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PEACE CHRONICLE

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PEACE CHRONICLE

The Magazine of the Peace and Justice Studies Association

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LETTER FROM THE EDITOR

MATT THIERRY

Dear friends,

When Wim invited board members to guest edit upcoming Peace Chronicle issues, and that the theme of the next one would focus on “Climate,” I jumped at the chance, probably to process my own anxiety on the subject. That this Spring issue is coming out in the latter half of the season, probably when most are breaking for summer, reflects my own underestimation of the work and time that goes into a project like this. Still, the words you’ll find in these articles reflect some of the most important and timely perspectives I’ve had the privilege of reading in my life.

This issue goes beyond the truism that the problem we face today is the prioritization of profit over people. That much is clear, but many of the voices identify the banality of the infrastructures underlying our lives as the crux of our dis-ease today. Here, the articles articulate the unconscious dynamics of the daily violences we are subject to. In doing so, the authors contribute to what scholar Sarah Ahmed might describe as “the feminist life,” raising to consciousness the inequities and oppressions concealed under the language of civility most take for granted. Martin Luther King Jr., in his Letter From Birmingham City Jail, famously puts the task this way:

“Like a boil that can never be cured as long as it is covered up but must be opened with all its pus-flowing ugliness to the natural medicines of air and light, injustice must likewise be exposed, with all of the tension its exposing creates, to the light of human conscience and the air of national opinion before it can be cured.”

The articles in this issue take this responsibility seriously, deepening our analysis of the climate in ways that go beyond typical fields of meteorology, oceanography, physics, and chemistry, centering peace and justice as a critical frame to converge on.

Gabriel Ertsgaard’s essay “Percival and Climate Crisis” links the political and ecological climate crises while introducing readers to several themes pervading our response to date, namely the importance of leadership, skillfully asking the right questions, and the necessity of empathy, all of which demand sustained action. These themes – leadership, asking the right questions, compassion, and activism – are further developed in the next four essays.

In her interview, Laurel Kearns gives readers insight into her advisory work with religious environmental groups in crafting responses to climate change, as well as the changing nature of institutional and academic leadership. In doing so, she reminds us of those common

traditions that see the earth as a gift, pointing as well to the increased focus on animals in what may become a new phase of religious environmentalism, along with our moral obligations to both in these unprecedented times.

Ruth E. McKie, in her article, "Climate Change Obstruction," not only questions the dominant narratives of political and economic actors, demonstrating the varied ways in which neutralization techniques are employed and operationalized against the climate movement, but draws attention to a legal framework ill-equipped to even conceptualize ecological harm (ecocide) as criminal. In this sense the purposive delaying and obstruction of critical action by elites the world over is identified as reckless and negligent responses that risk the lives of billions of citizens. Ultimately, McKie writes, they will need to be held to account for the consequences of their actions.

Shanna N. McClain and Carl Bruch together highlight the migration life cycle of climate refugees in their article "Migration with Dignity." Providing a conceptual framework and analytical tool guided by dignity, empathy, and compassion, the authors guide readers through the difficult terrain increasingly fraught with new barriers and obstacles that hundreds of millions of people will need to contend with and overcome as they are forced into increasingly dire circumstances in the upcoming years and decades.

Wrapping up this section, Gillian Hart-O'Brien, our youngest contributor, speaks to her experience participating in the establishment of the first Legacy Forest, a department-led initiative seeking not only to offset student emissions by designing forests able to sequester carbon, but also to anchor memories of accomplishment in a replicable model program able to inspire the collective shift exemplified by youth activism today.

The next essays are tied together in their solidarity and resistance with those working against the onslaught of extractive industry and the destruction of land, life, and culture alike. Chantal Noa Forbes' film review of "The Last Ice" opens our eyes to the very real threat faced by Inuit communities forced to defend traditional lifeways in the Arctic against economic opportunities and conditions that threaten to erase them. In doing so, the film's focus on reconnection and commitment to each next generation offers lessons and hope for cultural survivance into the future, beyond the all-too-real legacy of colonialism.

Lauren Finley Jacobs, in "From Waterfalls to Walls," next walks us through the effects that industrial plantations in Hawaii have had in disrupting the water cycle, focusing on the 'O'opu as a representative species quite literally boiling to death in the environment we've created. Here, the island community's struggle against the structural forces generating climate change not only serves as a microcosm for the wider global-historical conflict, but also invites us to consider again the wisdom of traditional relations wherein water flow can become a pathway toward peace and justice once more.

