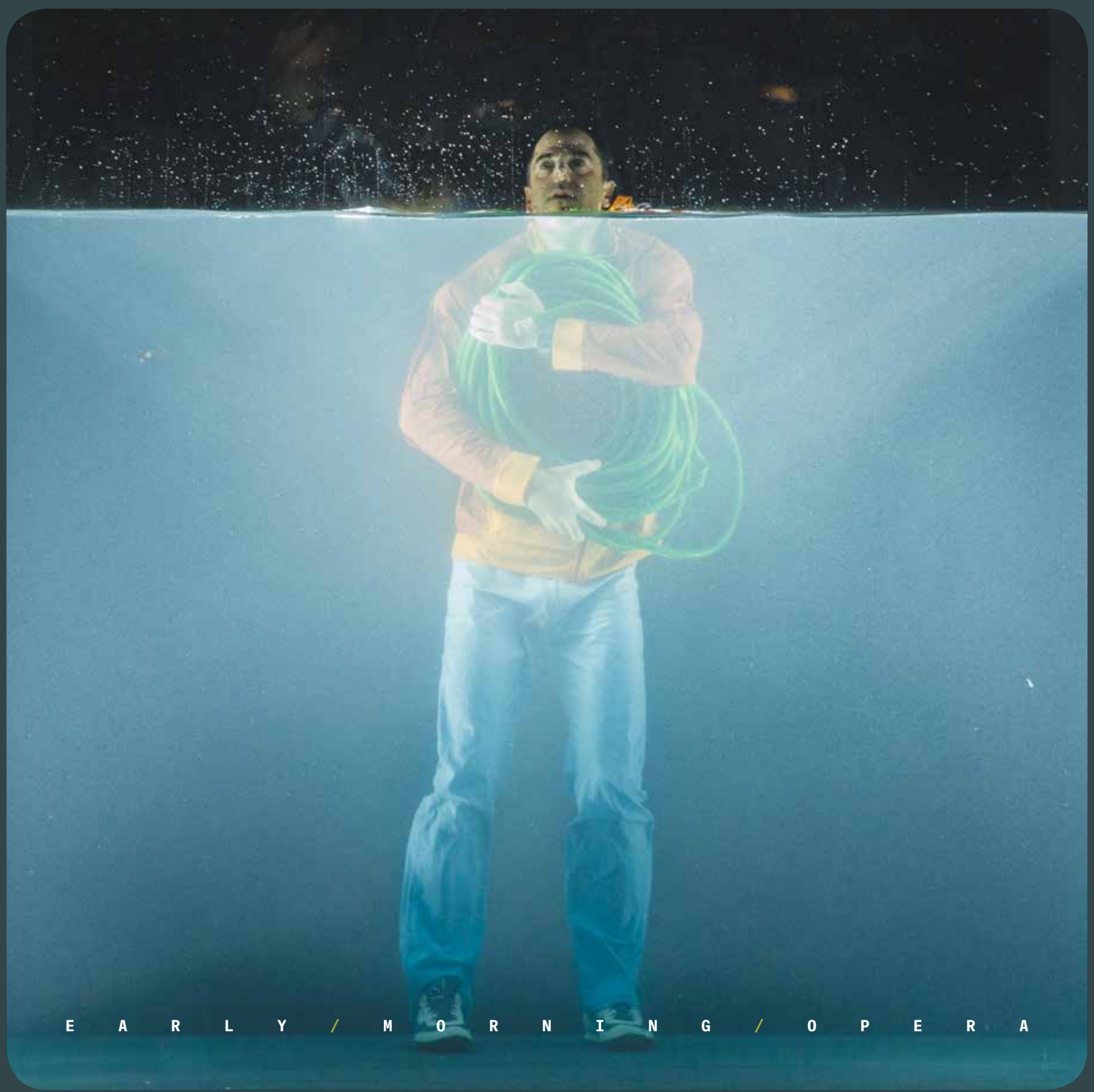

E A R L Y / M O R N I N G / O P E R A

TODAY

I can trace my desire to pursue HOLOSCENES to a photo made by the tremendous photojournalist Daniel Berehulak during the widespread flooding in Pakistan in 2010. The photograph conveyed incredible devastation, and yet was simultaneously just so gorgeous to behold. I wondered: How does this beauty relate to the horror of the situation depicted, and to my empathetic response? I had been registering the onslaught of floods around the world ever since Hurricane Katrina hit the Gulf Coast in 2005, but the simultaneous beauty and horror of Berehulak's image presented me with a door I felt I had to walk through as an artist.

For a few months I daydreamed the same scenario: a person in an aquarium calmly trying to read a newspaper in a normal way, while flood waters surged around. I needed to decipher that image, and I'm still deciphering it now.

I realized early on that while HOLOSCENES related to the macroscopic tales of climate change and water in the 21st century, a core component would be our simple, everyday behaviors—something like making coffee, which you can zone out during because you automatically know how to do that thing choreographically. Accumulated, these daily micro-cycles become the predominant patterns of our lives.

Ultimately, I didn't undertake HOLOSCENES to encourage you to take shorter showers or use LED lightbulbs—though those are good things to do. By featuring these everyday behaviors amidst the rising and falling waters of HOLOSCENES, I wanted to viscerally explore where we as a culture and as individuals place our attention, and ask whether we are capable of expanding that attention in space and time.

A team of scientists working on climate issues from many perspectives generously guided my research into the subject, and the more I learned, the clearer it became that climate change is a mirror. At this point, it's as much about us—the behavioral and cognitive science behind how we make decisions, think in the long-term, and feel empathy—as it is about CO2 or melting glaciers.

Climate science makes clear: our biosphere, our communities, our daily behaviors are all part of a single, deeply-connected system. How can we come to understand this very simple fact in a way that will prompt us to act accordingly? The way I've begun to answer that question for myself is that art has a major role to play in expanding how we convey and confront this and other mammoth challenges.

A sprawling collaborative team of artists, scientists, engineers, producers, curators, and supporters from many walks of life collaborated to make HOLOSCENES a reality over four years of development. I'm deeply thankful to each of them for their thoughtful work and passion, and for the gift they have given me: belief in the power of a collective daydream that is pursued.

