

Inside This Issue

- 2 Research Notes
- 3 Project Highlights
- 4 Class Spotlights
- 6 Student Spotlight
- 7 Event Highlight
- 8 ITG Updates

With the 2020 – 2021 academic year now behind us, we send our very best wishes to this year's graduating class and many of the students who have been member of **Inside the Greenhouse** through classes, events, internships, and more!

Needless to say, this year has been challenging for all on many fronts. Here at **Inside the Greenhouse**, our commitment to creative climate communication is as strong as ever. In this issue, you will learn about the work and fun we've had together

Up With Hope,

Beth Osnes, Phaedra Pezzullo, Rebecca Safran, and Max Boykoff (**Inside the Greenhouse** co-directors)

Support ITG!

To support our work with your donation go to: <u>https://giving.cu.edu/fund/cires</u> <u>-inside-greenhouse-gift-fund</u>

Subscribers to ITG will be notified by email when a new edition is available, and may access it either in pdf or html format. The newsletter is also available online at:

https://insidethegreenhouse.org/ab out/newsletters



Research Notes

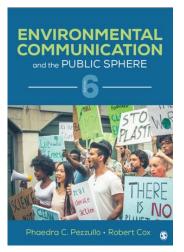
e have continued to produce peer-reviewed research outputs emanating from our ongoing experimentations and explorations.

Among them **Inside the Greenhouse** co-Director Max Boykoff co-authored a journal article examining <u>'Climate change perception among</u> <u>Spanish undergraduate students'</u> with Bienvenido León and Carmen Rodrigo Jordán in the Journal of Communication. They examined how climate change attitudes and perceptions vary significantly among countries and cultures, focusing particularly on framing combinations across local-global and gain-loss frames in video communications with students in Spain. Their research sought to further deepen and nuance possible explanations for wider discursive interactions that comprise our attitudes and perceptions of climate change.

<u>Climate Change Perception Among Spanish</u> <u>Undergraduate Students</u>

Bienvenido León, Maxwell Boykoff, Carmen Rodrigo Jordán

Also, Environmental Studies PhD candidate Patrick Chandler led on a book chapter with Inside the Greenhouse co-Directors Beth Osnes and Max Boykoff on 'Creative Climate Communications: Teaching From the Heart Through the Arts' for an edited volume entitled Teaching Climate Change in the United States (Joseph Henderson and Andrea Drewes). In this chapter, they reflected on how their own personal experiences drew them into these areas of creative climate communication, and how their perspectives can be brought to bear on work through science and the arts that helps enhance engagement in the face of 21st century climate change. Through examples of art/science integration, they emphasized the importance of partnerships that make for stronger and more effective projects, suggesting that schools work with local groups, universities, businesses, and leaders by bringing them into the classroom to help produce science-informed collectively created art that can be shared with the larger community.



The Sixth Edition of <u>Environmental</u> <u>Communication and the</u> <u>Public Sphere</u> remains the most comprehensive introduction to the timely and growing field of environmental communication. This innovative textbook focuses on how

communication matters to the ways we imagine, make choices, and act in the environment. It also examines what motivates us to engage environmental matters publicly, whether we are moved by pressing crises, such as climate change, or by the affection we feel for a specific animal or place. Inside the Greenhouse co-director Phaedra C. Pezzullo brings decades of experiences working with grassroots environmental justice organizations and citizen-state partnerships, as well as internationally recognized research on communication and culture, public spheres, civic engagement, toxic tours, and climate justice. Three-time president of the Sierra Club, the largest environmental group in the United States, Robert Cox leverages his vast experience to offer insights into the news media, Congress, environmental conflict, advocacy campaigns, and other real-world applications of environmental communication.

> Environmental Communication and the Public Sphere

> > Phaedra C. Pezzullo and Robert Cox

Project Highlights

NESTed Roots Side-by-Side Project with Beth Osnes and RebeSafran

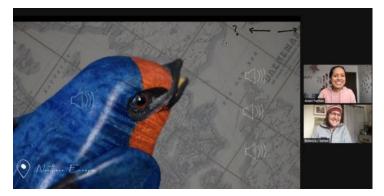
The work of Rebecca Safran and Beth Osnes as part of their ongoing Side by Side, art-science collaboration based on friendship and survivability between barn swallows and humans, was part of a gallery exibit at Carbondale Arts in Carbondale, CO, entitled NESTed Roots from March-May 2021. Pictured here is Sara Herrin, the director of the film on Side by Side, visiting the exhibit.

