made political boundaries that we've imposed upon ourselves. It is one planet, and it is our home. We know that we need to protect it. ”

tions and those people who enabled us to be where we are at the point today where there is more than one woman on the space station. It makes sense that it just happened to be an all-female spacewalk. And so that to me is the most important part that should be celebrated. It's really about those generations that came before us. And now it's our turn to help keep that inspiration, to serve as those role models, and to pay it forward.

KEATING: It reminds me of something Sally Ride said to me a long time ago: all astronauts should be women because they have a higher strength-to-weight ratio than men. But we won't get into that . . .

MEIR: And a lower metabolic rate.

KEATING: That's right.

MEIR: The reason why Christina and my spacewalk lasted so long was because we were not limited by the CO₂ scrubbing.

KEATING: Although wasn't it true that you didn't have proper-fitting suits?

MEIR: Yeah, that did come out in the media a little, but it was a little bit misrepresented. All of the space suits right now, I'll tell you, are too big for me. We have to learn how to work in the space suits that we have because they're really an anachronism tied to the past. Those space suits were designed in the 1970s. The astronaut population back

then looked a lot different than it does now. We're still stuck with those same suits because of the amount of time it takes to develop the technology, the budget, and then to get those suits up there. The good thing is that the suits that we're designing for the future will actually be built for a small person. And then we scale up. The first prototype that we have right now is ideally suited for people around my size or even smaller.

And so that's a big difference, that we're able to approach it from that side. And these suits will accommodate a range of sizes from the fifth to ninety-fifth percentile. So we will be covered in the future with these suits, which will also have a lot more mobility and be much easier to use.

KEATING: As part of the ninety-ninth percentile, I'm looking forward to that. Just a question, my own curiosity, while I have the opportunity. Do you dream differently in space? Do you have more vivid dreams? Is it any different than being on Earth?

MEIR: I didn't notice a perceptible difference, not at least in the things that I remembered. People do often ask, are you floating in your dreams or are you in gravity? I think that for most of my dreams I was still in gravity. I was either walking or biking or doing something that did involve gravity. So I didn't notice really a perceptible change.

KEATING: Thank you to all the students who participated in this discussion. Now we're going to take some questions from some older people. The Academy's Public Face of Science report on *Perceptions of Science in America* tells us that people's lived experiences shape their relationship to climate change. They see erosion or they experience hurricanes, and the problem becomes more magnified and real to them. In your experience, both in Antarctica where you were witness to the freezer of the planet and also looking down on Earth from this isolated bubble in space, how did that affect your own perspective of the climate crisis?

MEIR: That's something that I thought about a lot before even going to space. I've always been very environmentally minded. It's always been a very important issue to me. For a lot of other astronauts, it did change them. Maybe they were people who hadn't thought a lot about climate change in the past. So they noticed a drastic difference after looking down, having that privilege to see Earth from above. But you see that very thin,

tenuous band of an atmosphere and how beautiful it is and how fragile it is. And you know that you have to protect it. You can even see the gradient of the different blues as the atmosphere gets thinner and thinner with altitude. You see the interconnected land masses and the oceans. And you just know that it is so special. You're looking around in this void, in this blackness of space. We have one home. And with that interconnected component, we are all in it together.

I think for me it made all of that resonate even more loudly. As I mentioned, I thought a lot about the environmental aspect, but that interconnected aspect was something that really resonated from looking down. You look at Earth, and you don't see any of these man-made political boundaries that we've imposed upon ourselves. It is one planet, and it is our home. We know that we need to protect it.

KEATING: Another report from the Academy's Public Face of Science initiative, on *Encountering Science in America*, says that people's trust in science is based on their cumulative experience with science over the years. Oftentimes I get the impression that people see us scientists as specialized people doing specialized things. It's not really relevant to them. It's maybe interesting, but it's not for them. And you, especially as a scientist and an astronaut, having done the most specialized thing perhaps in the universe right now, have a really unique perspective. I wonder, do you see ways that we can improve, increase, and enhance the public's enthusiasm for science generally and for space in particular?

MEIR: I think that is very important. I've always said that one of our biggest roles as scientists, as astronauts, is as these ambassadors for science to communicate that kind of understanding to students and to the general public. My science was all federally funded from the National Science Foundation. My role as an astronaut is also federally funded. I've always said that if as a scientist or an astronaut, I can't explain why it is that what I'm doing is important or why we're doing it, then we really shouldn't be doing it at all. And I know that a lot of scientists historically have had a problem communicating. We have, as you mentioned, this kind of lofty attitude or maybe we can't quite relate ourselves or our research and what we're

doing to the masses. But it's critically important to do that.

I think the newer generations are getting better and better at it. We have a lot of new technology that helps us communicate more widely. But it is incredibly important that we keep doing that. I feel that way about my mission. I just wish so badly that all the humans on Earth could see what I saw, because as you said, accumulating that kind of science and experience makes you understand and gives you an appreciation for it. And if everyone could see Earth as I was lucky enough to from above, it would give us the perspective needed to solve these kinds of problems with the environment and with our current global crisis with this pandemic. So the best we can do is share it and have meetings like this one and show the imagery and talk to people and try to educate as much as we can and try to emphasize that science is real. It is fact.

And as Neil deGrasse Tyson loves to say, the thing about science is that it's true whether or not you believe in it. And I think that's the thing for me that I have trouble with right now, this problem of accepting science and believing in science. I understand that people have different beliefs. But science isn't a belief.

KEATING: A youngster who I happen to know personally by the name of Elijah Keating asked, "what's your favorite thing to eat in space?" And I guess he means favorite food that's kosher.

MEIR: We have a whole food lab at NASA now and so our menu is very extensive. I would say some of my favorites are the newer foods like Indian fish curry and Turkish fish stew. I love the butternut squash, the sweet and savory kale. And then we also get to have food from our Russian and other European counterparts. I loved having the tvorog and even the ryazhenka, which are some interesting things with dairy that the Russians do.

KEATING: See if Postmates would deliver. I have a question now from Carol from Colombia, South America. She's about to finish school and wants to study astronomy. But in her country, it's not a career that is easy to enter. Her question is what advice would you give to all those young people who are afraid to study what they love because in their country it's hard to get a job in that field?

MEIR: I would say persistence is what you need. If it's something that you know you want, you have to try to find a way to make that happen. And it might sound easy for me to say that, growing up in the United States. I had a lot of opportunities that simply are not available for everybody. But if you can try to do the research, try to find whatever avenue you can take to get as close to that opportunity as you can, you will be happy in the end if you are able to be involved in that thing that you love so much.

Integrating arts with the sciences helps us solve problems in a different way and elaborates and brings things out in a whole new light. ”

KEATING: A quick question here from Eva Fowler. Because of your view of planet Earth, what are your views of going to planet Mars?

MEIR: I would love to go to Mars. But I would hope my next destination is the moon. That really is the next realistic step. It's the way we do things here at NASA. We've got to be incremental about it and demonstrate all of these technologies and how we will sustain a presence farther away. The moon is 250,000 miles away. The space station is only 250 miles. So I'm further from you now than when we spoke when I was on the space station. The moon is another leap. I hope to be on one of the Artemis missions. We are planning those missions now to send the first woman and the next man back to the moon. And then hopefully onto Mars as well. Once we figure that out, once we have the mission infrastructure ready, I'll be ready to go.

KEATING: I'm going to take my moderator prerogative and ask you a question I've been dying to ask you. Speaking of the moon, you may have seen Stanley Kubrick's adaptation of Arthur C. Clarke's 2001: *A Space Odyssey*. I'm not going to ask about your relationship to HAL. I'm not going to get into that. But these astronauts encounter this mysterious monolith, which was previously seen by these hominids on the savannahs of Africa. And it's supposed to represent a time capsule or some machine to convey wisdom or knowledge that will last until human civilization is mature enough to decipher

this message within. I want to ask you – and I also asked this of Ann Druyan who did this on the Voyager mission, she put a record on it – if you had a billion-year, long-lasting time capsule, what would you put in it? What would you do with it if you knew it would be transported one billion years into the future?

MEIR: That is a difficult question. I would say definitely some way to record some of these basic scientific principles that we rely on for everything that we do, some kind of documentation of all of our big discoveries, the things that we think are the most important from our civilization. But I would absolutely include music and the arts. It's not just about STEM, it's about STEAM now. I think integrating arts with the sciences helps us solve problems in a different way and elaborates and brings things out in a whole new light. So, I would definitely include some classical music, some jazz music, some modern rock, all the way through. What else? I'm going to have to think about that one for a while.

KEATING: Maybe I'll get you on the podcast, and we can spend more time on it. Last couple of questions. Do you have a role model? Do you have a particular person outside of your family who was a role model to you?

MEIR: I have had so many. It's hard to pick just one. But my family, my siblings and my parents were big ones. All of the astronauts that I saw growing up. I remember meeting John Glenn when I was graduating from Brown University. The first astronaut I ever met was Charlie Duke. All of the female astronauts, of course Kathy Sullivan doing that first female spacewalk. So many people have inspired me in my journey.

KEATING: Well, Jessica, I want to thank you for being a role model to me and to millions around the world like me and being so gracious and accommodating with your time, your experiences, and your shared wisdom.

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To view or listen to the presentation, visit www.amacad.org/events/astronaut-meir.



TELLING OUR REGIONAL STORY

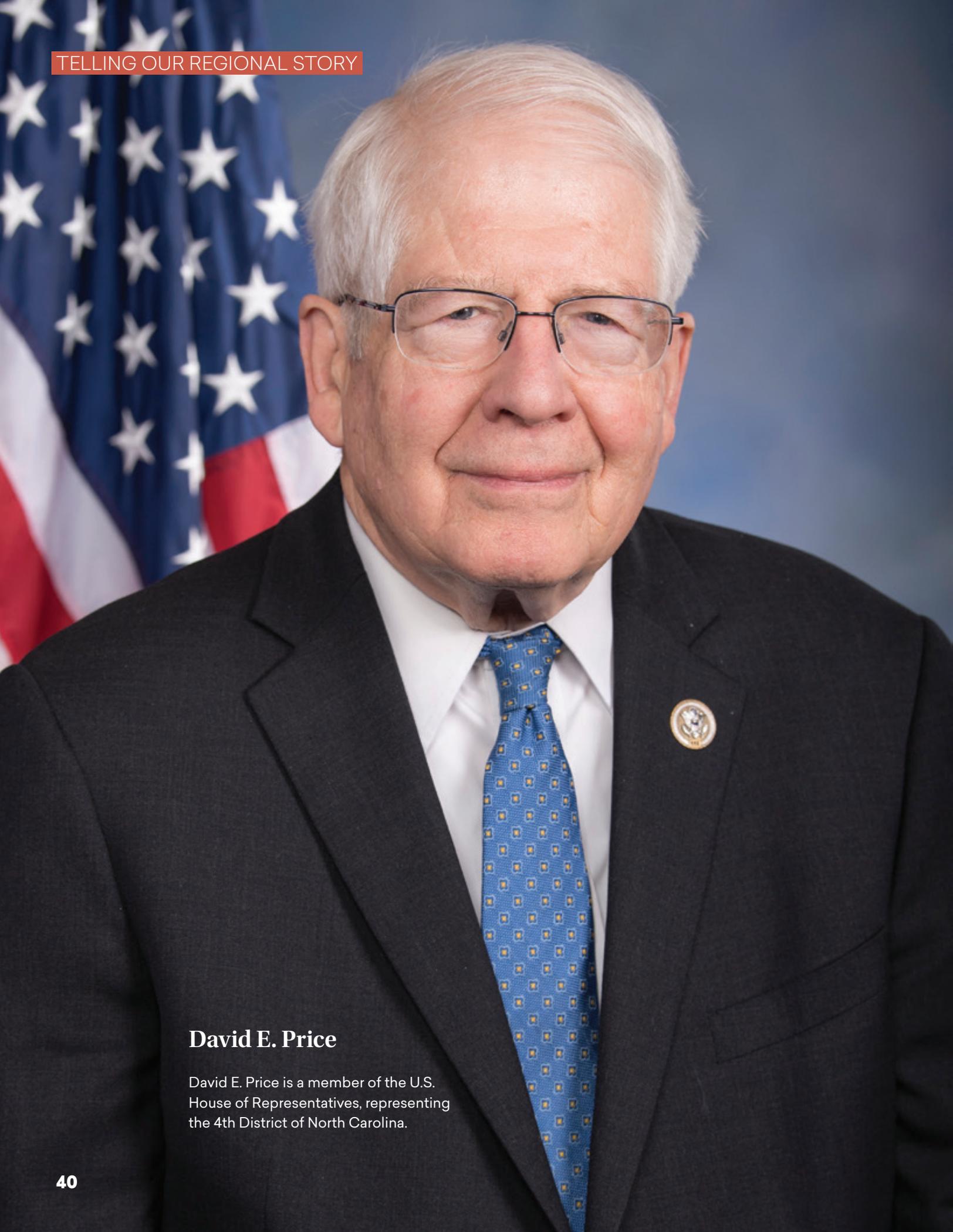
The Narratives that Unite and Divide in North Carolina