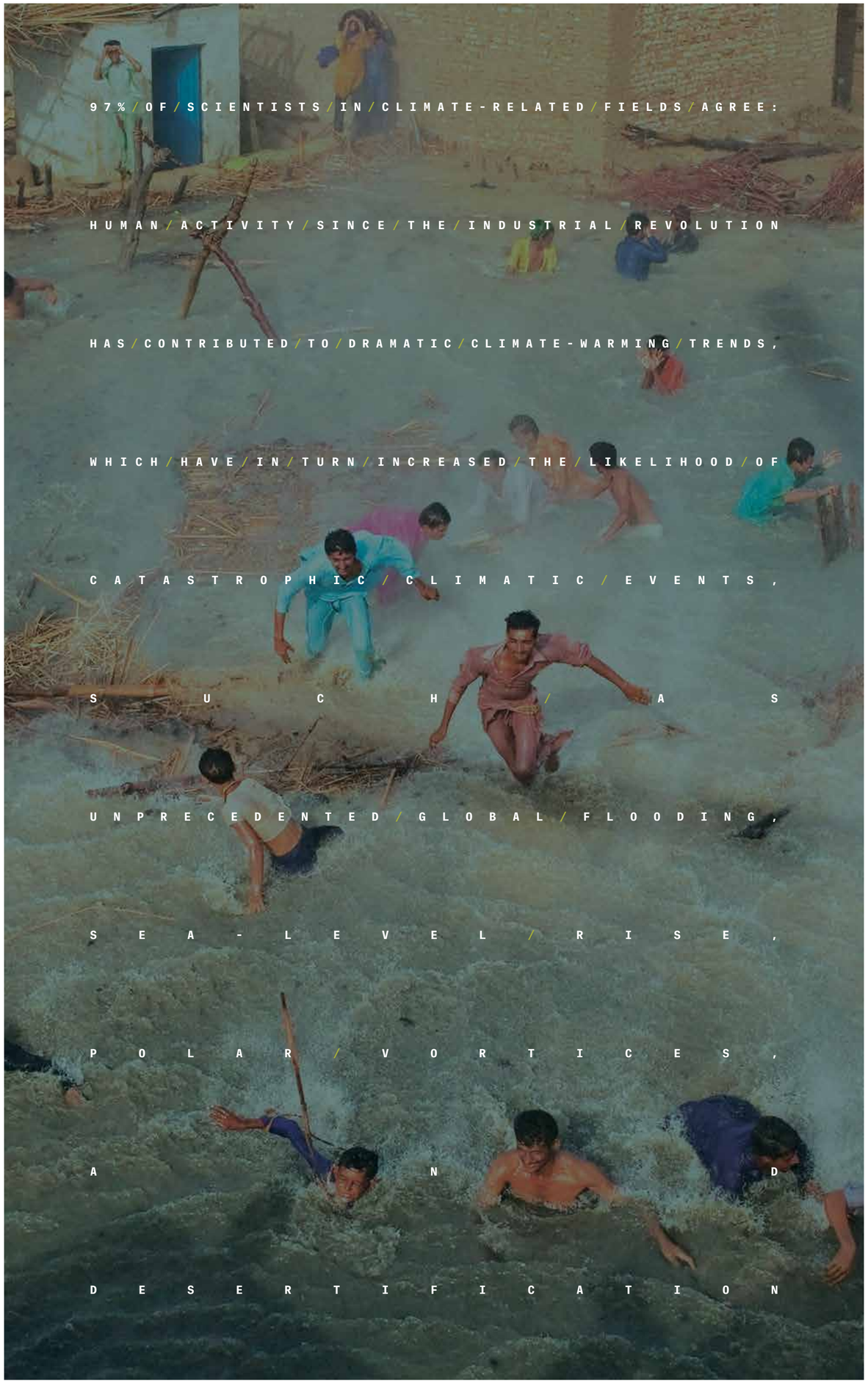
It's probably true that people change very,

v
e
r
y
slowly.

But, then, that was supposed to be the case for the biosphere too—and just look how quickly that's evolved. I have faith that we'll be next.

From one to another,

Lars Jan
Artistic Director, Early Morning Opera
February 29th, 2015



IF YOU WOULD LIKE TO SEE THE SCIENCE, VISIT: CLIMATE.NASA.GOV/EVIDENCE / PHOTO BY DANIEL BEREHULAK

HOLOCENE

holo = entirely, cene = recent
The Holocene refers to the geological epoch following the last major Ice Age about 11,700 years ago. While humans were roaming the Earth as early as 200,000 years ago, human civilizations only began to form and flourish during the Holocene with the advent of agriculture and eventual rise of Industrialism. A group of geologists and climatologists has recently suggested that the unforeseen effects of the Industrial Age have ushered our planet into the Anthropocene.

ANTHROPOCENE

anthropo = human, cene = new
The Anthropocene refers to the dawn of an epoch in which humans have begun effecting large-scale and long-lasting changes to the environment. Popularized in 2000 by Nobel Laureate and atmospheric chemist Paul Crutzen, the term stresses that the man-made markings left on our planet are undeniable and deserving of distinction.

While the Earth's climate has changed throughout its 4.6 billion year history, human activity has rapidly set a series of climatic changes in motion. We have extensively extracted and burned ancient fossil fuels from deep within our earth and oceans, and released their carbon-rich byproducts into our atmosphere. This carbon disequilibrium has efficiently trapped heat in our atmosphere. The resulting warming has melted ancient icecaps and glaciers, risen our seas, and warmed our oceans, which has in turn contributed to increasingly erratic and extreme weather patterns. We've further shifted our planet's chemical equilibrium by overloading our soil with nitrogen from fertilizers, acidifying our waters with uprooted carbon, and fabricating artificial islands from plastic detritus.