Avani Fachon Rituals of this Good Earth: A Multimedia Exploration of Global Barn Swallow-Human Interconnections'

Rebecca Safran had the honor of working with Avani Fachon on her EBIO honor's thesis project this year. Fachon's project, titled 'Rituals of this Good Earth: A Multimedia Exploration of Global Barn Swallow-Human Interconnections' examined the human-non-human animal connections using barn swallows as a model species for exploration. As barn swallows construct their nests almost entirely on humanmade structures around the world, Fachon was able to explore how different cultures and different human observers (scientific, artistic) view their relationship with barn swallows. For this work, Fachon interviewed 23 people from all around the world to document their stories about barn swallows. Fachon's thesis explores various perspectives and relationships humans describe with barn swallows. The culmination of her work is a gorgeous interactive website experience. A few screen shots of her website, as being discussed on Zoom by Fachon and Safran are shown below. Stay tuned for more incredible creative work by Fachon who will be working with the Side by Side team and the Safran lab this summer!









Class Spotlights

Creative Climate Communications ENVS3173/ATLS4173/THTR4173

No joke- this actually happened (well...the 16 comedians Zoomed in) as part of a class project in 'Creative Climate Communications' this past Spring 2021 semester. In this iteration, **Inside the Greenhouse** co-Directors Beth Osnes and Max Boykoff co-taught the class in partnership with teaching assistant and Environmental Studies PhD candidate <u>Patrick Chandler.</u>

One of the class projects for the semester was to co-create climate comedy through a partnership between an undergraduate class of 44 students and 16 professional comedians from across the United States (US). So during this pandemic semester – while night clubs across the world remain largely closed to live standup comedy – Boykoff and Osnes concocted a plan. They decided to recruit and pay 10 comedians from coast to coast to partner with our students to create climate comedy in an online environment. Through a long-term, climate comedy partnership with New York comedian (and co-host of Star Talk with Neil Degrasse Tyson) Chuck Nice, they put out the call to comedians far and wide. The response was overwhelmingly positive, such that they quickly signed up 15 comedians participate (plus Chuck=16).

These comedians were then matched with students in groups of 3–4, effectively forming writer's rooms where they brainstormed and discussed comedic possibilities. Each group chose a specific climate solution from the list generated by <u>Project Drawdown</u> for their assigned comedian to focus on in their comic piece. Students provided a summary of research on the solution, links to media stories about this solution, and ideas for jokes and comic approaches for this solution. The comedians used this material – and consulted with the students over two class visits – to create an original comic piece they they performed for the Stand Up for Climate Comedy Show that was launched online on Earth Day April 22, 2021.

Did you hear the one about the 16 comedians who walked into a Creative Climate Communication course at the University of Colorado during a global pandemic?



Watch the Stand Up For Climate Comedy Show



An active writers room as part of the Stand Up for Climate Comedy! project, with comedian Sasha Stewart (top left), Max Boykoff (top center), student Ava Lypps (top right), student Ben Stasny (middle left), student Morgan Oliva (center), comedian Rollie Williams (middle right), student Garrett Warren (bottom left) and student Julia Merton (bottom right).

Watch Now! Stand up for Climate Change Comedy Show

Watch Now! 2021 Climate Comedy Contest Winners

Class Spotlights

This experiment is part of the ongoing course that (1) generates multimodal compositions on climate change and (2) engages with various dimensions and issues associated with climate, environment and sustainability, and sustain hope and engaged climate action. Participants in the course work to deepen their understanding of how issues associated with climate change are/can be communicated creatively, by analyzing previously created expressions from a variety of media and by creating original work. While the ongoing coronavirus pandemic and consequent precautions make this a challenging semester, the adaptive strategies deployed still provided creative space and active learning for everyone involved.

W

rapping up the semester- Beth Osnes co-teaching Creative Climate Communications (ENVS 3173/ ATLS 4173/ THTR 4173) With Max Boykoff and Patrick Chandler.



While, yes, part of wrapping up for the semester involved reading final exams and posting grades, it also involved laundering our collection of <u>green suits</u> in cold water and line drying them in the breeze.

