December 2022

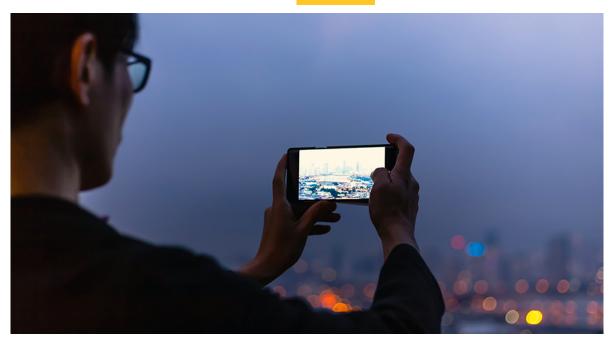
Congratulations, Fall 2022 graduates!





Arizona State University

Global Futures: Now



"Norms rarely emerge spontaneously: they are often reflection of underlying material interests and resulting political struggles."

– Akitoshi Miyashita

What is "normal" is dependent on many things: culture, geography, values, income, access to technology, and many other factors. Moreover, what is normal is dynamic. One hundred years ago, most families did not have access to an automobile. Less than 70 years ago, the FIFA World Cup was televised for the first time and only a privileged few had access to a TV to watch. Less than twenty years ago, it was unheard of to share your vacation photos with people around the world. And life changed completely with the advent of the mobile phone.

In broad terms, normalization is the process of turning actions, ideas, tools or behavior into routines or even second nature. While some cultures, such as the U.S., promote the idea of individuality, people are highly likely to conform to the social forces and perceptions we experience and witness daily. Humans have an amazing capacity to adapt and to rewrite what is normal, often aided by new technologies, such as in the aforementioned examples. The speed at which change has happened during my lifetime is astounding.

Yet, it can be hard to quantify and sometimes even comprehend human capacity to normalize, with or without technology, or to anticipate the speed at which change happens. During the past 12 months, we have witnessed the extent to which humankind has normalized disruption, even to the point of mass death. We have seen that normalization of death with COVID-19, and we see it with violence. Consider, roughly a week after the Robb Elementary massacre, a CBS News poll revealed that 44% of respondents belonging to one of the major U.S. political parties answered that mass shootings are something people must accept in a free society. COVID-19, gun violence, war and even inflation—all of these disruptions place our focus on individual safety and well-being, rather than seeking ways to make substantive, systemic changes that will transform the future.

Humans always have normalized disruption. We have normalized global warming. And we have even normalized low expectations from international negotiations. I wonder, what will it take for humankind to do things differently?

Our ability to normalize, whether related to tragedies or global change, is a key mechanism to dealing with difficult situations, trauma, and loss. It might even be a key contributor to our survival. It can have negative effects, as described above, but it can also promote behavior that will benefit planetary health. As we look ahead to the new year, the Julie Ann Wrigley Global Futures Laboratory is a place dedicated to normalizing positive change. What is normal is a dynamic part of our action space, opening endless possibilities to do things differently. To do things better.

Peter Schlosser

Vice President and Vice Provost of Global Futures

Pelu Shlosun

News



ASU to lead partnership for actionable solutions to Arizona's water needs

The state of Arizona will make a \$40 million investment in ASU for the multiyear Arizona Water Innovation Initiative to provide immediate, actionable and evidence-based solutions to ensure that Arizona will continue to thrive with a secure future water supply. The initiative will build upon and leverage the university's successful programs in water science, technology, management and law. Gov. Doug Ducey committed the resources and asked ASU to work with industrial, municipal, agricultural, tribal and international partners to rapidly accelerate and deploy new approaches and technology for water conservation, augmentation, desalination, efficiency, infrastructure and reuse. The university-wide initiative will be led by the Julie Ann Wrigley Global Futures Laboratory and will work closely with the Ira A. Fulton Schools of Engineering.

Learn more



<u>Dave White</u>, associate vice president of research advancement at ASU and director of the Global Institute of Sustainability and Innovation, and <u>Sarah Porter</u>, director of the Kyl Center for Water Policy, discussed the Arizona Water Innovation Initiative with Arizona Horizon.

Watch the interview

100th Anniversary of the Colorado River Compact

Three-part series by ASU News



Running out of river, running out of time

The Colorado River provides water for millions of acres of irrigation and some 40 million people in tribes and cities in Arizona, Nevada, New Mexico, Colorado, California, Wyoming, Utah and Mexico. But the literal wellspring of the Southwest region's vitality is drying up, and fast.

Why you should care about Colorado River cuts

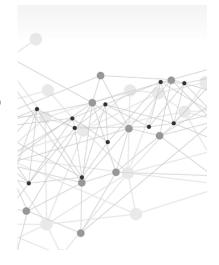
The headline on Aug. 16 was ominous: New water cuts coming for Southwest as Colorado River falls into Tier 2 shortage. Then came the details – and the really bad news. Arizona will lose approximately 21% of the state's yearly allotment from the drought-stricken Colorado River. The cuts, experts said, will dramatically impact agribusinesses, smaller farms and, to varying degrees, cities across the state.