OUR CARBON EMISSIONS AND WASTE DEBRIS WILL LONG OUTLIVE OUR GENERATION.

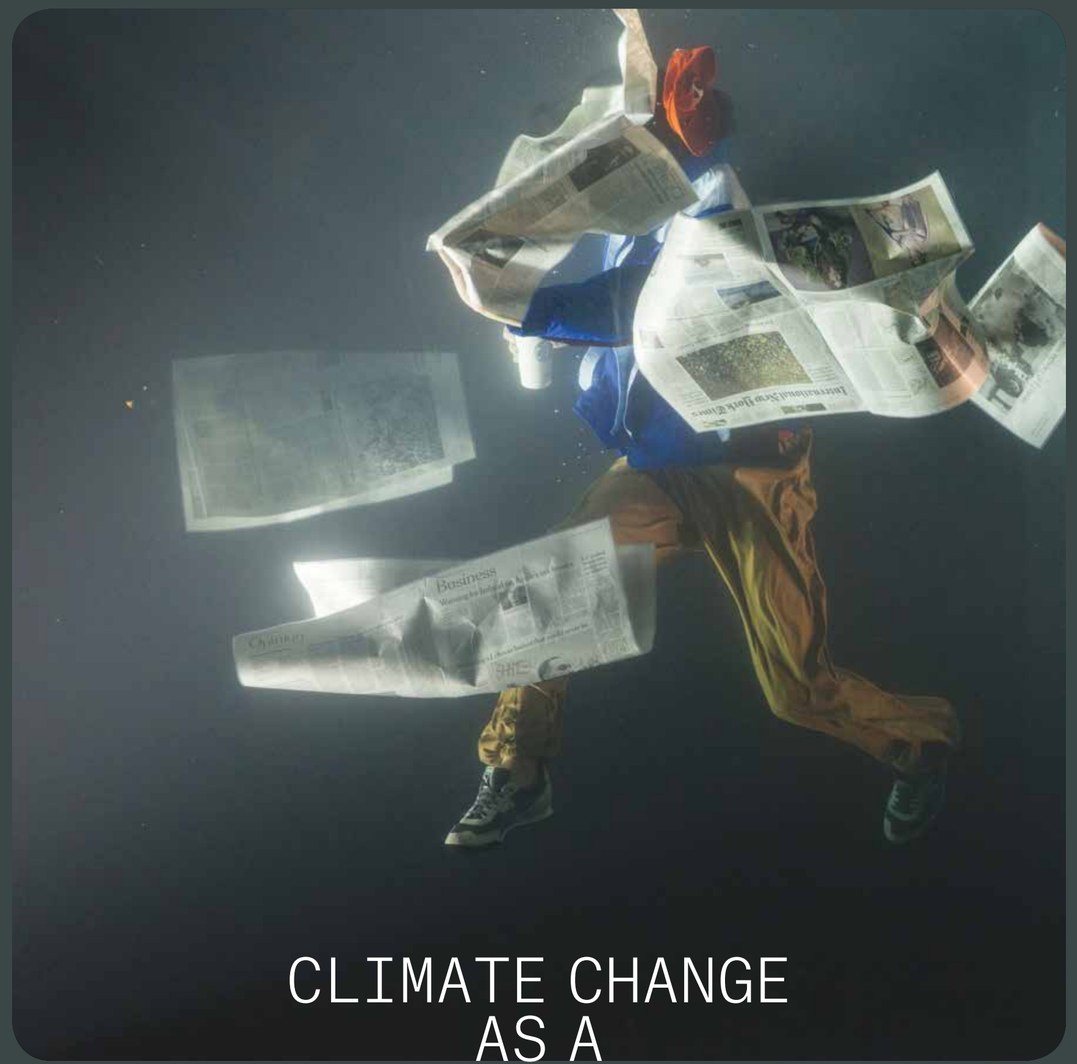
PHOTOS BY LARS JAN

TIME

Imagine all of our planet's history was condensed into 24 hours. All of human history—from our evolution up to now—would span two seconds of that Earth-time. Yet within these two ticks, our species has managed to drastically reshape the ecological equilibrium established over millions of years of evolution. So while the more forward-thinking among us may have 5- or 50-year plans for the future, few can conceive periods spanning hundreds or thousands of years, let alone make decisions based on these spans.