These <u>green suits</u> were put into service again this semester by students who were assigned to visually communicate within their circle of influence how sustainable fashion can positively influence the environment and be aspirational. Each student created a sustainably sourced outfit (thrifted, hand-me-down, recycled, dumpster dived, clothing swapped, sewn from repurposed cloth...) as an expression of their personal style. They created a photo or video of themselves modeling this outfit while wearing a full-body Lycra green suit underneath. They were challenged with adding a pro-environmental personal message to this photo or video and post it on some form of social media or communication platform. There were asked to reach at least ten people within their circle of influence and document any responses or feedback received. This assignment in a class of 44 students was able to reach over 3000 people with a vibrant, personal message inspiring Green Fashion and sustainable fashion behavior. Given the incredibly significant environmental impact of the fashion industry, it is essential for our survivability to radically reimagine our relationship with clothing. Our students are perfectly suited to this charge as powerful agents for change. This non-disposable assignment acknowledged that our students creative work in our courses can be towards authentic positive impact.

Student Spotlight

Coleman 'Cole' Dickerson Student Spotlight



Cole Dickerson is a graduate student in the Sustainable Food Systems track of the Masters of the Environment Program at CU Boulder and hails from Virginia. Over the last year he's become excited to explore how storytelling can convey complex scientific topics and engage broad audiences. We hear from Dickerson – in his own words – as we spotlight his creative climate communications from his work in Max Boykoff's graduate seminar 'Climate Politics & Science-Policy.'

"I've always had an interest in spending time outdoors and protecting the environment. Often, this manifested itself through being involved in restoration and conservation efforts, however within the past few years I've realized that environmentalism is about a lot more than being good to the planet, it's about being good to people too. Addressing climate change has everything to do with addressing systemic racism, economic inequality, and the reform of our political system. As a part of Max Boykoff's climate policy and politics class last semester, I wanted to explore this new concept for our final project. One of the more interesting topics relating to climate policy and

people that we discussed was neoliberalism: a political ideal defined in many ways which nurtures a pattern of market based legislation and government deregulation in favor of the private sector. I was compelled. Though neoliberalism can be defined in many ways, no matter how you look at it, it encourages the exclusion of human values like community and individual well-being from political discourse.



Listen Now! 'Flea Market' by Cole Dickerson

After seeing the climate segment of the first Presidential Debate in September of last year, I was even more compelled. So much of what neoliberalism exists as was demonstrated in the back and forth. I used inspiration from my undergraduate professor A.D. Carson, who recently released the first ever peer-reviewed rap album, and some experience in music production to take a creative approach to the assignment. I created a short narrative-focused music album titled <u>"Flea Market"</u> in exploration of the extent to which neoliberalism was represented at the debates. It was as painful as you'd expect to sift through the sound bytes, but I wouldn't have done it any other way."

- Cole Dickerson



Event Highlight

Along with Inside the Greenhouse co-Directors Phaedra Pezzullo and Max Boykoff as well as CU Boulder undergraduate student Andrew Benham, Inside the Greenhouse Intern Presley Church led on Colorado representation for the Global Dialogues: Solve Climate by 2030 campaign in an event on April 7th. This was an internationally coordinated event led by Bard College Center for Environmental Policy.

"You're never too young to get involved. You are never too inexperienced...in every situation you are the student and the teacher."

- Lizeth Chacon, Colorado Peoples Alliance

Inside the Greenhouse co-sponsored the Colorado event which featured a great panel discussion focusing on 'Just Transition and Recovery for Colorado.' Opening remarks given by <u>Governor Jared Polis</u> were ambitious, including multiple policies already underway for the state to reach global greenhouse gas reduction goals, support green jobs (including <u>HB 19-1314</u>), and include frontline community voices. <u>Will Toor</u>, the Executive Director of the <u>Colorado Energy Office</u>, identified more state and national policies including the opportunities the American Jobs Act provides. <u>CSU Associate Professor Stephanie A. Malin</u> shared <u>Kate Raworth's Theory of Doughnut Economics</u> as a broader frame. And <u>Lizeth Chacon</u>, the Executive Director of COPA (<u>Colorado Peoples Alliance</u>), underscored the important of environmental racism and disproportionate air contamination in Commerce City; as someone who serves on the Advisory Board of the <u>Colorado Just Transition Office</u>, she notes that the climate goal optimism must continue to grapple with the fact that the state has the dirtiest zip code in the nation as well. In addition to welcoming more support and involvement with her work in Colorado, she underscored her support of the <u>Thrive Agenda</u>.