October 22, 2020 | Virtual Event

A challenge facing the United States is how to combine the good and bad of our history into shared narratives. Telling Our Nation's Story, one of the recommendations of the Academy's Commission on the Practice of Democratic Citizenship, calls for communities to work toward a common narrative by engaging in honest conversations about the past in order to reckon with what divides us while uncovering what unites us. At a virtual program, hosted by the Academy's Research Triangle Program Committee in partnership with the University of North Carolina at Chapel Hill's Research Week, **John Aldrich** (Duke University),



Phoebe Stein (Federation of State Humanities Councils), and **William Sturkey** (University of North Carolina at Chapel Hill) discussed how communities across the Research Triangle can meld the pride and pain of their regional history to create a more honest and inclusive common narrative. The program included introductions from **Terry Magnuson** (University of North Carolina at Chapel Hill) and **Paula D. McClain** (Duke University) as well as opening remarks from **Congressman David E. Price** (4th District of North Carolina). An edited version of the presentations and discussion follows.



David E. Price

David E. Price is a member of the U.S. House of Representatives, representing the 4th District of North Carolina.

I am grateful for the opportunity to join you today at one of the regional conversations envisioned in the American Academy's recent report, *Our Common Purpose: Reinventing American Democracy for the 21st Century*. The Academy dates to the earliest years of the republic; its founders included John Adams and John Hancock. Today, the Academy is best known for its policy studies that respond thoughtfully and creatively to the needs of society. Locally, we recall and are grateful for the Academy's role in establishing the National Humanities Center in Research Triangle Park.

As a member of Congress, I have been involved in the commissioning of two recent Academy projects. The Commission on the Humanities and Social Sciences, cochaired by Duke University President Richard Brodhead, produced an acclaimed report, *The Heart of the Matter*. This report surveyed the contribution the humanities and social sciences make to our common life and how they might be promoted and strengthened. We held a forum at North Carolina State University to discuss the report, much like the meeting we are having today.

Next came the Commission on Language Learning and its report, *America's Languages: Investing in Language Education for the 21st Century*. That report established the importance and current state of language learning and suggested multiple ways it might be advanced.

Now we have the much-anticipated report of the Commission on the Practice of Democratic Citizenship, *Our Common Purpose*. The report is very broad-gauged, as indicated by the leading questions it poses:

- How do we achieve equality of voice and representation?
- How do we empower voters?
- How do we ensure the responsiveness of political institutions?
- How do we dramatically expand civic bridging capacity?

- How do we build civic information architecture that supports common purpose?
- How do we inspire a culture of commitment to American constitutional democracy and to one another?

In the circles I frequent, most discussions have focused on such specific recommendations as:

- expanding the size of the House of Representatives;
- instituting nonpartisan legislative districting;
- overcoming court-imposed limits on the regulation of campaign contributions and spending;
- implementing eighteen-year terms for Supreme Court justices;
- holding elections on Veterans Day, a national holiday; and
- ensuring voting rights for ex-prisoners.

Today's discussion, however, will highlight the report's broader focus on civic culture, namely inspiring a "Culture of Commitment to American Constitutional Democracy and One Another" – one aspect of which is engaging communities across the country in "direct, open-ended, and inclusive conversations about the complex and always evolving American story."

We have outstanding leaders to get the dialogue started. I am looking forward to our discussion.

Our Common Purpose is very broad-gauged, as indicated by the leading questions it poses: How do we achieve equality of voice and representation? How do we empower voters? How do we ensure the responsiveness of political institutions? How do we dramatically expand civic bridging capacity? How do we build civic information architecture that supports common purpose? How do we inspire a culture of commitment to American constitutional democracy and to one another? ”



Phoebe Stein

Phoebe Stein is President of the Federation of State Humanities Councils.

Thank you, Congressman Price, for those inspiring words and for your many years of support for the work of the state humanities councils. I am honored to be here among such esteemed thinkers who are working to bring the public and the Academy together to build a stronger democracy.

Let me begin by saying a little bit about the Federation of State Humanities Councils. We are the membership organization for the nation's jurisdictional humanities councils. There is a humanities council in every state and territory and the District of Columbia. Councils are independent 501(c)(3) nonprofit organizations, created by Congress in the 1970s, and they receive an annual federal appropriation through the National

Endowment for the Humanities. So, this is truly a private-public partnership. Collectively, the work of the state humanities councils is to use the humanities to bring communities together to listen, to learn, and to challenge one another. Working in and with the community, councils create and conduct public humanities programs that respond to the unique issues and concerns facing their communities and explore where community priorities and stories diverge and overlap. This is why the Academy's Commission on the Practice of Democratic Citizenship, which issued the report *Our Common Purpose*, calls on the state humanities councils (as "civic organizations") to support Strategy 6, which relates to civic culture: "Inspire a Culture of Commitment to American

Humanities councils do not aim to get people to think alike or to come to the same conclusion. Rather, the goal is to explore the idea that we are divided and ask how we can come together to create stronger, more resilient communities. ”

Constitutional Democracy and One Another.” But more specifically, recommendation 6.2: “create a Telling Our Nation’s Story initiative to engage communities throughout the country in direct, open-ended, and inclusive conversations about the complex and always evolving American story.”

I like that we will explore feelings and hopes for the country and that they will be shared in these community conversations. Because this commission and this report are courageous, we dive right into “the heart of the matter.” I am glad Congressman Price mentioned *The Heart of the Matter* report, another wonderful Academy publication. Here again the Academy wanted national conversations to reconcile the noble aspects of our history with our greatest sins.

Let me add that this specific recommendation for community conversations is built on some research that Susan Glisson published in an article with Cambridge University Press, which tells us that trust building is a prerequisite for systems to change. And that is what *Our Common Purpose* is about: the idea that communities can make themselves better and build trust in order to tell the truth about their pasts.

So, what can and does this look like across the nation through the work of the state humanities councils? Since 2015, the state humanities councils have conducted three national programs funded in large part by the Andrew W. Mellon Foundation, in which between 40 to 50 of the 55 councils organized programs over a year or two on a timely topic. The first was focused on the centennial of the Pulitzer Prizes. The second, “Democracy and the Informed Citizen,” focused on the role and importance of an informed citizenry and looked at the role journalism plays in a strong democracy. The third is the second phase of the “Democracy and the Informed Citizen” work, which provides new programs nationwide. The goal of those national initiatives, like the work that the councils have been doing for more than forty years, is to

strengthen civil society and give attention to what the report calls “a full range of stories that make up our complex history.”

It’s interesting that the tagline for the North Carolina Humanities Council is “Many Stories, One People.” Stories are really at the heart of what this project is about. In Mississippi, we have public forums on the state flag, with participants who wanted to keep the flag and participants who wanted to jettison it altogether. In Alaska, what this work looks like are story circles with indigenous youth sharing and telling their stories. In Nebraska, it is a lecture and Q&A session with Doris Kearns Goodwin. In Guam, we have publications about the indigenous CHamorro people and the barriers they face to civic participation and voting at the national level. In Oregon, there is a monthly conversation series called Bridging Oregon that starts with the idea that Oregon is a divided state and asks how people can come together to create stronger, more resilient communities. New Hampshire has an entire series that presents Black thought leaders in the state. And, as was reported yesterday in *The New York Times*, Indiana Humanities is giving grants to artists and humanists to create statues of and about forgotten women’s history in that state.

I want to be clear that for the humanities councils, this work is equally about creating courageous as well as safe spaces, where multiple perspectives can be shared. Finally, I think it’s worth saying that the “new narratives” that *Our Common Purpose* calls for are ones that would bring together what historian Jill Lepore calls “the gory and the glory”: humanities councils do not aim to get people to think alike or to come to the same conclusion. Rather, the goal, as it is in the Bridging Oregon program, is to explore the idea that we are divided and ask how we can come together to create stronger, more resilient communities. So that is our common purpose: to have more resilient communities, not total agreement or unanimity.

William Sturkey

William Sturkey is Associate Professor of History at the University of North Carolina at Chapel Hill.



I want to open by sharing something. In the fall of 2014, which was my second year at UNC – I was a research fellow before I joined the faculty – I was at an event for the Center for the Study of the American South. I was having a conversation with an older White man and we were talking about history, and at some point in the conversation he told me, “I just want to let you know that my family owned slaves, and those slaves were happy.” He added a bit more. “When Sherman came through to liberate the South, the matriarch of the enslaved family said, ‘No, no, turn back around. We’re very content and happy with our life here.’”

Think about that for a moment. This is a regional story: race, memory, and identity all playing out in a single sentence uttered to a stranger at a party – his identity, my perceived identity; his race, my perceived race; and a family “memory” all in one sentence. That is the regional story that members of that rich, White family have been telling us for more than a hundred years.

Think about the work that that story and stories like it have been doing: Like so many myths in America’s racial history, this tale is rooted in White superiority. It is a story constructed to justify both

the past and the present. In the past, it justified disenfranchisement, racial inequality, and the Jim Crow system. Today, it remains a pillar of Southern and even American White identity – that Black people didn’t really have it all that bad, and that White people deserve credit for building Southern society because they were more innovative and industrious. As bad as things might have been, as this tale goes, it gave us this and so it was worth it. But if you follow the logic here, if those enslaved people were completely content in their enslavement, then that man’s family really did nothing morally wrong. And if they did nothing wrong, then slavery was just part of a natural process that was not only necessary for the development of the South and of America, but also in some ways essential to my very existence at UNC. Of course, the ultimate inference is that Black people held in bondage were inherently inferior, and that this man’s family – and by extension he – deserves their positions of great wealth and privilege. The reasons White people have a higher position is because they worked for it: they were more talented and industrious.

One of the conflicts we have now in this country over our national story comes from the fact that



we are in the second generation after Jim Crow. Black historians and thinkers are encountering these old tales with a very fresh take. After all, they didn't let us into the archive until the mid-1960s. In the grand scheme of things, these stories are quite old. They might go back hundreds of years, but Black people have only had a platform for two generations. The same could be said of other minority groups and of women. My father was eighteen years old when UNC hired its first Black tenure-track professor. I am the first generation of my family ever born outside of the Jim Crow South. We hear these stories from White men at parties and we are skeptical. How could we not be? How could we not be skeptical of our ancestors' inherent inferiority and contentment in enslavement?

Maybe there are other perspectives that should be considered. Maybe there were structures that can explain how and why that man's family became so wealthy. When you look closely, you see that his family was given a land grant. Okay, that

We are telling the full story now. And when you tell the full story, the reasons for the Black-White wealth gap, the reasons for racial inequalities in our country, look a lot different. Part of our modern conflict in today's world is rooted in the fact that we as a nation have not told our story very accurately, or at least very completely, and certainly not from the perspective of all citizens. And we are fed this narrative constantly. It is all around us: on our commemorative landscape and even on our license plates in North Carolina. North Carolina has an option for a license plate that says, "First in Freedom" because of North Carolina's role in arguing for independence from England. But don't tell that to the more than one hundred thousand enslaved people in this state in 1790. One-fourth of all people living here were enslaved. First in freedom is a lie.