The future of water in Arizona

Climate change has produced a megadrought that has reduced water in the Colorado River, which was already overallocated to the seven states in its basin. Cuts in the water allotments were imposed in 2022, and this summer, the federal government increased those cuts. Arizona will lose about one-fifth of its share. ASU's experts on water don't have a crystal ball, but their deep expertise leads them to predict definite changes to our environment and lifestyle.

Opinion: How to make models more useful

An ASU-led group of authors summarize the need to support efforts, incentives and rewards proposed by the Open Modeling Foundation, whose mission is to adopt standards to help modeling researchers, research and academic organizations, journals, funders, and other stakeholders to define what it means for a model to meet FAIR principles: Findability, Accessibility, Interoperability, and Reusability.



Learn more

Paper highlights existing policy



opportunities to protect coral reefs

Earth's coral reef ecosystems continue to be exposed to human stressors such as overfishing and pollution, placing these habitats at greater risk of extinction. Researchers from Arizona State University and University of Hawai'i at Hilo recently published a paper with PNAS on actionable pathways to protect coral reefs in an unexpected place: existing policy focusing on land, such as current legal policies and procedures aimed at drinking water, freshwater and emergency management.

Learn more

New center developing regional clean hydrogen hub based in the Southwest

Energy leaders focused on developing low-carbon economies in Arizona, the Navajo Nation and Nevada have joined forces to develop a regional clean hydrogen hub that will provide clean energy for the hard-to-abate carbon emissions in the transportation, industrial and electricity sectors. The Center for an Arizona Carbon-Neutral Economy (AzCaNE), housed within the Global Futures Laboratory, is collaborating with partners in the aforementioned areas to launch the Southwest Clean Hydrogen Innovation Network, or "SHINe."



Learn more





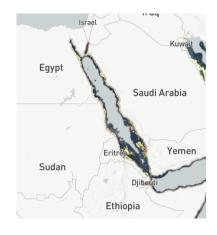
2022 President's Awards honor sustainability, civic engagement projects

<u>Pamela DeLargy</u>, professor of practice within the School of Politics and Global Studies and a senior global futures scholar, earned the President's Award for Global Engagement, and <u>Project Cities</u> and <u>Libraries as Community Hubs for Citizen Science</u> each received recognition for social embeddedness.

Learn about the winners

Wastewater pollution in Red Sea visible with Allen Coral Atlas

An investigation by BBC News Arabic uncovered an oil terminal dumping toxic wastewater into Egypt's Red Sea coast. The pollution is visible with high-resolution images from the Allen Coral Atlas, said Greg Asner, director of the Center for Global Discovery and Conservation Science.



Learn more

Researchers develop a typology



of residential users attitudes toward water conservation

Renee Obringer, assistant professor at Penn State, and Dave White, director of the Global Institute of Sustainability and Innovation, defined transferable archetypes of consumer attitudes towards water conservation, as well as built a novel interdisciplinary methodology that combines social survey data with unsupervised machine learning, to evaluate success of demand management strategies.

Learn more

KJZZ: Global Futures Laboratory guides global conference on 10 things the world must do

Peter Schlosser, vice president and vice provost of Global Futures at ASU, joined KJZZ reporter Mark Brodie on The Show to discuss the <u>10 Must Haves Initiative</u>.



Listen

Leader of Walton Sustainability Solutions Service stresses conservation investment on CGTV



In advance of the U.N. conference on biodiversity (COP15), Michael Dorsey, the Rob & Melani Walton Chair for Sustainability Solutions, joined a conversation with CGTN's The Heat to call for \$1 trillion annual investment to meet the 30x30 initiative and for nations to act now rather than wait for a catastrophic event. He calls the current investments in conservation "sums not fit for purpose and scale."

Listen

Comments welcomed on draft of U.S. Fifth National Climate Assessment

Public review and comments are open for the Fifth National Climate Assessment, which evaluates findings of the program and analyzes the effects and trends of global climate change. Senior Global Futures Scientist Dave White is the lead author on the Southwest Region chapter. Share feedback through Jan. 27, 2023.



Learn more

Food for thought

What will we be eating in the year 2075? Which of our favorite foods will be off the table? And what can be done to replace concerns about scarcity? These



questions and more were explored at Emerge 2022: Eating at the Edges — A Festival of Food Futures held Nov. 19 at ASU MIX Center at Mesa City Center and the Mesa Arts Center. The festival was presented by the Julie Ann Wrigley Global Futures Laboratory, the Herberger Institute for Design and the Arts, the School for the Futre of Innovation in Society, the School of Arts Media + Engineering and the ASU Leonardo Initiative.

Learn more

Nomination call

On the heels of the recently announced 2022 awardees, the search for the 2023 Earthshot Prize has begun. The prize includes five Earthshot honors: Protect & Restore Nature, Clean Our Air, Revive Our Oceans, Build A Waste-Free World, and Fix Our Climate. The ASU Julie Ann Wrigley Global Futures Laboratory is proud to once again be an official nominator to help identify the most disruptive solutions across the five Earthshots. If you have nominations for solutions (ASU or external), please read the one-page guide and fill out the Google Form by Jan. 6 for consideration by the Global Futures Earthshot committee.



Nomination form

In The Conversation

After COP27, all signs point to world blowing
past the 1.5 degrees global warming limit –
here's what we can still do about it
By Peter Schlosser, vice president and vice provost
of Global Futures









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