In addition to amazing speakers and ASL interpreters that helped make our April 7th event a success, ITG intern Presley Church (pictured here in the bottom row) oversaw logistics and coordinating with the national conversation on Making Climate a Class. The event included live ASL interpreters and the online link includes Closed Captioning.

Watch Now!

2021 Global Dialog: Just Transition and Recovery for Colorado

> Watch Now! Global Dialog Student Summaries

> > Get Involved! Make Climate a Class

ITG Updates

Sustainability and the Common Core Curriculum Phaedra Pezzullo and Max Boykoff

Phaedra Pezzullo and Max Boykoff submitted a proposal to campus for sustainability to become part of the common core curriculum. Though this will be a multi-year process, we are hopeful that the campus is poised to make this commitment. **Inside the Greenhouse** continues to promote curricular work with undergraduates and graduates on climate and sustainability.

Here There Then Now: A Discussion on Location-Based Rhetoric Phaedra Pezzullo

The day after Earth Day, Pezzullo spoke at a virtual event sponsored by the University of Southern California Long Beach's Communication Department, Student Communication Association, American Indian Student Council, and Office of Multicultural Affairs. The event, Here There Then Now: A Discussion on Location-Based Rhetoric, also featured two Indigenous speakers Jessa and Tina Calderon (Gabrielino Tongva and Ventureño Chumash) and a former PhD student of Pezzullo's who now is faculty at San Francisco State, Constance Gordon (CUB Class of 2018). The event engaged many themes that have been touchstones throughout Pezzullo's research, including: listening to frontline voices; the importance of naming, narratives, and advocacy tours; and creating a feeling of presence with communities.

Watch Now! 2020 End of Summer Side by Side Video

American Meteorological Society and American Association of Geographers Max Boykoff

Inside the Greenhouse co-director Boykoff continued to adapt to the changing constraints and pressures during the coronavirus pandemic as he forged ahead with ITG-related talks online as well as other activities besides those already mentioned. Among them, Boykoff participated remotely on panels at the American Meteorological Society and the American Association of Geographers.

Side by Side Rebecca Safran and Beth Osnes

Inside the Greenhouse co-directors Safran and Osnes are excited to roll out Side by Side for a second time this summer! With additional funding from the National Science Foundation, we are able to offer stipends to high school students to participate in an eight-week long journey of side by side observation of birds in nature. We are thrilled to team up again with PhD candidate Molly McDermott and Dr. Chelsea Hackett who will work with us on creating curricula associated with the Side by Side project. To check out our 2020 end of summer Side by Side video, go here: https://vimeo.com/473564810

Side by Side is a multi-year collaboration led by Osnes, Safran and their students. Side by Side brings together evolutionary ecology and creative expression into an exploration of and deepening into interspecies friendship. The unifying thread through each aspect of this project is a validation of women's contributions to ways of knowing, expressing, and connecting with the natural world as a means to build confidence and agency as a young STEM researcher.

ITG Updates

Climate Solutions Adaptation and Spanish Translation for Accessibility to Grades 5-12 Beth Osnes and Patrick Chandler

Patrick Chandler, an ENVS PhD candidate and research fellow with **Inside the Greenhouse**, joined Beth Osnes in a presentation for the CUNY Conference on Climate Change Education in New York (but via Zoom, of course, so no New York pizza slices) presented Climate Solutions Adaptation and Spanish Translation for Accessibility to Grades 5–12 on April 23, 2021. We shared our continued progress on our adaptation of the Project Drawdown top climate solutions for students. This resource along with other embodied and creative activities will be available soon via our website <u>www.enactingclimate.org</u>.

Creative Climate Communication & Behavior Change (C3BC) Phaedra Pezzullo

On Earth Day, as Co-Director of <u>C3BC</u> (Center for Creative Climate Communication & Behavior Change), Phaedra Pezzullo spoke at the CU Boulder Sustainability Summit, sponsored by the Environmental Center. Her panel was titled: "Buffs Striving for Justice, Equity and Health: Stories from Change–Makers." She was on a panel moderated by the CUB student government president with: Hannah Wilks, Director, Volunteer Resource Center; Rick George, Director, Athletics; Abigail Weeks, CUSG Environmental Board; and Ysatiz Piñero, Director, Center for Inclusion and Social Change. It was an engaging reminder of how climate justice matters to every part of our students lives on and off campus.

