

cited, and others were asked to say, “I am calm” or “I am anxious.”

Brooks says she saw a “Fake it until you make it” effect among the excited group. (“If you say, ‘I’m excited,’ you’re likely to actually feel excited,” she notes.) The karaoke-singing participants used a video game with voice-recognition software that scored singing performance on measures such as volume, pitch, and rhythm. “People who said, ‘I’m excited,’ before they sang actually sang *better* on this objective performance measure,” she reports. In the public-speaking experiment, independent judges found that excited people seemed more persuasive, competent, persistent, and confident.

What makes the excited state so powerful? Brooks explains that feeling anxious is “associated with a threat mind-set. We’re worried about how things can go wrong in the future.” But when people are feeling excited, they are “focusing on the opportunities, how things can go well and work out in their favor. What we find in this paper is that, by focusing deliberately on the positive potential outcomes, you actually are more likely to achieve them.”

The findings are particularly appealing, she adds, because simple self-encouragement can make a dramatic difference.

Brooks had the opportunity to put her findings to the test when she was applying for jobs as she completed her doctorate in 2013. The process involved lecturing on this very research before groups of senior academics who peppered her with

tough questions. It was a “challenging, thrilling, and strangely reflective process,” she says. “Everyone loved asking me, ‘Are you anxious, or are you excited?’”

~ERIN O’DONNELL

ALISON WOOD BROOKS WEBSITE:

www.hbs.edu/faculty/Pages/profile.aspx?facId=684820

THE TEMPERATURE TARIFF

Climate Change’s Economic Heat

BY MAY, snow and ice may seem a distant memory, but the economic effects of an unusual winter still linger. Frequent snowstorms in the eastern United States are estimated to have cost the economy tens of billions of dollars as productivity slowed and both consum-

ers and workers stayed home. Meanwhile, the season’s record-high temperatures in the American West intensified a lengthy drought, which will increase the risk of wildfires this summer.

Weather has diverse and far-reaching effects, and—given realized and anticipated

Fragrance-Free Workplaces?

In the 1960s few would have believed that smoke-free workplaces would before long become the norm. Could fragrance-free workplaces be the wave of the future?

A CDC policy bans the use of air fresheners and scented candles in every CDC facility in the country. This policy states: “The use of some products with fragrance may be detrimental to the health of workers with chemical sensitivities, allergies, asthma, and chronic headaches/migraines.”

The full CDC policy can be viewed on the website of the Chemical Sensitivity Foundation, which contains information about multiple chemical sensitivity (MCS), including a research bibliography. Individuals with MCS react not only to fragrances but also to substances such as cleaning products, pesticides, diesel exhaust, air fresheners, fabric softeners, and new carpet. Symptoms can include asthma attacks, sinusitis, headaches, skin rashes, irritable bowel symptoms, fatigue, and difficulty with concentration, memory, and cognition.

To learn more, play on YouTube the video “**Multiple Chemical Sensitivity: A Life-Altering Condition**,” which contains footage of interviews with four leading members of Congress and a former Commander of Walter Reed Army Medical Center.

www.ChemicalSensitivityFoundation.org

climate change—there is growing interest in predicting how rising temperatures will affect global economies. In a review in the *Journal of Economic Literature*, Junior Fellow Melissa Dell (who becomes an assistant professor of economics on July 1) and two coauthors summarized the findings of this rapidly growing field of research.

Curiosity about climate is nothing new. The French philosopher Montesquieu argued at length about climate's effect on human temperament and, thereby, on a region's politics and economics: "The inhabitants of warm countries are, like old men, timorous; the people in cold countries are, like young men, brave," he wrote at one point. But isolating the effect of climate has always been difficult. Dell and her collaborators found in 2009, for instance, that countries that are one degree Celsius warmer are, on average, 8.5 percent poorer per capita. "In the raw data, we see this huge correlation," she says. "We want to understand how much of that is actually due to a causal effect of temperature."

Recent studies try to discern temperature effects by observing the impact of

Changes in climate have surprisingly far-reaching economic effects.



weather fluctuations within a single region. "Within one place, you have multiple observations and compare *within* that place over time," she explains. A harsh winter, for instance, is an opportunity to observe the effects of colder temperatures. "You use that variation instead of comparing, say, Boston to California."

"Weather has a surprisingly broad num-

ber of impacts across different sectors of the economy," says Dell. The agricultural damage done by a heat wave or drought is easy to imagine, but the literature suggests effects on manufacturing, crime rates, and health as well. Some correlations may have complex roots: higher temperatures may be linked to more civil unrest, for example, because crop failures make it less costly for



PHOTO: STEVE GILBERT

**THE HARVARD CAMPAIGN
FOR ARTS AND SCIENCES**



CLASS OF 1975 FRIENDS AND KIRKLAND HOUSE ROOMMATES CELEBRATE THE DEDICATION OF THE FINNEGAN FAMILY JUNIOR COMMON ROOM.

FROM LEFT: STEVEN T. DAGDIGIAN, FREDERICK S. MOSELEY IV, CHRISTOPHER H. DUBLE, PAUL J. FINNEGAN, LEIGH P. HOGAN, AND JOHN K. CLARKE

farmers to protest, or because the stresses of extreme weather highlight government ineptitude. Other findings seem surprisingly straightforward: for instance, both laboratory studies of individual workers and broad analyses of economic output have found that productivity is lower on hot days. “I think that because we mostly have air conditioning in the United States, it’s very easy to forget how big a deal this is,” Dell observes. “Before air conditioning, when it was above 90 degrees, the federal government would just close down.”