For hundreds of years this narrative has been dominated by rich, White people. But what happens when you flip the narrative? What happens when you start the story of George Washington

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explains how they got their land. When you look closely, you see that his family was able to take out a loan to purchase enslaved people. And, of course, they held absolute rights over these enslaved people. Those enslaved people were not allowed to marry, or leave, or decide who to have children with, or learn how to read, or choose where they slept at night or what clothes they wore. They couldn't be free, and even if they could be free, they couldn't own a gun or a farm or even remain in the state without fearing that they might be re-enslaved. Their lives were maximized for profits for that man's family.

Even after slavery, they couldn't go to the University of North Carolina, or invest in a railroad, or start a chemical company, or create a philanthropic foundation, or put up a Confederate monument, or raise a militia and ride through the streets of Wilmington killing Black people in 1898. These are not random examples. These are all things that man's family did. I know that because I am a historian and I looked them up. Of course, that's not part of the story that he told me.

not with him chopping down a cherry tree, but of ripping the teeth out of his enslaved people to make dentures for himself. Or what happens when you start the story of Thomas Jefferson not with studying architecture by candlelight, but of being born into a wealthy slave-owning family and then raping his fourteen-year-old female slave Sally Hemings. These are complex stories, but until recently a lot has been cut out; people and events have been erased.

One of the things that is so interesting to me lately are conversations on diversity, affirmative action, and reparations. I really don't have a formulated blanket position on all of these issues, but history here – and this idea of telling our regional stories – is absolutely essential to these conversations. They change everything when you know the history. And it doesn't necessarily have to be about blame or guilt. Going back to my conversation with that older man, the Black-White wealth gap is not only the product of legal racial discrimination. It is also the product of billions and billions of dollars being given to White people to help them build

their wealth. Even though White people did not experience racial discrimination in the same way as Blacks, many of them certainly had their own challenges. It's admirable that White people created institutions and built homes and started companies, but what about all the help that they received to do that? UNC-Chapel Hill is just one of thousands of examples all over this country. On our campus, we have buildings and streets named for our benefactors. Some of those names have been removed in recent months after the George Floyd protests, but we have plenty more. And those names do work; they tell a story. They tell the story of the great White men that built this place.

But what if I told you that those people didn't actually build the campus, they didn't actually raise or donate the money that created the incredible institution that we all love now? They played a role, certainly, and their names are all over the campus, but none of them is essential for what we have today. Do you know who is? Franklin Roosevelt and the taxpayers. Guess how they got the money to build the campus hotel, the campus power plant, classrooms, the gym, the dining hall, and the dorms? The federal government poured hundreds of millions of dollars into the institution. And when the federal government did that, only White people could attend UNC or work on its faculty. Was the law necessarily racist? Not exactly. Did the New Deal and programs like it subsidize White segregation, White institution building, White wealth? Yes. Across town in Durham, there is a Black institution named North Carolina Central University that does not have the facilities or the prestige of UNC-Chapel Hill. The quiet part of the narrative that we don't say out loud is that they had Black founders who could not build what White people were able to build. Well, go build them a new gym, a new classroom building, new dorms, a hotel, a power plant. Give them hundreds of millions of more dollars than you give to UNC over the course of the next seventy years and let's see what those institutions look like.

What if we applied this to a different walk of life? What if we take the medical profession, for example? Some of you may be familiar with *The Flexner Report* of 1910, commissioned by the Carnegie Foundation. It rated American medical schools and it changed American medical education by saying basically that medical schools needed to be more scientific and research-based; they

needed to be attached to major research universities. And states needed to help fund these medical schools and build these medical facilities so that their medical schools could be accredited. We lost about half of the for-profit medical schools in this country because of the recommendations in *The Flexner Report*. Well, it just so happened that this new model was employed at many places that did not allow Blacks to train. So medical schools had to be well-funded research centers, the government had to invest millions of dollars to build them, but at the same time state governments literally made it illegal for the medical schools to accept Black trainees. So, what happens then to the number of Black doctors in the states where most Black people live? The reason we have fewer Black doctors now is because we had fewer back then. And this is just the tip of the iceberg.

“ The Black-White wealth gap is not only the product of legal racial discrimination. It is also the product of billions and billions of dollars being given to White people to help them build their wealth.

It's incredibly ironic because we are told that Black people are the ones who become dependent on government handouts if they receive Medicaid or unemployment insurance. In this country, we have this “great White man myth.” We had a lot of great White men, of course, but they often had a lot of help. When you know this history, when you know this story, it fundamentally changes modern discussions over issues like diversity, affirmative action, reparations, and reconciliation. It also suggests that the state – our federal and state governments – played very active roles in creating the systems and structures that led to racial disparities; institutions like UNC-Chapel Hill did as well. Segregation is not just a minor inconvenience or a footnote; it is the whole damn story. And if you understand the role of the state and of institutions in creating these disparities, then you probably realize that it is essential for the state and for our institutions to play active roles in dismantling these disparities.

A portrait of John Aldrich, a middle-aged man with short grey hair, wearing a grey suit jacket, a light blue shirt, and a blue patterned tie. He is sitting in a high-backed chair with a gold and brown patterned fabric. His hands are clasped on a dark wooden table in front of him. The background is a blurred interior with decorative elements.

John Aldrich

John Aldrich, elected a Fellow of the American Academy in 2001, is Pfizer-Pratt University Professor of Political Science at Duke University.

Let me offer a minor footnote to William's wonderful presentation. Ira Katznelson has written a terrific book, *When Affirmative Action Was White*, for those who may be interested in reading about racial inequality in twentieth-century America.

My brief remarks will focus on the political changes that we have witnessed in North Carolina and in the South, in general. An important lesson in all of this is that we need to be telling stories, but we also need to try to understand the people who have very different stories to tell. As we read in the Academy's *Our Common Purpose* report, our problems are going to require real institutional changes. So, let me start by talking about the changes from the Jim Crow South to the contemporary South, including North Carolina.

By far the most important part of understanding the Jim Crow laws was the design by White elites to try to recreate a system that was akin to slavery. But there was a second dimension, a second purpose, and that was to ensure that there would be no organized, regular competition for

office to upset the White Southern Democratic majority. They eliminated not only African Americans from the electorate but poor Whites. The fear of upper middle-class White people was that they would lose to a coalition of African Americans and the White rural working class.

Now in the 1950s, this system begins to come under serious threat. In the presidential elections in 1956, 49 percent of North Carolinians cast their vote for Eisenhower. There was a large group of people who were willing to support the Republicans. There were 11 members from North Carolina in Congress at that time. In a good Democratic year, there would be ten Democrats and one Republican from the mountains. In a good Republican year, there would be nine Democrats and two Republicans. That was the range. The Southern White Democratic Party had effectively eliminated any long-term organized opposition. Changing that reality took a very long time.

In 1972, we had Nixon's landslide reelection. Jesse Helms was the first Republican senator elected from the state, and James Holshouser was the

first Republican governor. Helms won with 54 percent of the vote. In 1980, we had a second Republican senator, John East, and John Martin was elected as the second Republican governor. The House majority was still Democratic. But in 1994, Newt Gingrich led a revolution and for the first time after the 1994 elections there was a Republican majority – meaning a majority of the Republican delegation was from the South rather than from the North. It’s also the first time in fifty years that the Republicans had a majority in Congress.

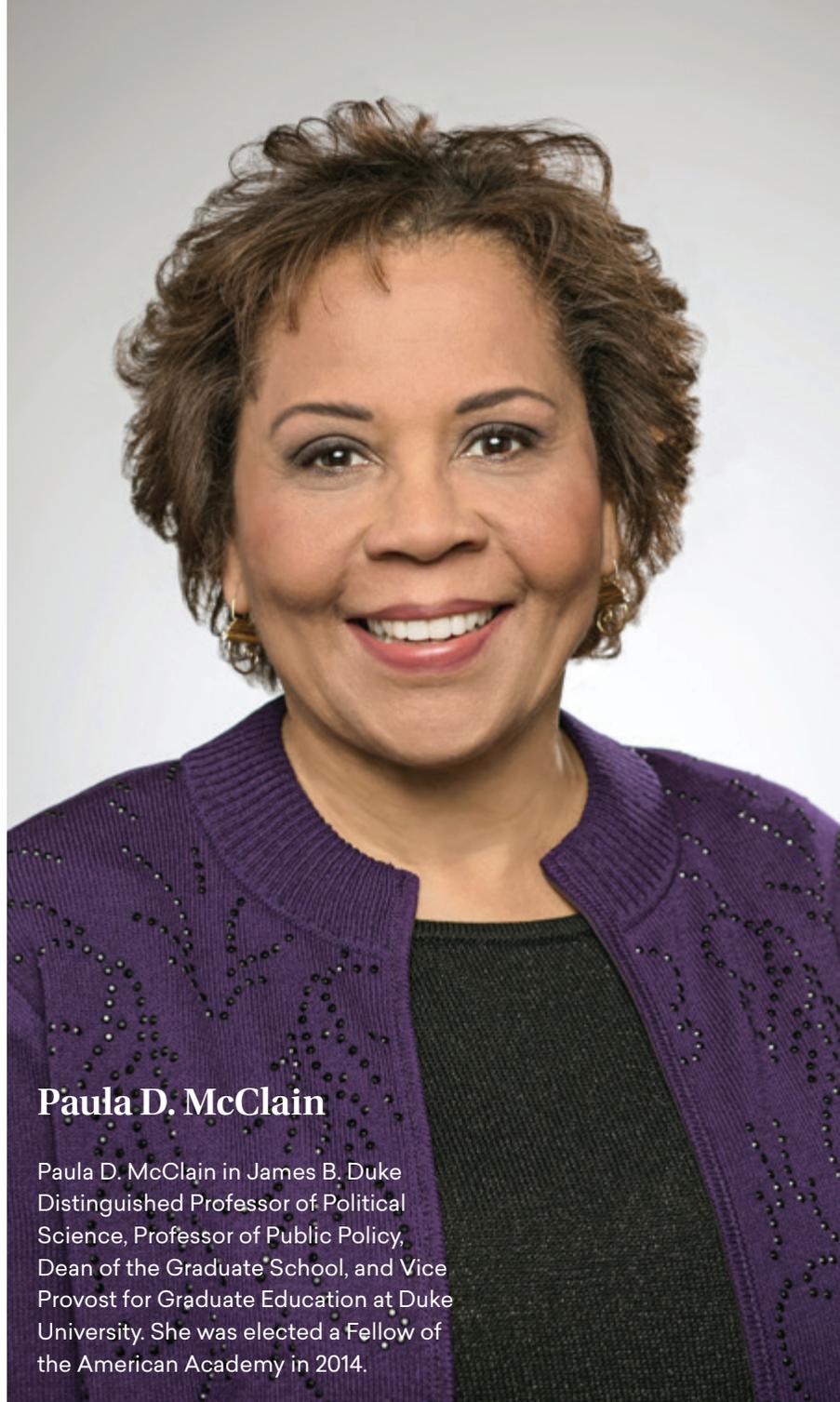
As we have seen recently, solving fundamental social problems is going to require listening to people and trying to understand their problems. Will people care about wearing masks if they are worried about losing their homes and their health insurance because of the economic downside of the COVID-19 pandemic? That is the kind of story that we have to tell in addition to the powerful stories of individuals.

DISCUSSION
MODERATED BY PAULA D. MCCLAIN

PAULA D. MCCLAIN: The first question is for all of our speakers. Given the immediate and timely problems our country is facing, why should it be a priority to look backwards and think about how we talk about the past?

WILLIAM STURKEY: History can be a lot of different things. For many of us, it undergirds our sense of identity. It is the story of us, of who we are, of how we got here. It explains everything around us. And we interact with it all the time. There are lots of people who base their political identities on some interpretation of history, and I think that a lot of those interpretations have been flawed throughout the history of this country. As an educator and professor, I am frustrated by the amount of misinformation that drives so many voters. There are major political issues today and the people going to the polls may have attended segregated high schools or been raised in the Jim Crow South. I think we don’t have a better sense of some of the complicated aspects of our society because we haven’t been told the truth, or at least the whole truth.