We now see signs everywhere calling us to stretch our conception of time. Signs that beg us to make decisions now to avoid disastrous effects that may take decades—or even centuries—to fully materialize. We've witnessed as superstorms flooded our cities, rising tides lapped up our lands, and fires burned our brittle forests.

We've enlisted a fleet of scientists dedicated to diagnosing what ails our Earth by tracking climate change symptoms. Nevertheless, much of our thinking about the consequences of climate change is wrapped up in abstract visions of a world future generations will inherit—from barren dystopia to innovative technological wonderland. But those cli-fi visions often create a false sense of inevitability. They excuse us from actively asking: So what can we do right now?



CLIMATE CHANGE
AS A
PROBLEM OF

SPACE

There is no one unified climate reality to rally behind because climate change does not affect us all in the same way across the globe. While China, the United States, India, Russia, Japan, and Germany are collectively responsible for 60% of the world's carbon emissions, countries with virtually no footprint like Bangladesh, Haiti, Cambodia, Malawi, and the Philippines stand to be the hardest hit by climate extremities. In our own country, large areas of Miami and New Orleans are slated to be under water by 2050, while Los Angeles and Las Vegas face chronic bouts of drought.

Though the effects may be regionally specific, they are all symptoms of the same global disease. Climate change is asking us to broaden our conception of space so that we might recognize that the futures of our communities have interlocked as never before. Great geographical lengths have been bridged by unprecedented communication and transportation technologies. But those same technologies have also come to dominate—and scatter—our attention.

Still, can we employ technology, not as an escape, but rather as a tool to enrich the scope of our awareness and foster a newfound connectivity?

PHOTOS BY LARS JAN

CLIMATE CHANGE
AS A
PROBLEM OF

I M A G I N E / A L L / O F / O U R / P L A N E T ' S / H I S T O R Y

W A S / C O N D E N S E D / I N T O / 2 4 / H O U R S .

A L L / O F / H U M A N / H I S T O R Y –

F R O M / O U R / E V O L U T I O N

U P / T O / N O W –

W O U L D / S P A N / T W O S E C O N D S / O F / T H A T / E A R T H - T I M E .