Beth Osnes' Speaking Engagements

Osnes was invited to speak as a part of the opening panel Theatre Pedagogy and the Climate Crisis that took place on March 20, 2021 for the Brock University Symposium in Ontario, Canada that was entitled "Theatre Pedagogy in the Era of Climate Crisis."

Osnes was invited to perform an original climate comedy piece The Eleventh Commandment for the Denver Museum of Nature & Science, CO for the online Earth Day event, Seeing Differently: The Art of Communicating Climate Change, April 22, 2021.

Osnes was also delighted to be interviewed by Kasha Patel-- science writer at NASA by day, and science stand-up comedian by night on a show she produces entitled DC Science Comedy, a science-themed comedy virtual show. Beth's visit on April 24th honoring Earth Day was called "For What It's Earth."



CU Boulder Sustainability Summit



Kasha Patel Show: For What It's Earth





ITG Updates

ITG Podcast Feature!

Chuck Nice, comedian, climate communicator and host of our Stand Up for Climate Comedy Show, brought Beth Osnes, Max Boykoff and comedians Nat Towsen and Rollie Williams onto his podcast: Pod Zero. Pod Zero is part of Chuck Nice's group <u>Shhh, It's Real.</u> We partnered with Nice in September to host Ten Thousand Teachers. You can read more in <u>Issue 18</u>.



Inside the Greenhouse is on Spotify!

This month we are celebrating #MusicMay, highlighting all the artists, songs, sounds, producers, and more that are using music to communicate the climate crisis. You can follow us on Spotify for playlists, artist spotlights, podcasts and more!

> LISTEN NOW! Inside the Greenhouse on Spotify

> > Listen Now!

DJ Caven

2021 ITG Awards Presented at 'Stand Up For Climate Comedy'

🖨 •||||•|••|•||••••

Inside The Greenhouse





Dr. Ietef "DJ CAVEM" Vita

Creative Climate Communicator Award Eco HipHop Artist, Vegan Chef Order his album Biomimicz on Apple or itunes; New album Teacher's Lounge forthcoming. Order his organic seed albums or kicks or book him for an event, including classrooms: <u>https://www.chefietef.com/shop-2/</u>

Chantal Bilodeau

Global Citizen Award Playwright and Translator Chantal Bilodeau is a playwright and translator whose work focuses on the intersection of science, policy, art, and climate change. <u>https://www.cbilodeau.com</u>

Support!

To support our work with your donation go to: <u>https://giving.cu.edu/fund/cires-inside-greenhouse-gift-fund</u>

Subscribe!

Subscribers to ITG will be notified by email when a new edition is available, and may access it either in pdf or html format. The newsletter is also available online at: <u>https://insidethegreenhouse.org/about/newsletters</u>

Engage!



About Inside the Greenhouse

Creative framing and storytelling of issues surrounding climate change through video, theatre, dance, and writing can connect a wider audience to the deep and pressing need to address climate change. Project leaders Max Boykoff (Associate Professor, Environmental Studies; CIRES Fellow), Rebecca Safran (Associate Professor, Ecology and Evolutionary Biology), Beth Osnes (Associate Professor, Department of Theater and Dance) and Phaedra Pezzullo (Associate Professor, Department of Communication) have been producing events and classes over the past six years under the banner of the 'Inside the Greenhouse'. Support for this work catalyzes creative climate communication and builds capacity among CU Boulder undergraduate and graduate students in particular. Our efforts to engage our students, those working at the science-policy interface, and the public alike seek to help concerned make climate change meaningful in the lives of everyday people. Students are involved directly and collaboratively connecting work in the classroom to applied contexts.



Max Boykoff boykoff@colorado.edu



Phaedra Pezzullo phaedra.pezzullo@colorado.edu



Beth Osnes beth.osnes@colorado.edu



Becca Safran rebecca.safran@colorado.edu



Inside the Greenhouse University of Colorado Boulder, CO 80309 <u>insidethegreenhouse.org</u>

SUBSCRIBE