JOHN ALDRICH: It so happens I was fortunate to take part in a survey over the summer about Southern political participation. It was a redo of



Paula D. McClain

Paula D. McClain is James B. Duke Distinguished Professor of Political Science, Professor of Public Policy, Dean of the Graduate School, and Vice Provost for Graduate Education at Duke University. She was elected a Fellow of the American Academy in 2014.

a study that UNC political scientists conducted during the civil rights era. I received the survey results yesterday. On Confederate monuments, 36 percent of Whites Southerners agreed with the removal of these Confederate symbols; 70 percent of the remaining Whites disagreed strongly with their removal. Therefore, we have a long way to go to reach consensus.

STURKEY: Let me add one point. Tommy Tucker, one of the sponsors of our local North Carolina bill that prevents monument removal, once said, “The

monuments can sit where they've been sitting for 150 years." The monuments were not put there 150 years ago; that is a fundamental misunderstanding of history. This is one example of where understanding that history could really help inform a lot of people.

PHOEBE STEIN: To build on what Professor Sturkey has said, it was indeed White middle- and upper-class women who started some of these campaigns to erect these statues well after the Civil War. So, we have the layered symbolism of the construction and the role of many in holding onto this history and perpetuating it.

MCCLAIN: Phoebe, that was a nice segue into the next question, which I pose to you. What are the challenges in constructing a new narrative of the South? Given the legacy of the South, of the Confederacy, what are the challenges of getting people to let go of some of that?

There are lots of people who base their political identities on some interpretation of history, and I think that a lot of those interpretations have been flawed throughout the history of this country. ”

STEIN: I am not a historian, but I will say that I think it involves a lot of humility and a lot of understanding. We need to look at our assumptions and understand the history of them. We need to create a space that can invite that kind of self-examination, perhaps listening more than talking. We need to change the narrative and be willing to be uncomfortable. And this all stems with being in and with a community. It has to come from trust, but also from a willingness to be uncomfortable.

MCCLAIN: Congressman Price, you have been a champion of the humanities for a long time. From your perspective, why are initiatives like these important for our political system?

DAVID E. PRICE: On the matter of narratives, I recently heard a story from a classmate who had talked to one of the first African-American

students to come on the campus when we were there. And this man was talking about his early days on the campus and what a jolting experience it was to walk by the Silent Sam statue. And he said to my friend, "You know, in the subsequent four years on campus, I could never bring myself to walk there again." Think about that. As a student, I was caught up in the civil rights movement. I was sympathetic. I was involved in the efforts to integrate the theaters and so on. But it never occurred to me what my fellow student was going through and how that felt in his life. Fifty years later we find this out because of a story.

We talk about policies and we get into political debates, but the different levels of understanding and empathy that stories bring are really important. We should not underestimate how much we need that depth of understanding and how far we fall short of it in our everyday discourse.

When the Academy published *The Heart of the Matter* a few years ago, it led me to reflect on my own liberal arts education, on my own humanities education. I feel very indebted to the people who taught me and to the reading and research I subsequently did for whatever understanding I have of the intellectual and political forces we are dealing with. For example, think of the anti-federalist opponents of the Constitution and the kind of anti-power ideology that continues to course through the American political system. I particularly value the communitarian strain in American political thought, and how that still speaks to our hyper-individualism and enduring conflicts. The tragic sense embodied in Lincoln's second inaugural is iconic, but still represents a dissenting strain of thought: a sense of humility and a sense of the partiality of our own perspectives.

You can learn lots of things on the job, in Congress, or elsewhere, but the kind of understanding you gain from history and literature and theology is invaluable. People who are teaching and working in the humanities should never be on the defensive about their relevance. We ought to be shouting from the rooftops about the importance of the humanities and the kind of contribution they can make to our common understanding and common life.

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To view or listen to the presentation, visit www.amacad.org/events/narratives-unite-and-divide-north-carolina.

Does Meritocracy Destroy the Common Good?

2092nd Stated Meeting | August 24, 2020 | Virtual Event
Morton L. Mandel Public Lecture



In *The Tyranny of Merit: What's Become of the Common Good?* **Michael J. Sandel** argues that the divide between winners and losers has poisoned our politics and pulled us apart. The problem, he contends, is not only that we have failed to live up to the meritocratic ideals we profess, but that a meritocratic society is a flawed aspiration. It produces hubris among the successful and humiliation among those left behind. In the first virtual Stated Meeting in the history of the Academy, Michael J. Sandel joined **T. J. Jackson Lears** and **Anna Deavere Smith** in a conversation about his new book and the destructive consequences of linking socioeconomic status with personal worth. An edited version of the discussion follows.



Michael J. Sandel

Michael J. Sandel is Anne T. and Robert M. Bass Professor of Government at Harvard University. He was elected a Fellow of the American Academy in 2003.

What an honor it is to be joined by Jackson Lears and Anna Deavere Smith, both of whom I've long admired. And it's an honor to participate in this first virtual Stated Meeting in the storied history of the Academy. I can only imagine John Adams leaning into his Zoom grid and saying, "Franklin, we can't hear you. Unmute yourself!"

Our subject today is meritocracy, and whether it corrupts the common good. I suggest that it does. Consider our broken civic life. We live in a polarized, rancorous political moment. For decades, the divide between winners and losers has

their own success, to forget the luck and good fortune that helped them on their way.

Even as globalization brought deepening inequality and stagnant wages, its proponents offered workers some bracing advice: if you want to compete and win in the global economy, go to college. What you earn depends on what you learn. You can make it if you try. These elites failed to see the insult implicit in this advice: if you didn't go to college, and if you're not flourishing in the new economy, your failure is your fault. Not surprisingly, this insult fueled resentment among many working people against credentialed elites.

Today's credentialed professional classes have figured out how to pass their privileges onto their children: not by bequeathing them large estates, but by equipping them with the advantages that give them a leg up in meritocratic competition. ”

been deepening, poisoning our politics, driving us apart. This divide isn't only about inequality. It is also about the attitudes toward winning and losing that have come with it. In recent decades, those who landed on top have come to believe that their success is their own doing, a measure of their merit, and that those left behind have no one to blame but themselves.

This way of thinking about success arises from a seemingly attractive principle: if everyone starts out with an equal chance, those who succeed deserve the rewards their talents bring. This is the heart of the meritocratic ideal. In practice, of course, we fall short; not everyone has an equal chance to rise. We see this at Ivy League colleges, where there are more students from families in the top 1 percent of the income scale than from the entire bottom half of the country combined.¹ But the problem isn't only that we fail to live up to the meritocratic principles we profess. The ideal itself has a dark side: meritocracy is corrosive of the common good. It leads to hubris among the winners, and humiliation for those who lose out. It encourages the successful to inhale too deeply of

So what should we do? In *The Tyranny of Merit*, I suggest a number of responses, but for this discussion, I would like to focus on one of them: we need to rethink the role of universities as arbiters of opportunity. Colleges and universities confer the credentials that a market-based, meritocratic society prizes and rewards. But this role is a mixed blessing. It has enlarged the cultural authority and prestige of higher education and made admission to elite colleges the object of fevered ambition. But converting these institutions into sorting machines for a meritocratic order is not good for democracy, for the students who compete to win admission, or for the colleges and universities themselves.²

The meritocratic mission of selective colleges and universities found its clearest expression in the writings of James Conant, president of Harvard, in the 1940s. He wanted to overturn the established hereditary elite that he saw dominating not only at Harvard, but throughout American society. As Nicholas Lemann describes in his book *The Big Test: The Secret History of the American Meritocracy*, Conant wanted a meritocratic society to replace this hereditary privileged one. In many

1. Raj Chetty, John N. Friedman, Emmanuel Saez, et al., "Mobility Report Cards: The Role of Colleges in Intergenerational Mobility," The Equality of Opportunity Project, July 2017, 1, http://www.equality-of-opportunity.org/papers/coll_mrc_paper.pdf.

2. I draw here, and in the following paragraphs, from Michael J. Sandel, *The Tyranny of Merit: What's Become of the Common Good?* (New York: Farrar, Straus and Giroux, 2020), chap. 6.

ways, he succeeded. Higher education today is far more inclusive than it was in the 1940s and 1950s in terms of gender, race, ethnicity, and religion. But Conant expected and wanted the new meritocracy to produce a fluid, mobile society. This hope has not been fulfilled. Today's credentialed professional classes have figured out how to pass their privileges onto their children: not by bequeathing them large estates, but by equipping them with the advantages that give them a leg up in meritocratic competition. We see this in the class profile of colleges and universities, including those with generous financial aid policies.

Despite Conant's hope, colleges and universities in the United States do not serve as powerful engines of upward mobility. A team of economists led by Raj Chetty recently did a comprehensive study of the role of colleges in promoting intergenerational mobility. The researchers asked: for each college in the United States, what proportion of its students come from poor families (bottom quintile) but ultimately wind up in the top 20 percent of earners? The answer: shockingly few.

Although attending a school like Harvard or Princeton or Stanford does give students from modest economic backgrounds a good chance of rising, such places enroll so few poor kids to begin with that the overall mobility rate is low. At Harvard, less than 2 percent of students rise from the bottom to the top of the income scale. At Princeton, it's 1.3 percent. The same is true at some big-name public universities: at the University of Michigan and the University of Virginia, the mobility rate is 1.5 percent. Chetty and his team looked at 1,800 colleges and universities and found that, overall, fewer than 2 percent of their students rise from the bottom-fifth to the top-fifth of the income scale. Even more modest ascents are relatively rare. At elite private colleges and universities, only about one student in ten manages to rise even two rungs (two quintiles) on the income ladder.³

College graduates, especially from prestigious places, do have a major edge in landing lucrative jobs. But these schools have little impact on

upward mobility, because most of their students are well-off in the first place. American higher education is like an elevator in a building that most people enter on the top floor.

This calls into question an article of faith in contemporary politics – that the answer to rising inequality is greater mobility, and that the way to increase mobility is to send more people to college. To be clear: encouraging people to go to college is a good thing. Broadening access for those who can't afford it is even better. But it is a mistake to see this as the solution to decades of wage stagnation and inequality. Those of us who spend our days in the company of the credentialed can easily forget a simple fact: most people don't have a four-year college degree; nearly two-thirds of Americans do not. So it is folly to create an economy that makes a university diploma a necessary condition for dignified work and a decent life.

“The tyranny of merit oppresses not only those who lose out in meritocratic competition, but also those who prevail – the wounded winners.”

If higher education fails to be the engine of upward mobility that Conant and today's defenders of meritocracy expect it to be, what should we do? One approach is to double down on the meritocratic project and do a better job of removing obstacles to admission faced by students from low-income backgrounds. We should consider, for example, whether to end legacy admission preferences, and how to recruit more low-income and first-generation students. Removing such obstacles is desirable and important. But we cannot solve the problem of meritocracy simply by making higher education a more perfect meritocracy.

Focusing only on perfecting the sorting machine begs a bigger question: should colleges and universities take on the role of sorting people based on talent to determine who gets ahead in life? There are at least two reasons to doubt that they should. The first concerns the invidious judgments such sorting implies for those who get sorted out, and the damaging consequences for a

3. Chetty et al., “Mobility Report Cards.” For mobility rates of individual colleges based on Chetty's data, see “Some Colleges Have More Students from the Top 1 Percent Than the Bottom 60. Find Yours,” *The New York Times*, January 18, 2017, <https://www.nytimes.com/interactive/2017/01/18/upshot/some-colleges-have-more-students-from-the-top-1-percent-than-the-bottom-60.html>.

shared civic life. The second concerns the injury the meritocratic struggle inflicts on those who get sorted in and the tendency of the sorting mission to become so all-consuming that it diverts colleges and universities from their educational mission.