Y E T / W I T H I N / T H E S E / T W O / T I C K S ,

O U R / S P E C I E S

H A S / M A N A G E D / T O / D R A S T I C A L L Y / R E S H A P E

T H E / E C O L O G I C A L / E Q U I L I B R I U M

E S T A B L I S H E D / O V E R / M I L L I O N S / O F / Y E A R S

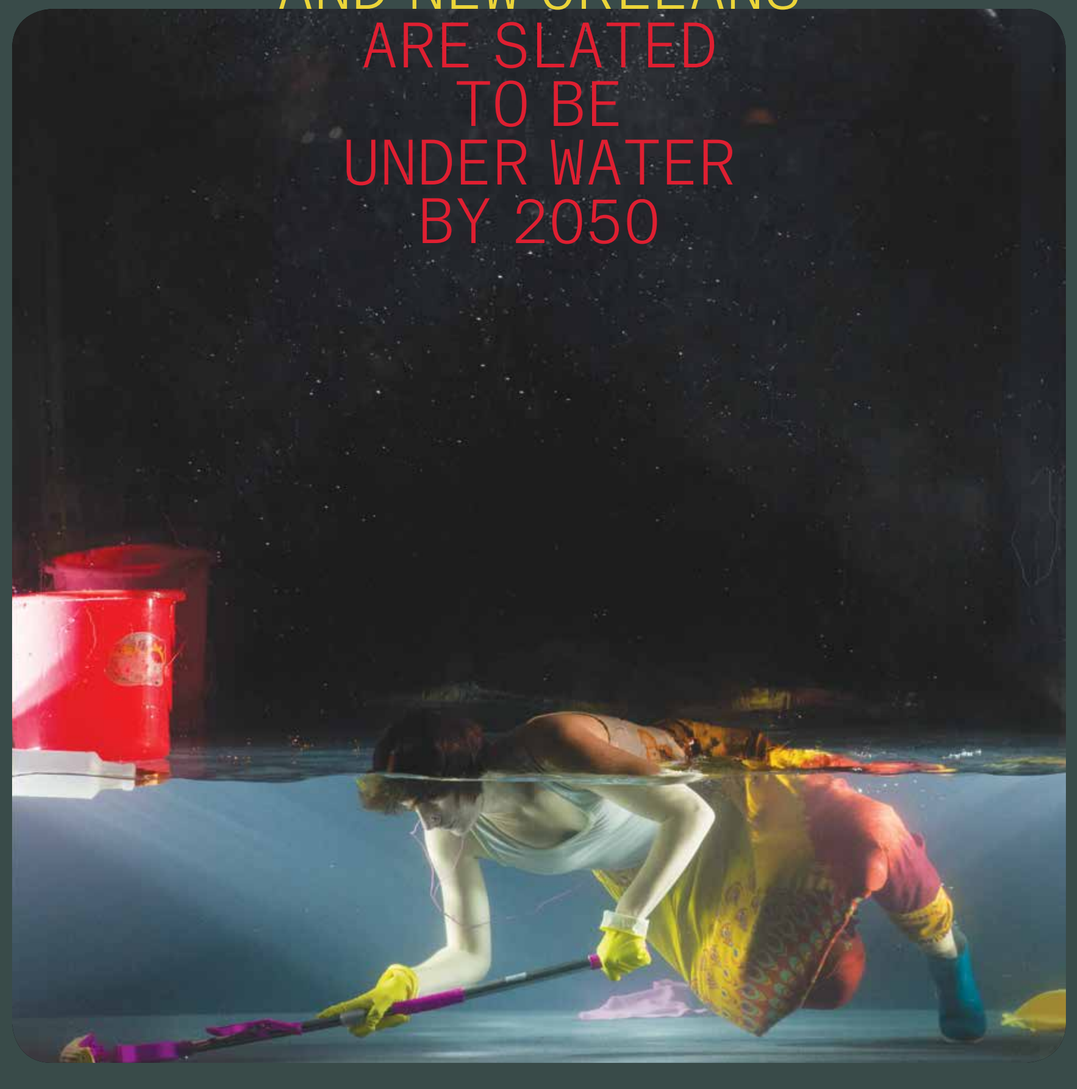
O F / E V O L U T I O N

ADAPTATION

Embedded within the climate crisis is a call to innovate. Our success as a species has hinged on our capacity to respond and adapt to change. But as we pride ourselves on a hard-wired ability to solve problems, we cannot rely solely on concocting cutting-edge green technologies. These technologies alone cannot counterbalance the reality that we have built contemporary society on a false assumption: that our atmosphere is an infinitely resilient dumping ground for the carbonous byproducts of our Industry and activity. We must take ownership for this massive miscalculation at the heart of the climate crisis—perpetuated over many generations—and demand that those around us follow suit.

Can we accept our own culpability in the climate crisis and adapt to face its realities?

LARGE AREAS
OF MIAMI
AND NEW ORLEANS
ARE SLATED
TO BE
UNDER WATER
BY 2050



PHOTOS BY LARS JAN

A CASE FOR EMPATHY

The climate threat has exposed many of our weaknesses, reflecting an inherent short-sightedness and hubris born of our overwhelming success bending the biosphere to our will. So while we have catalyzed climate change, can climate change in turn inspire an evolution in our awareness through space and time? Can we socially evolve as quickly as we have transformed our Earth?