Predicting the economic consequences of climate change is especially relevant as governments consider policies like a carbon tax, but is far from easy. “We don’t even have a great sense of how large the climate effects are going to be,” let alone

their economic impact, Dell says. She also points out the difficulty of predicting the impact of potentially large changes in climate using data collected from smaller fluctuations in weather. Above certain thresholds, for instance, even minor temperature changes have disproportionately large effects as crops begin to fail. Moreover, resources like water reservoirs that buffer the impact of short-term fluctuations may be depleted by more persistent climate change.

A major question now is how well economies can adapt. Farmers, for instance, might switch to more heat-tolerant crops, but most analyses so far have found limited avenues for heading off long-term effects. Critically for international development, says Dell, the impacts are particularly large

on poor countries, which tend to depend more heavily on agriculture. Weather shocks like droughts or storms are also known to strongly slow their growth rate, suggesting that climate change could significantly impede long-term development.

Many areas for further research remain, Dell acknowledges, but evidence from these recent studies has an undeniable trend. “Even fairly modest changes have potentially large impacts,” she says. “We don’t know the exact magnitudes, but we know enough to say that, barring major changes in our capacities to adapt, we’ll see significant negative effects.”

~KATHERINE XUE

MELISSA DELL WEBSITE:

<http://scholar.harvard.edu/dell>

PRESCIENT FICTION

Joseph Conrad’s Crystal Ball

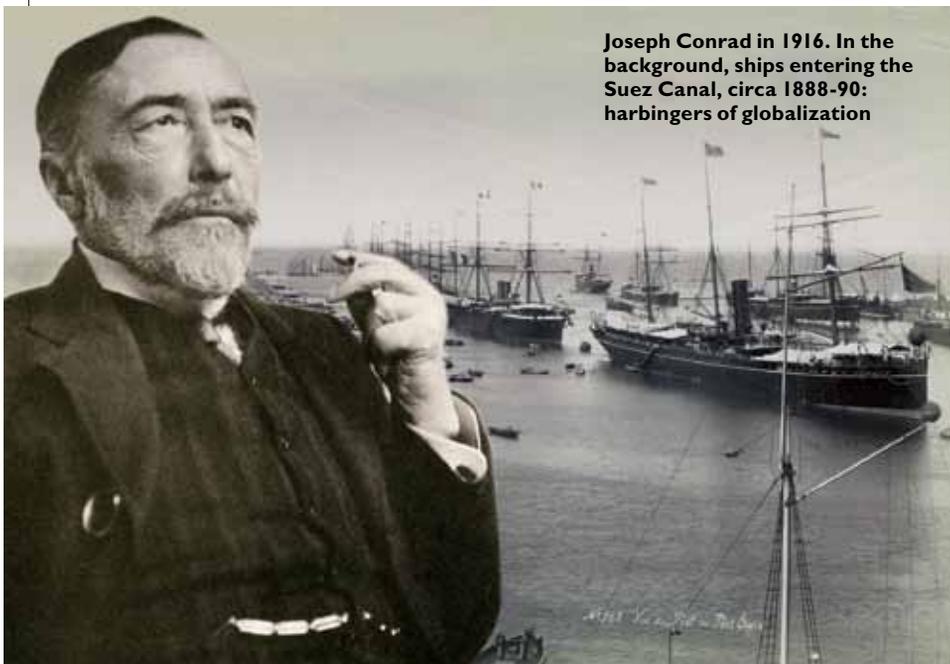
MANY CALL Rudyard Kipling the scribe of the British Empire, but novelist Joseph Conrad (1857-1924) may have best rendered its waning years and foreshadowed its demise. Around the turn of the last century, Conrad’s books portrayed terrorism in Europe, limned the reach of multinational corporations, and foresaw patterns of globalization

that became clear only a hundred years later. The contemporary Colombian novelist Juan Gabriel Vásquez has described Conrad’s books “as ‘crystal balls in which he sees the twentieth century,’” says professor of history Maya Jasanoff. “Conrad observed the world around him from distinctive and diverse vantage points because of his own cosmopolitan and well-traveled background,”

she continues. “Henry James wrote him a letter that said, ‘No-one has *known*—for intellectual use—the things you know, and you have, as the artist of the whole matter, an authority that no one has approached.’ James meant not only that Conrad had seen, but the depth of his insights. I would echo that.”

Born in Poland, Conrad spent 20 years of his adulthood as a merchant seaman on French, Belgian, and English ships, steaming to Africa, the Far East, and the Caribbean before settling down as an author in England. His grasp of the tensions and forces tearing apart the Victorian-Edwardian world is a counterweight, says Jasanoff, to the “widely held stereotype of the period as a golden age before everything got wrecked in the trenches of World War I. If you read what people were actually *saying* then, you get a strong sense of social and economic upheaval. World War I didn’t come out of a vacuum. Conrad’s novels suggest what it was like to be a person living in those times. Fiction can bring alive the subjective experience of the moment, which isn’t rendered by the kinds of documents historians usually look at.”

Jasanoff is writing a book, tentatively titled “The Worlds of Joseph Conrad,” that focuses on four of his novels: *Lord Jim*, *Heart of Darkness*, *Nostromo*, and *The Secret Agent*. The



Joseph Conrad in 1916. In the background, ships entering the Suez Canal, circa 1888-90: harbingers of globalization