The tyranny of merit oppresses not only those who lose out in meritocratic competition, but also those who prevail—the wounded winners. Although affluent parents often succeed at passing their advantages onto their kids, the mechanism by which they do so converts adolescence into a

who lack a diploma but who make essential contributions to our society – through the work they do, the families they raise, the communities they serve. We should renew the dignity of work and put it at the center of our politics. This means improving the economic prospects of those whose wages and job prospects have stagnated in recent decades. It also means according greater social recognition and esteem to forms of work that do not require a college degree but that contribute to the common good.

In contending with inequality, we should focus less on arming people for meritocratic competition and focus more on making life better for those who lack a diploma but who make essential contributions to our society – through the work they do, the families they raise, the communities they serve. ”

high-pressure, stress-strewn meritocratic gauntlet. Those who survive this gauntlet and win admission to selective colleges and universities are often injured along the way. Alarming numbers of college students suffer depression, anxiety, and other mental health problems borne of the intense pressure to achieve. Many of those who prevail in the meritocratic competition become so accustomed to hoop-jumping, so driven to strive, that they struggle, once they arrive in college, to find the peace and poise to explore, to reflect, to figure out what’s worth caring about, and why.

When Conant set Harvard and higher education the task of testing and sorting the American population, I doubt he imagined the relentless meritocratic competition the project would unleash. The time has come to rethink the role of higher education – not only to repair the damaged psyches of the privileged, but also to repair the polarized civic life that meritocratic sorting has produced. The regime of merit exerts its tyranny in two directions: Among those who win out, it induces anxiety, a debilitating perfectionism, and a meritocratic hubris that struggles to conceal a fragile self-esteem. Among those it leaves behind, it imposes a demoralizing, even humiliating sense of failure.

Instead of trying simply to perfect the meritocracy, we should begin to disentangle higher education from the mission of meritocratic sorting. In contending with inequality, we should focus less on arming people for meritocratic competition and focus more on making life better for those

The most potent rival to merit, to the idea that we are responsible for our lot and deserve what we get, is the notion that we are indebted for our success, and also for our troubles, to the vagaries of fortune, or to the grace of God, or to the luck of the draw. Morally and theologically, the dialectic between an ethic of merit and an ethic of luck or grace has a long career. Jackson has written powerfully about this.⁴ Living by the belief that we have no hand in whether we will be saved in the next world, or successful in this one, is hard to reconcile with the idea of freedom. This is why the ethic of merit tends to drive out the ethic of luck and grace. Sooner or later, the successful assert and come to believe that their success is their own doing. But even in its triumph, the meritocratic faith does not deliver the freedom or the self-mastery that it promises, nor does it provide a basis for solidarity. Ungenerous to the losers and oppressive to the winners, merit becomes a tyrant.

Being alive to the chanced nature of our lot can prompt a certain humility: “There, but for the accident of birth, or the grace of God, or the mystery of fate, go I.” This spirit of humility is the civic virtue we need now. It is the beginning of the way back from the harsh ethic of success that drives us apart. It points beyond the tyranny of merit toward a less-rancorous, more-generous public life.

4. Jackson Lears, *Something for Nothing: Luck in America* (New York: Viking, 2003).



T. J. Jackson Lears

T. J. Jackson Lears is Board of Governors Distinguished Professor of History at Rutgers University. He was elected a Fellow of the American Academy in 2009.

Thank you, Michael, for engaging with a book that slipped into relative obscurity fairly quickly. It was published, as a number of my books seem to be, at the worst possible time. *Something for Nothing* appeared at the height of the escalation toward the invasion of Iraq, when there was a lot of talk of providential destiny in the air. My book challenged the kind of secular providence that suggests that nations as well as people get what they deserve in this life as well as in the world to come, if indeed there is one.

I want to talk just for a few minutes about the historical origins of meritocracy, which we have to realize is different from merit per se, even though I appreciate the title of Michael's book and think it's good in its concision. But when merit becomes meritocracy, then we are dealing not only with an idea that has become institutionalized as a means for organizing an entire society, but also with an ideology that sanctifies its proponents' sense of entitlement to run the nation, and maybe even the

world. What I want to suggest is that if we look at both the historical origins of American belief in meritocracy and the historical alternatives, which I can only briefly gesture to, we might have a deeper sense of what we're engaging with, and why these issues tend to run so deeply in our national history and in our debates about what we are as a nation.

The belief that people get what they deserve is central to American success mythology, and has been since at least the mid-nineteenth century, if not earlier; it's based on a very secular version of the Christian faith in providence. The traditional view was that God's ways were not our ways, and that those who prosper in the world, in this world, might well fry in the next. God's ways were mysterious, if not absolutely opaque to human comprehension.

But this starts to change, accelerating through the nineteenth century, when there's a growing assumption particularly among educated and affluent American Protestants – and you have to

recognize, this was a predominantly Protestant nation at the time in terms of cultural style and even in terms of secular values – an assumption that God’s will could be discovered in human affairs, and the success or failure of individuals, as well as that of nations, could reveal God’s will at work in this world. So the American nation was from this point of view divinely ordained to play a redemptive role in world history, and since this was a market society, the rich were rich because they deserved to be, and the poor had no one to blame but themselves.

with respect to gender and race, of mid-century social democracy.

Now in the last four decades or so, as Michael points out, with the rise of what I think we can fairly call neoliberal capitalism, the autonomous self has returned to the center of the success ethic. The autonomous self is more autonomous than ever, more bereft of communal supports, more responsible for his or her own fate, down to and including the metrics of personal health, which the responsible individual is now expected to monitor as anxiously as the Calvinist monitored the con-

When merit becomes meritocracy, then we are dealing not only with an idea that has become institutionalized as a means for organizing an entire society, but also with an ideology that sanctifies its proponents’ sense of entitlement to run the nation. ”

The moral dimension here, the distinction that was made between the worthy and the unworthy, the deserving and the undeserving, this survived the transformation of the Protestant ethic into the spirit of capitalism. The moral distinction was based on the assumption that successful people had earned their wealth and that failures had frittered away their opportunities through laziness and inattention to business. This faith was comforting for the successful few. One finds it certainly in the beliefs of people like John D. Rockefeller Sr. and also J. P. Morgan; one’s a Baptist, one’s an Episcopalian, but they have the same notions of providence. Comforting for them, but stigmatizing for the struggling many.

At the same time, though, and this is very important historically as well as with respect to contemporary affairs, the vision of a nation of autonomous strivers was always counterbalanced by older ideals of community and solidarity, whether they came from religion, or family, or community traditions and customs, and these were cultural memories and also current realities for many people. The democratic socialists in the late nineteenth century talked about building a cooperative commonwealth. Progressive reformers talked about bringing commonwealth to bear against wealth. And these kinds of sentiments animated populist and socialist and progressive movements, and then resurfaced in the Great Depression to become the basis, however limited and imperfect

tents of his soul. So the idioms have changed since the nineteenth century: there’s less emphasis on plodding diligence; there’s more on talent, brains, and credentialed expertise.

But lack of success now implies not only a failure of mental power, but a failure of moral character. There’s still that sting of moral judgment about it. And the impact on democratic fellow feeling, as Michael shows I think very convincingly in his book, has been even more devastating in our gilded age than it was in the last one more than a century ago.

I want to echo what Michael suggested, which I also explore in my book *Something for Nothing*, about the need to resurrect the tradition that acknowledges the centrality of chance in human affairs. This makes a huge difference in how we tend to relate to one another and how we tend to evaluate one another’s worth in the world; and it also introduces a sense of humility. This is not a point of view that is restricted to gamblers and confidence men, although they sometimes benefit from it. There’s a whole underside of American culture pushed to the margins, much of the time by dominant cultural elites, but nevertheless thriving and acknowledging the role of chance, which of course has a long pedigree. We can go back at least to the wisdom of Ecclesiastes to acknowledge the ubiquity of hazard in human affairs, and recognize that you don’t always get what you deserve; you get what you get.

Anna Deavere Smith

Anna Deavere Smith is an Actress, Playwright, and Author; and University Professor at the Tisch School of the Arts and Founding Director of the Institute on the Arts and Civic Dialogue at New York University. She was elected a Fellow of the American Academy in 2019.

In the land of smoke and mirrors, there's a real hotel, which I'll call the Hotel Merit Hollywood, just a quarter block south and a half a block west of one of the busiest intersections in all of Southern California. It has a facade of quiet opulence. The semicircular driveway is adorned from around eight in the morning until dusk with a Lamborghini, a McLaren, a Bentley, and the house car, a Rolls. The entertainment industry movers and shakers do breakfast, lunch, and cocktails there, breakfast costing more than \$100 for two people, even though the shakers don't eat very much – they're quite fit. Sprinting up and down the meritocratic ladder is done without breaking much of a sweat, no matter how far apart the rungs are. Harvard, Stanford, Princeton, Yale don't always appear on the resumes of the elite here; to be sure, there's a healthy contingent of alums, but the only necessary credential to have your special table at the Hotel Merit poolside is the ability to make money and/or noise (meaning, to attract attention). It helps to have a couple of movie stars in your pantry to leverage. Those in power at the Merit seek to be – Michael, to use the words you've pulled from the liberal-speak thesaurus – on the right side of history. One of the most powerful agencies in town, extending to offices in fourteen cities in six nations, represents the founders of Black Lives Matter.

Here comes the main character of my tale. It was dusk in the parking lot at the Hotel Merit Hollywood. I was waiting for my rental car – not a Lamborghini. My breath was arrested by a standard poodle. She – I think it was a she – was poodle royalty, well-bred, racehorse legs, not a silly haircut, groomed with taste – *taste*, now there's a word they throw around at the Merit, taste. She was obviously well-educated, tutored daily. I did not sense hubris. Her intelligence came through a piercing, focused gaze. Every ringlet of her thick coat fell as it should, a beautiful jeweled collar, maybe fake



jewels, but you never know. It's the land of excess, where even a dog's sense of self depends on a little bit of bling. She wouldn't last at a dog park, though. Even if she had a deep desire to play with others, it was sufficiently bred out of her. I suspect that if her nanny didn't rescue her immediately, she'd escape on her own. She was not bred to cavort. All she was bred for was to look like a million bucks. And she knew her worth.

There's an apartment building, I'll call it the Tudor Downs, that is situated in New Haven, where there's Yale and then – there's everybody else. The Downs is a beat-up place that's in everybody else's part of town. I and my collaborators were boarded there while we were rehearsing *Let Me Down Easy*, my 2008 play about resilience and vulnerability, the body versus American health care, the body versus the state, life versus death, winning versus losing – Michael, you know all about that play, because you were among the real people that I interviewed and portrayed in the New Haven version.

Many who work with me on my plays in fact did attend Harvard, Princeton, Yale, Stanford; but they don't have a lot of hubris. And that's because of money. Those of us who work in nonprofit

theater aren't there for the money. Whereas the salaries of resident artistic and managing directors pre-COVID increased exponentially over the last three decades, the salaries of we itinerant artists have not. Those in consistent power, including our unions, perhaps, are banking on an assumption that we who are skilled performers, directors, writers, designers, and assistants choose to work in nonprofit institutions because we have something burning in our hearts to say, and having the opportunity to say it ought to be pay enough. Some of us buy into the missions of these theaters: creating community, the betterment of society, maybe even the common good.

What skill sets do we have that we don't even know about, because we've not practiced? Or more troubling, what skill sets are rotting inside of us because we're numb to the needs around us? ”

But here's the relevant action of this part of my presentation: Memphis, my dog, lived with me for seventeen years, but it was not until our seventh year together, during our sojourn at the Tudor Downs that I learned of her gifts. The realization was – to use your words, Professor Sandel, from that interview I did of you in 2007 – *unbidden*. This realization was *unbidden*. Memphis had no pedigree. The vet said that she was part Australian cattle dog, other part, anybody's guess. She was not educated, and that's my fault. Like the rest of her breed, or half of her DNA at least, she was smarter than me, so even though she showed potential at puppy school, I flunked out. And as you know, the owner, or as they say, “the parent of the dog” has to get trained as well. With my dismissal came hers.