We base the bulk of our decisions on what we can immediately sense—our own first-hand experiences of the world. While a near-one degree rise in temperature makes little physical difference to us, that very same single degree equates to the ecological tipping point that has ushered in escalating climate catastrophes. So how can we come to feel climate realities immediately and intuitively when they are out of the realm of direct experience?

Fear can be an excellent motivator, but it can also instill a deep sense of hopelessness and resignation. An alternative to the pessimistic plea is to harness the fact that we are fundamentally empathetic beings. Rather than relying on complex, theoretical models to depict climate change, we can appeal to emotion and focus on growing our empathetic capacities. What strikes us in the heart tends to stick in our heads.

How can we feel climate change in our gut?

CASE STUDY: EARTHRISE

"When you're finally up at the moon looking back on earth, all those differences and nationalistic traits are pretty well going to blend, and you're going to get a concept that maybe this really is one world and why the hell can't we learn to live together like decent people."

— Astronaut Frank Borman, Dec 23, 1968

Apollo 8 launched on December 21, 1968, marking the first human-manned spacecraft to leave Earth's orbit and travel to the moon. The three-astronaut crew—Commander Frank Borman, Command Module Pilot James Lovell, and Lunar Module Pilot William Anders—became the first humans to witness Earth emerging from behind the lunar horizon. Aboard this vessel epitomizing both the world's most advanced technologies and the competitiveness of the Cold War, Anders used the comparatively antique technology of a photographic camera to capture Earthrise—an image that is perhaps the most impactful of all time.

For the first time, we were gifted a glimpse our connectivity, our fragility, our atomity. Two years later, on April 22, 1970, tens of millions of people across the globe participated in the first Earth Day. Earthrise had helped catalyze the environmental movement.

There is power in images that provide a new perspective. We cannot escape them. All we can do is open our eyes.

PHOTOS BY LARS JAN

PHOTO BY SAM JAVANROUGH

Resources

For More Information
The Environmental Protection Agency features an excellent climate resource center that breaks down environmental impacts by issue and region, and provides information on the relevant science and legislation surrounding climate issues: www.epa.gov/climatechange

NASA's Climate Resource Center includes interactive climate-tracking tools, news updates and features, and a well-curated list of links to resources for climate solutions: climate.nasa.gov

Climate Central is an independent organization that reports on key findings in climate research from leading scientists and journalists in the field: www.climatecentral.org

For Inspiration & Organization
Committed to reducing carbon emissions, 350.org is an international environmental organization building a global climate movement from the grassroots, and has useful resources for organizing in your local community and connecting to the growing network of over 188 countries: www.350.org

Founded and chaired by Al Gore, the Climate Reality Project is dedicated to shifting cultural consciousness in light of climate change. The site is a hub for climate action, from sharing stories and exchanging information to connecting with local climate leaders: www.climaterealityproject.org

Credits

Holoscenes / Printed Matter
Written by Maryam Zaringhalam
Edited by Lars Jan
Designed by Rick Valicenti and Bud Rodecker
Thirst (www.3st.com)

Holoscenes / Performance
Created by Early Morning Opera
www.earlymorningopera.com
Conceived and directed by Lars Jan
Produced by Mapp International Productions
Performed by Annie Saunders, Lua Shayenne, Geoff Sobelle, Orlando Pabotoy, and Benjamin Kamino
Choreographed by Geoff Sobelle
Show Control and Lighting Design by Pablo N. Molina
Sound Design by Nathan Ruyle
Costume Design by Irina Kruzhilina
Technical Direction by Eric Lin
Hydraulic Design by Larry McDonald
Automation Design by Erich Bolton
Company Management by Alexandria Yalj
Special Assistance by Chris Kuhl, Jenna Didier, Peter Zuspan, Blaine O'Neill, Peter Rand, and Barry Farley

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