A fire alarm went off at the Downs in the middle of the day. Our rooms were on – perhaps the eighteenth floor? People I'd never seen, some of them in pajamas, poured out of rooms into the hallways and down the stairs. Much to my horror, as we ran *down* the stairs, Memphis ran back *up* the many floors. Australian cattle dogs are herders, and her herding genes revealed themselves for the first time. Never trained to herd, but she had dignity about the work that she was bred to do. Over and over I screamed for

her to come with me, singular me, *her owner*. But she herded those many others, all of whom were previously unknown to her, out of the building with resolve and the utmost purpose. Memphis had an understanding of the common good in her blood and it prevailed.

I will close with some words from the 2007 interview I conducted of Michael Sandel and for which my portrait of him in *Let Me Down Easy* – New Haven was based. I will not perform him now. Here's one of my favorite parts of the monologue portrait, culled from the interview. It is relevant to our discussion about the tyranny of merit. I quote Professor Sandel:

In the '20s and '30s, there were state fairs that awarded prizes called “Fittest Family” prizes. You would go to the state fair, and alongside the livestock competitions where they would give blue ribbons to the best cattle, or the best-bred pig, they were doing the same for human beings. And people would enter, and they would give their genetic information, their medical history, and they would award prizes for the fittest families, just as they gave gold medals to the fittest cattle and the best-bred pig. And what we're doing today in the name of helping our children, equipping our children, we are gradually, without being aware of it, turning parenting into manufacturing, as if the child were a consumer good. We're using technologies to fit ourselves into the world that happens to be. We should change society to fit us, rather than to try to change our bodies to fit the social roles that could be otherwise. It is a lack of moral imagination.

The Tyranny of Merit raises many important questions, and it's the perfect time to ask them. One of the questions I'd ask is, how much of our instinct toward the common good has been bred out of us? Or is it still there? The hope-a-holics would say it's still there, like Memphis's herding. She was an orphan dog, left on the side of a highway in Tennessee, probably, because I'm told, she proved to be gun-shy as a puppy. There were no papers to document her aptitude, but her herding instinct emerged once the need was there on that staircase in the Downs. What skill sets do we have that we don't even know about, because we've not practiced? Or more troubling, what skill sets are rotting inside of us because we're numb to the needs around us? Have we lost our instinct to protect the common good?

DISCUSSION

MICHAEL J. SANDEL: I'd like to identify one theme that I think connects our comments, and that is one of the animating arguments of *The Tyranny of Merit*. Underlying all of these debates about success and moral desert, about who deserves what, about winners and losers, and about rising, is a question about human freedom and the project of self-making. Jackson raised this in pointing out the parallel between the earlier Christian debate about whether salvation is something we earn through our own merit, or an unearned gift. Anna raised it with the ingenious story about her dog, Memphis, a mutt, an unbidden dog, who was not deliberately created, crafted, honed, designed, but just happened to be, and in happening to be, turned out to have the impulse to the common good that Anna wonders about today – whether we've lost our capacity for it, or whether it's simply occluded.

Jackson's and Anna's far-reaching observations raise the question that I most care about in this book, which goes back, as Anna recalls, to my book *The Case Against Perfection*, about designer children and eugenics. There is something alluring about a conception of freedom that enables us to say and to believe that we are self-making, that we are the masters of our nature and of our lot in life, that we are wholly responsible for where we land – whether we're saved, whether we're rich. The moral of the story of *The Tyranny of Merit* is that the alluring image of self-mastery and self-making is flawed. It's a flawed conception of freedom. It doesn't lead to a satisfying way of life for the winners, and it disparages the rest, cuts us off from a sense of responsibility for those less fortunate than ourselves. This seems to me the deep point that Jackson and Anna have identified. This is the ultimate moral, even existential, theological question at stake in the debate about meritocracy.

T. J. JACKSON LEARS: I want to make a quick comment on eugenics, because it's significant that both Anna and Michael brought that up. There's a kind of stealth operation going on. As you all know, eugenics went out of fashion during the Second World War and since because it was associated with Nazism and fascist regimes generally and with organized racism. But in recent decades, we've seen a revival of, on the one hand, an updated version of nineteenth-century liberal individualist

laissez faire economics and free market rhetoric, however inaccurate it is with respect to the actual workings of the economy. It has become all the rage, the whole emphasis on free entrepreneurship and innovation and the sense that creative destruction has come back into fashion as a term of approbation, almost with a kind of providential dimension to it, so that no matter how many factories have been closed, communities have been hollowed out, and lives have been destroyed, this is all just part of the creative destruction that is necessary to foster further innovation. So it's almost as if it plays the kind of secular providentialist role in justifying untrammelled capitalism.

On the other hand, we have a resurgence of positivist scientism arguing that science has answered, or is about to answer, all ultimate questions about human worth and human purpose, and that one can therefore look to science, however that may be defined, to define human worth – to define the fittest. And the ideology of meritocracy basically says that we, the meritorious ones who have been recognized as such by the meritocracy, are the most fit, and thus are entitled to our privileges. There's also a revival of a kind of social Darwinism – and, of course, there is a lot of pop Darwinian flavor to the meritocratic idiom as well. As Michael points out, in the meritocratic scheme of things, there's a sense in which the fittest have a renewed claim on power, respect, and influence, and there's less embarrassment about using that kind of language, it seems to me, than there used to be. So in my way of thinking, there's a connection between neoliberal political economy and positivist social science, which often has a eugenic or neo-Darwinian flavor.

ANNA DEAVERE SMITH: I have a question, actually, for Michael. In your book, you use the word *deliberate* – to talk about how we need to deliberate about our values. I want to know where you see some of those spaces, or how that would work, or if you think it's working now, or where you find it working.

SANDEL: Anna, I find it in the conversations following some of your performances. But these are spaces we need to proliferate and enlarge. I think the reason we desperately need occasions and sites and spaces for deliberation is that in their absence, we allow merit to be defined by the money that people make in a market. It's easy to slide into the assumption that the money people make is

the measure of their contribution to the common good, subject to some assumptions about markets being truly competitive, and so on. That's an easy assumption to make. But it's a mistake.

What I'm arguing against is not merit as such, but merit as defined by the rewards markets bestow on the talents that society happens to prize at any given moment. LeBron James is a great basketball player, and of course he worked hard to develop his talents. But is it his doing that he lives in a society that loves basketball and rewards it handsomely? Or is that his good luck? If LeBron had lived in the Renaissance, when they cared more about fresco painters than basketball players, he wouldn't enjoy the bounty the market heaps on his talents now.

So what we need to do is to find occasions to deliberate about what counts as a valuable contribution to the common good, and how it should be rewarded, both in material terms and also in terms of social recognition and esteem. These are moral judgments that we have outsourced to markets in recent decades. We, as democratic citizens, should reclaim from markets the responsibility for deliberating about what counts as a valuable contribution to the common good.

The pandemic offers a possible occasion for deliberation of this kind. Those of us who have the luxury of working from home can't help but notice how deeply we depend on workers we often overlook – delivery people, warehouse workers, grocery store clerks, childcare workers, home health care providers. These are not the best-paid or most-honored members of our society, and yet now we are calling them “essential workers.” So at least there's a moment of dissonance. And this moment of dissonance could be an opening for a broader public debate about what contributions really are worthy of honor, recognition, and reward, and about how we can reconfigure our economy to take account of those judgments. What do you think?

SMITH: Well, my one concern about the deliberation is how segregated our society remains.

And the only place to have it is on social media, because even theaters attract certain kinds of people and not others, as in your classroom, and mine at NYU.

SANDEL: Right, and what that suggests is that part of the crisis of deliberation and of the common good is that we lack class-mixing common spaces and public places, especially those – libraries are a good example – where people inadvertently come

together in the ordinary course of life, encountering people from different walks of life, different backgrounds of class and race and ethnicity, and different life experiences. It used to be that sports stadia were class-mixing institutions, back when I was a kid going to watch my favorite baseball team play in Minnesota. CEOs and mailroom clerks sat more or less side-by-side, and when it rained, everyone got wet. But then, through the 1990s and 2000s, most sports stadia built VIP skyboxes. So even places that were once class-mixing settings have been segmented or segregated. Those who can afford to buy their way out of public services, cultural institutions, recreational facilities, public transit, have done so.

And so part of this project would require reinventing the civic infrastructure of a shared common life, places where inadvertent, unplanned encounters can take place. These can be the seedbeds of civic deliberation.

LEARS: I think it was your phrase, Michael, *fellow feeling*. And fellow feeling is what needs somehow to be generated, and creating the kind of public spaces you described is essential to that, obviously, but it doesn't guarantee anything we might hope will come out of it. Fellow feeling is a little less than solidarity, a little less rigorous and demanding. We're talking about human sympathy. We're talking about a sense that we're all in this together. If we can't generate that now in the midst of a pandemic, when can we?

I'll make one final comment here, on the question of invisibility. We have known for generations about invisibility due to gender and race exclusion, which of course continues today. But we also have a larger category of the invisible who might be characterized as the unlucky. And this is what we're gesturing toward: the people who are left out by this process of meritocratic sorting. Thomas Gray wrote “full many a flower is born to blush unseen.” I hold to the sentiment behind that thought. I think that loosening up the meritocracy would allow for a kind of efflorescence, a flowering of talent in places that we might never have imagined it would appear.

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To view or listen to the presentation, visit www.amacad.org/events/does-meritocracy-destroy-common-good.



Celebrating the Newest Members of the Academy

On October 7, 2020, over two hundred members of the class of 2020 gathered on Zoom to celebrate their recent election to the Academy. This virtual convening was not designed to replace Induction, but rather to capture some of the camaraderie, joy, and ceremony of the traditional weekend in Cambridge.

In a nod to what the new members may expect when it is safe to gather in person for Induction, the online program began with a celebration of the arts. Following a welcome and introduction from **John Lithgow** (Author, Actor), **Natasha Trethewey** (Northwestern University) recited “Illumination,” her poem about the scholar’s duty to pursue knowledge in service to the common good. The program included an overview of some history and traditions of the Academy from Board Chair **Nancy Andrews** (Duke University School of Medicine) as well as testimonials from current members reflecting on their own experiences with the work of the Academy and encouraging their newest colleagues to jump in with both feet. Excerpts from these testimonials are on the next page.

Members moved into smaller breakout rooms that were, in the great tradition of the Academy, intentionally cross-disciplinary. In each room, a representative from the Academy’s governing bodies facilitated the conversations. These rooms had elements of spontaneity and even serendipity, with former colleagues reconnecting by chance and new acquaintances bonding over mutually shared interests.

President **David Oxtoby** provided an overview of the current priorities and led a town hall discussion about the Academy’s work. In the very final moments of the program, members watched Paul Simon’s performance of “American Tune” at his Induction ceremony in 2011 – an opportunity to reflect on the honor of election and consider the ways in which Academy members are connected through history.

Danielle Allen (Harvard University)



“I make room for [projects that matter] in my professional life because I know with these projects, I can make a difference for my community, for my country, [and] for the world more broadly.”

Geraldine Richmond (University of Oregon)

“We look forward to seeing how you can help us make the Academy better, make the country better, and make the world better.”



Karl Eikenberry (Stanford University)



“Academy gatherings . . . are cognitive fireworks that stimulate the mind and challenge participants to question their assumptions and consider other perspectives.”

Marcelo Suárez-Orozco (University of Massachusetts Boston)

“Will you use your election into this most extraordinary of academies to put it on your CV, to hang it on the wall? Or will you commit to engage, commit to enter the fellowship of our Academy dedicated to the pursuit of that which is true (logic, science), that which is just (ethics), and that which is beautiful (aesthetics)?”



David Rubenstein (The Carlyle Group)



“I hope all of you will listen to John Adams if you don’t listen to me. Be involved. Be engaged. Take advantage of this opportunity.”

Select Prizes and Awards to Members

Susan Ackerman (University of California San Diego) was elected to the National Academy of Medicine.

Eric Adelberger (University of Washington) was awarded a 2021 Breakthrough Prize in Fundamental Physics.

Margaret Atwood (Toronto, Ontario, Canada) received the 2020 Ambassador Richard C. Holbrooke Distinguished Achievement Award.

David Baker (University of Washington) was awarded a 2021 Breakthrough Prize in Life Sciences.

Arden L. Bement Jr. (Purdue University) is the recipient of the Arthur M. Bueche Award, given by the National Academy of Engineering.

Francine Berman (Rensselaer Polytechnic Institute) was elected to the National Academy of Public Administration.

Myles Brown (Harvard Medical School; Dana-Farber Cancer Institute) was elected to the National Academy of Medicine.

Adam Burrows (Princeton University) was awarded the Viktor Ambartsumian International Science Prize. He shares the award with **Alexander Szalay** (Johns Hopkins University) and **Isabelle Baraffe** (University of Exeter; Lyon Center for Astrophysics Research).

Raj Chetty (Harvard University) was awarded the Infosys Prize in Social Sciences.

James J. Collins (Massachusetts Institute of Technology) was awarded the 2020 Dickson Prize in Medicine, given by the University of Pittsburgh School of Medicine.

Michael Cook (Princeton University) received the 2020 Middle East Medievalists Lifetime Achievement Award.

Caroline Dean (John Innes Centre) was awarded a Royal Medal by the Royal Society.

Jennifer A. Doudna (University of California, Berkeley) was awarded the Nobel Prize in Chemistry. She shares the award with Emmanuelle Charpentier (Max Planck Unit for the Science of Pathogens).

Catherine Dulac (Harvard University) was awarded a 2021 Breakthrough Prize in Life Sciences.

Paul Farmer (Harvard Medical School; Brigham and Women's Hospital) was awarded the Berggruen Prize for Philosophy & Culture.

Anthony Fauci (National Institute of Allergy and Infectious Diseases) received a Citizen Leadership Award from the Aspen Institute.

Nicky Finney (University of South Carolina) is the recipient of the Wallace Stevens Award, given by the Academy of American Poets.

Scott E. Fraser (University of Southern California) was elected to the National Academy of Medicine.

Howard Earl Gardner (Harvard Graduate School of Education) received the 2020 Distinguished Contributions to Research in Education Award from the American Educational Research Association.

Gretchen H. Gerzina (University of Massachusetts, Amherst) was elected to the American Antiquarian Society.

Andrea Ghez (University of California, Los Angeles) was awarded the Nobel Prize in Physics. She shares the award with Roger Penrose (University of Oxford) and Reinhard Genzel (University of California, Berkeley; Max Planck Institute for Extraterrestrial Physics).

Jane Goodall (Jane Goodall Institute) was awarded the 2020 Tang Prize in Sustainable Development.

Craig Hawker (University of California, Santa Barbara) received the American Chemical Society's 2021 Kathryn C. Hach Award for Entrepreneurial Success.

Melody Hobson (Ariel Investments) received a Citizen Leadership Award from the Aspen Institute.

Louis Ignarro (David Geffen School of Medicine at UCLA) was elected a Fellow of the National Academy of Inventors.

Don Ingber (Wyss Institute, Harvard University) has been named a 2021 recipient of Yale University's Wilbur Cross Medal for Alumni Achievement.

Vicky Kaspi (McGill University) is the recipient of the 2021 Bakerian Medal of the Royal Society of the United Kingdom.

Alex Kolodkin (Johns Hopkins University School of Medicine) was elected to the National Academy of Medicine.

Nicholas Kristof (*The New York Times*) received the inaugural Aurora Humanitarian Journalism Award. He shares the award with Jane Ferguson (PBS NewsHour; Princeton University).

Milan Kundera (Paris, France) was awarded the Franz Kafka Prize of the Czech Republic.

Cato T. Laurencin (University of Connecticut) is the recipient of the 2020 Herbert W. Nickens Award, given by the Association of American Medical Colleges.

Ruth Lehmann (Whitehead Institute; Massachusetts Institute of Technology) was awarded the 2021 Vilcek Prize in Biomedical Science.

Judy Lieberman (Boston Children's Hospital; Harvard Medical School) was elected to the National Academy of Medicine.

Bill McKibben (Middlebury College) received the Distinguished Environmental Leadership Award, given by the Brushwood Center at Ryerson Woods. He shares the award with Sue Halpern (Middlebury College).

Paul Milgrom (Stanford University) was awarded the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel. He shares the award with Robert B. Wilson (Stanford University).

Danesh Moazed (Harvard Medical School) received a PBSci Distinguished Alumni Award from the UC Santa Cruz Division of Physical and Biological Sciences.

Toshiko Mori (Toshiko Mori Architect; Harvard University Graduate School of Design) was awarded the 2020 Louis Auchincloss Prize by the Museum of the City of New York.

Gülru Necipoğlu (Harvard University) was elected a Fellow of the British Academy.

Alondra Nelson (Institute for Advanced Study; Social Science Research Council) was elected to the National Academy of Medicine. She was also awarded the 2020 Morison Prize in Science, Technology, and Society from the Massachusetts Institute of Technology.

Charles Nelson III (Harvard University) was elected a Fellow of the British Academy.

Yuri Orlov † (Cornell University) was awarded the 2021 Robert R. Wilson Prize for Achievement in the Physics of Particle Accelerators by the American Physical Society.

Orlando Patterson (Harvard University) was awarded the Order of Merit of Jamaica.

Roderic Pettigrew (Texas A&M University) is the recipient of the Vannevar Bush Award from the National Science Board.

Elizabeth A. Phelps (Harvard University) was awarded the George A. Miller Prize in Cognitive Neuroscience.

Jennifer Richeson (Yale University) received the 2020 SAGE-CASBS Award, given by SAGE Publishing and the Center for Advanced Study in the Behavioral Sciences at Stanford University.

Henry Samueli (Broadcom Inc.) is the recipient of the 2021 IEEE Founders Medal.

Greg Sarris (Federated Indians of Graton Rancheria) received a Lifetime Achievement Award from Heyday Publishers.

Frederick Schauer (University of Virginia School of Law) was elected a Fellow of the British Academy.

Sara Seager (Massachusetts Institute of Technology) was named an Officer of the Order of Canada.

Robert Seyfarth (University of Pennsylvania) received the Distinguished Animal Behaviorist Award from the Animal Behavior Society.

Kathryn Sikkink (Harvard Kennedy School) was elected a Fellow of the British Academy.

Subra Suresh (Nanyang Technological University) was awarded the 2020 ASME Medal by the American Society of Mechanical Engineers.

Melody A. Swartz (University of Chicago) was elected to the National Academy of Medicine.

Alexander Szalay (Johns Hopkins University) was awarded the Viktor Ambartsumian International Science Prize. He shares the award with **Adam Burrows** (Princeton University) and Isabelle Baraffe (University of Exeter; Lyon Center for Astrophysics Research).

Marc Tessier-Lavigne (Stanford University) was named an Officer of the Order of Canada.

Saul Teukolsky (Cornell University) was awarded the Einstein Prize of the American Physical Society. He shares the prize with **Clifford Will** (University of Florida).

John C. Tully (Yale University) was awarded the Ahmed Zewail Prize in Molecular Sciences.

Peter von Hippel (University of Oregon) is the recipient of the 2021 Ignacio Tinoco Award from the Biophysical Society.

Gungwu Wang (National University of Singapore) was awarded the 2020 Tang Prize in Sinology.

Clifford Will (University of Florida) was awarded the Einstein Prize of the American Physical Society. He shares the prize with **Saul Teukolsky** (Cornell University).

Kongjian Yu (Turenscape; Peking University) is the recipient of the IFLA Sir Geoffrey Jellicoe Award, given by the International Federation of Landscape Architects.

Xiaowei Zhuang (Harvard University) was elected to the National Academy of Medicine.

Jan Ziolkowski (Harvard University) was elected to the Finnish Academy of Science and Letters.

New Appointments

Alan Ashworth (University of California, San Francisco) was appointed to the Scientific Advisory Board of Circle Pharma, Inc.

Joanne Berger-Sweeney (Trinity College) was elected to the Board of Directors of the Henry Luce Foundation.

Jeffrey A. Bluestone (Sonoma Biotherapeutics; University of California, San Francisco) was appointed to the Board of Directors of Gilthead Sciences, Inc.

Louise Bryson (J. Paul Getty Trust) was named chairperson of the Board of Directors of the Public Media Group of Southern California.

Ursula Burns (VEON Ltd. and Xerox Corporation, ret.) was appointed to the Board of Directors of Waystar.

William F. DeGrado (University of California, San Francisco) was appointed scientific advisor at Innovation Pharmaceuticals.

Juan de Pablo (University of Chicago) was appointed vice president for National Laboratories, Science Strategy, Innovation, and Global Initiatives at the University of Chicago.

Daniel Diermeier (Vanderbilt University) joined the Federal Advisory Board of SpiderOak Mission Systems.

Nicholas B. Dirks (University of California, Berkeley) was named president and chief executive officer of the New York Academy of Sciences.

Garret FitzGerald (University of Pennsylvania) was appointed to the Scientific Advisory Board of Bicycle Therapeutics plc.

Kenneth C. Frazier (Merck & Co.) was appointed to the Board of Directors of Catalyst.

Cynthia M. Friend (Harvard University) was named president of The Kavli Foundation.

Laurie H. Glimcher (Harvard Medical School; Dana-Farber Cancer Institute) was appointed to the Board of Directors of Analog Devices, Inc.

Robert Jones (University of Illinois at Urbana-Champaign) was elected to the Board of Trustees of the National 4-H Council.

David Julius (University of California, San Francisco) was elected a trustee of the Howard Hughes Medical Institute.

Eric W. Kaler (University of Minnesota) was named president of Case Western Reserve University.

Peter Kareiva (University of California, Los Angeles) was named president and chief executive officer of the Aquarium of the Pacific.

Peter S. Kim (Stanford University) was appointed to the Board of Directors of Entrada Therapeutics.

Cato T. Laurencin (University of Connecticut) joined the Board of Directors of the National Academy of Inventors.

Risa Lavizzo-Mourey (University of Pennsylvania) was elected to the Board of Trustees of the Howard Hughes Medical Institute.

Robert Malenka (Stanford University) was appointed to the Scientific Advisory Board of AZTherapies, Inc.

Juanita L. Merchant (University of Arizona, Tucson) was appointed to the Scientific Advisory Committee of the Ludwig Institute for Cancer Research.

Alondra Nelson (Institute for Advanced Study; Social Science Research Council) was elected to the Board of Trustees of the Russell Sage Foundation.

Zaki Anwar Nusseibeh (Minister of State, United Arab Emirates) was appointed supreme president of the United Arab Emirates University.

Christina H. Paxson (Brown University) was appointed to serve as chair of the Federal Reserve Bank of Boston. She was also elected chair of the Board of Directors of the Association of American Universities.

Roger Perlmutter (Merck Research Laboratories) was appointed independent board director of insitro.

Tomaso A. Poggio (Massachusetts Institute of Technology) was appointed to the AI Technology Advisory Group of Hyundai Motor Corporation.

Peter J. Ratcliffe (University of Oxford) was appointed non-executive director of Immunocore.

Daniela L. Rus (Massachusetts Institute of Technology) was appointed to the AI Technology Advisory Group of Hyundai Motor Corporation.

Randy Schekman (University of California, Berkeley) was appointed to the Scientific Advisory Board of Eureka Therapeutics, Inc.

Larry Smarr (University of California San Diego) was named Technology Evangelist at Kazuhm.

Jacqueline Stewart (University of Chicago) was named chief artistic and programming officer of the Academy Museum of Motion Pictures.

Bruce Stillman (Cold Spring Harbor Laboratory) was appointed to the Scientific Advisory Board of Circle Pharma, Inc.

Sarah Thomas (Harvard University) was appointed to the Board of Trustees of the Natural History Museum.

Ajit Varki (University of California San Diego) was appointed to the Scientific Advisory Board of Aviceda Therapeutics.

Kevin Young (Schomburg Center for Research in Black Culture, New York Public Library) was named director of the Smithsonian's National Museum of African American History and Culture.

Select Publications

POETRY

Margaret Atwood (Toronto, Ontario, Canada). *Dearly: New Poems*. Ecco, November 2020

Henri Cole (Claremont McKenna College). *Blizzard: Poems*. Farrar, Straus and Giroux, September 2020

Jorie Graham (Harvard University). *Runaway: New Poems*. Ecco, September 2020

John Lithgow (Los Angeles, CA). *Trumpty Dumpty Wanted a Crown: Verses for a Despotist Age*. Chronicle Prism, September 2020

Rosanna Warren (University of Chicago). *So Forth*. W.W. Norton, May 2020

Kevin Young (Schomburg Center for Research in Black Culture, New York Public Library), ed. *African American Poetry: 250 Years of Struggle & Song*. Library of America, October 2020

FICTION

Martin Amis (New York, NY). *Inside Story: A Novel*. Knopf, October 2020

Russell Banks (Saratoga Springs, NY). *Foregone: A Novel*. Ecco, March 2021

Sanford Levinson (University of Texas at Austin School of Law) and Cynthia Levinson (Austin, TX). *Fault Lines in the Constitution: The Graphic Novel*. First Second, September 2020

Viet Thanh Nguyen (University of Southern California). *The Committed*. Grove Press, March 2021

Marilynne Robinson (University of Iowa). *Jack*. Farrar, Straus and Giroux, September 2020

Lynne Sharon Schwartz (New York, NY). *Truth-telling: Stories, Fables, Glimpses*. Delphinium Press, October 2020

Jane Smiley (Carmel Valley, CA). *Perestroika in Paris*. Knopf, December 2020

NONFICTION

Lisa Feldman Barrett (Northwestern University). *Seven and a Half Lessons About the Brain*. Houghton Mifflin Harcourt, November 2020

Ian Buruma (New York, NY). *The Churchill Complex: The Curse of Being Special, from Winston and FDR to Trump and Brexit*. Penguin Press, September 2020

F Stuart Chapin III (University of Alaska Fairbanks). *Grassroots Stewardship: Sustainability Within Our Reach*. Oxford University Press, June 2020

Colin Dayan (Vanderbilt University). *Animal Quintet: A Southern Memoir*. LARB Books, December 2020

Ruth Defries (Columbia University). *What Would Nature Do: A Guide for Our Uncertain Times*. Columbia University Press, December 2020

Joan Didion (New York, NY). *Let Me Tell You What I Mean*. Knopf, January 2021

Felton Earls (Harvard Medical School; Harvard T. H. Chan School of Public Health) and Mary Carlson (Harvard Medical School; Boston Children's Hospital). *Voice, Choice, and Action: The Potential of Young Citizens to Heal Democracy*. Belknap Press, September 2020

Juan Enriquez (Excel Venture Management). *Right/Wrong: How Technology Transforms Our Ethics*. The MIT Press, October 2020

Paul Farmer (Harvard Medical School). *Fevers, Feuds, and Diamonds: Ebola and the Ravages of History*. Farrar, Straus and Giroux, November 2020

Saul Friedländer (University of California, Los Angeles). *Proustian Uncertainties: On Reading and Rereading "In Search of Lost Time."* Other Press, December 2020

Loren Ghiglione (Northwestern University), Alyssa Karas (*Vanity Fair*), and Dan Tham (CNN). *Genus Americanus: Hitting the Road in Search of America's Identity*. University of Georgia Press, October 2020

Thomas C. Holt (University of Chicago). *The Movement: The African American Struggle for Civil Rights*. Oxford University Press, January 2021

Leonard Lauder (The Estée Lauder Companies Inc.). *The Company I Keep: My Life in Beauty*. Harper Business, November 2020

We invite all Fellows and International Honorary Members to send notices about their recent and forthcoming publications, new appointments, exhibitions and performances, films and documentaries, and honors and prizes to bulletin@amacad.org.

Nicholas Lemann (Columbia University), ed. *American Democracy: 21 Historic Answers to 5 Urgent Questions*. Library of America, October 2020

Alan Lightman (Massachusetts Institute of Technology). *Probable Impossibilities: Musings on Beginnings and Endings*. Pantheon, February 2021

Avi Loeb (Harvard University). *Extraterrestrial: The First Sign of Intelligent Life Beyond Earth*. Houghton Mifflin Harcourt, January 2021

Maxine L. Margolis (University of Florida; Columbia University). *Women in Fundamentalism: Modesty, Marriage, and Motherhood*. Rowman & Littlefield, October 2020

Louis Menand (Harvard University). *The Free World: Art and Thought in the Cold War*. Farrar, Straus and Giroux, April 2021

Paul Nurse (The Francis Crick Institute; Rockefeller University). *What Is Life? Five Great Ideas in Biology*. W.W. Norton, February 2021

Barack Obama (Washington, D.C.). *A Promised Land*. Crown, November 2020

Robert E. Page, Jr. (Arizona State University; University of California, Davis). *The Art of the Bee: Shaping the Environment from Landscapes to Societies*. Oxford University Press, August 2020

Jed S. Rakoff (United States District Court for the Southern District of New York). *Why the Innocent Plead Guilty and the Guilty Go Free: And Other Paradoxes of Our Broken Legal System*. Farrar, Straus and Giroux, February 2021

Claudia Rankine (Yale University). *Just Us: An American Conversation*. Graywolf Press, September 2020

David Remnick (*The New Yorker*) and Henry Finder (*The New Yorker*), eds. *The Fragile Earth: Writing from "The New Yorker" on Climate Change*. Ecco, October 2020

David M. Rubenstein (The Carlyle Group). *How to Lead: Wisdom from the World's Greatest CEOs, Founders, and Game Changers*. Simon & Schuster, September 2020

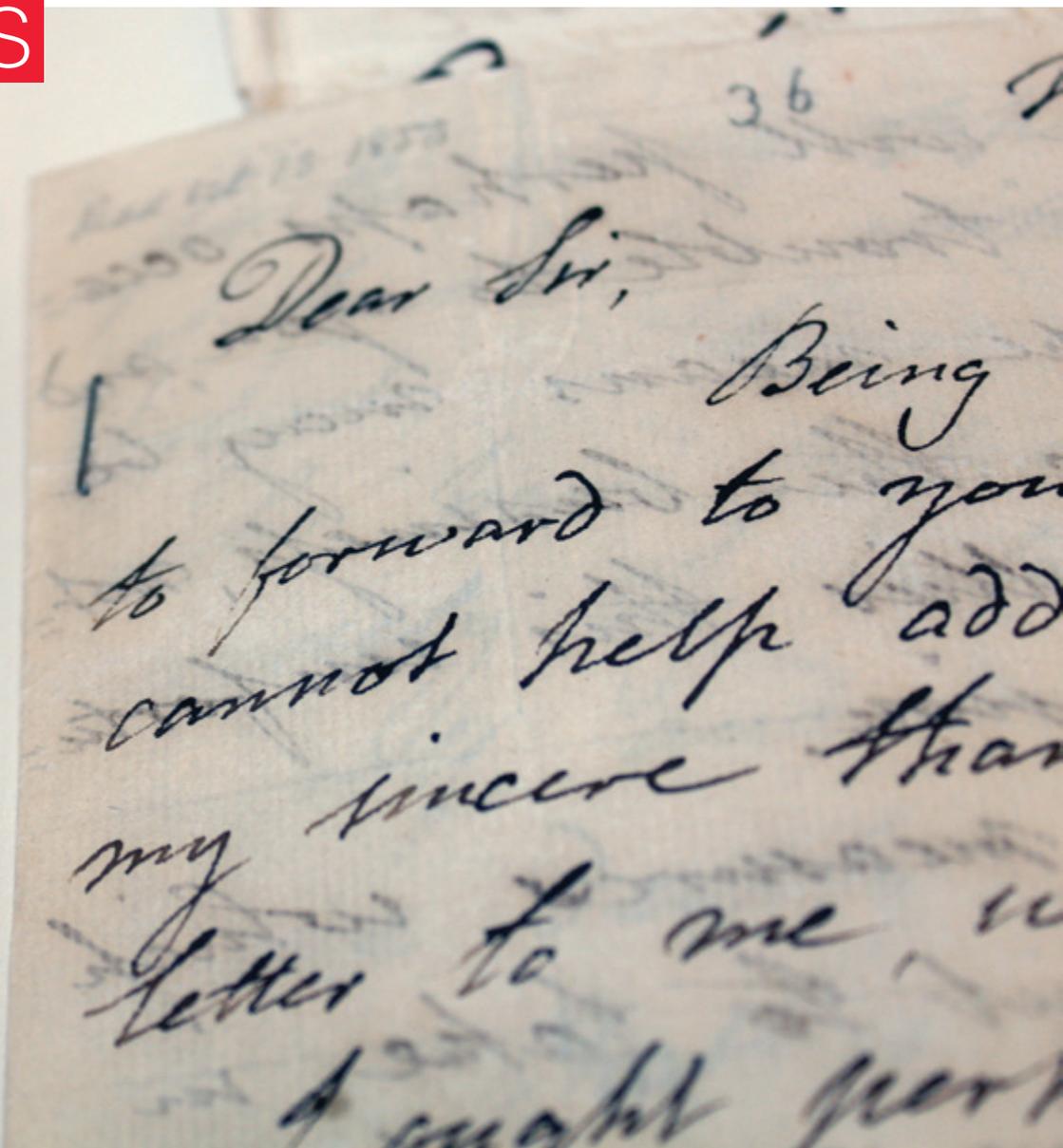
Peter Stansky (Stanford University). *Twenty Years On: Views and Reviews of Modern Britain*. Pinehill Humanities Press, September 2020

Teresa A. Sullivan (University of Virginia). *Census 2020: Understanding the Issues*. Springer, February 2020

Rosanna Warren (University of Chicago). *Max Jacob: A Life in Arts and Letters*. W.W. Norton, October 2020

Frank Wilczek (Massachusetts Institute of Technology). *Fundamentals: Ten Keys to Reality*. Penguin Press, January 2021

† Deceased



Detail of a stapled document from the Rumford Letterbooks

The Academy's Special Collections include materials related to the family life of Benjamin Thompson, Count Rumford, an American-born thermodynamic physicist, military officer, and inventor. Elected a Foreign Honorary Member in 1791, Rumford donated \$5,000 in stock to the Academy, which later formed the basis of the prize that bears his name.

The Rumford Family Collection consists of six volumes of letterbooks dating from 1775–1870 (with the majority from 1844–1854). Most of the materials are correspondence from Sarah Thompson, Countess Rumford, to James Fowle Baldwin. The letters concern her international and financial affairs (such as the Bavarian pension she was entitled to through her father) and the management of her estate in Concord. Her letters are a blend of personal and professional reflections, as Baldwin was both a primary business associate and a lifelong

friend. In addition to Thompson's letters, the collection includes lists of Thompson's expenses that Baldwin compiled, as well as a few documents related to her father, Count Rumford.

When the letterbooks were assembled in the mid-twentieth century, the original manuscripts were affixed to the ledgers' pages with a variety of adhesives, and some even include metal staples and pins. Many pages feature multiple documents layered on top of one another, making the volumes difficult to use.

The Academy has been fortunate to procure support for the conservation of these materials. The documents will be removed from the support pages, cleaned, and rehoused in archival folders and boxes. Tears will be mended, and folded pages will be flattened. The collection will also be digitized, allowing the material to be accessed online.

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The views expressed in the *Bulletin* are those held by each contributor and are not necessarily those of the Board of Directors and Members of the American Academy of Arts & Sciences.

ONLINE

The inaugural National Youth Poet Laureate in the United States, **Amanda Gorman**, impressed the country and the world when she read her poem “The Hill We Climb” at the inauguration of President Joseph Biden and Vice President Kamala Harris. Thousands of people who went online to learn more about her discovered a presentation and reading at the Academy on February 7, 2020.



Views skyrocketed for the video of Gorman opening a convening of the Academy’s Commission on the Practice of Democratic Citizenship that brought participants from listening sessions held across the country together with Commission members and civic leaders to develop ideas to strengthen American democracy. She spoke about the poetry of Phillis Wheatley, the founders of the nation and the Academy, and the unfinished work of democracy before reading her poem “Believer’s Hymn for the Republic.”

Follow the Academy on social media to keep current with news and events.

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