Sharing his experience at the Thacker Pass resistance site set up to protest the environmental destruction of land and life in the name of electric cars and "green industry," Max Wilbert offers us a kin-based life-place ethic driving the current land defense against bipartisan devastation. Here, Max, and presumably the rest of the camp, invites the reader to sink into the memory of the Nevada site and contribute to the lived struggle against the mining boom being pushed on behalf of superficial climate solutions with seemingly little regard for wildlife or the integrity of intact ecosystems.

Alexander Dunlap extends this critique of greenwashed industry in his article "The War of Progress," providing a comprehensive assessment of the real costs of

renewable energy and its worrisome trends, including the long-term perpetuation of injustice and capitalist exploitation at the expense of local autonomy and ecological longevity. In doing so, he addresses five aspects of renewable energy that will need to be accounted for to ensure peace and justice are not sacrificed for corporate profit: raw material extraction, land contracting, operational impacts, energy use, and decommissioning. The depth of this article is especially welcome, and Dunlap maps the landscape in exacting detail, concluding with a call for building truly nourishing socio-ecological infrastructures and community ecologies that reconsider energy justice and degrowth strategies from the bottom up.

Antonio Lopez next offers his article “Decolonizing Media Ecology” as a critically relevant pedagogical tool, providing easy and insightful avenues for students to begin developing their own ecological mindprint by analyzing the invisible costs of their devices and gadgets, and through them, coming to recognize that the causes of climate change are closer than we might believe. Lopez ends his article by offering seven ways in which ecomedia literacy supports learners to develop eco-citizenship skills that will become increasingly important in the years and decades to come.

“A Climate of Political Turmoil,” written by Peace Chronicle Editor-in-Chief Wim Laven, asks the essential question: how can we help the people of Myanmar? He offers his past experience teaching a workshop designing peace and social justice in the country, the lessons his students offer, and his own reflections on the promise of democracy in a climate of escalating violence and disappearing freedoms. Wim’s work points similarly to the wider phenomenon of the silencing, criminalizing, and killing of protesters across the world who are standing up for the right to be heard and against the violations of human rights today and years past, as well as the possibility of reclaiming power through popular

creativity and resourcefulness in order to disrupt the illegitimate and unjust activities of abusive regimes and restore democracy.

Finally, “How to Build an Ecological Culture,” composed by members of the Bioregional Congress of North America and inspired by the Syracuse Cultural Workers, uses poetry in its original sense – poiesis – bringing something into being that does not yet exist -- to suggest directions in self-organization, reminding us we are perhaps better served by listening to the world around us than speaking for it. Indeed, the voices of the non-human world may be the most important asset for any climate mitigation or adaptation strategy moving forward. If we lose the animals, we lose the ecosystems, we lose the climate. Yet as these articles point out, losing the climate may reflect the very serious prospect we have already lost something of ourselves somewhere along the way. In poetry we might begin to find ourselves again, enhancing peace and justice by sequestering carbon, protecting fresh water and clean air, building soil, and living up to the scientific reality and ethical responsibilities of our time, in conviviality.

This issue ends with the letters from the PJSA Board, Membership, and Publication updates for a simple reason: the future of peace and justice is determined in large part by those who study it, those who enact it, and those who are able to invite opportunities for practicing it with others. These last articles speak to the range of programs the Peace and Justice Studies Association has set up over the years to these ends. We invite you to look over the website and check out the opportunities for micro grants, to share your voice in publications like the journals or upcoming conferences, and to invite your departments or any groups to join the PJSA membership. In turbulent times we cannot be sure what the future will hold, but we can be certain we will fare much better together, organizing around values we share.

The articles included offer insights on climate in fields as diverse as mythology, criminology, public policy, environmental science, film, women's spirituality, land defense, anthropology, media studies, international relations, and poetry, not to mention the leadership of the PJSA itself, to offer, I hope, a transdisciplinary lens with which to better comprehend the climate issue.

When faced with such stark realities, and an impoverishment of real solutions, there is a real concern that any praxis will be paralyzed by what is increasingly recognized as climate anxiety, leading to a willingness to implement solutions that are anything but. Sisters Aph and Syl Ko offer guidance when it comes to the collapse of dominant cognitive frames and the search for alternative approaches. From their book, *Aphro-ism*:

"Part of activism is finding yourself in a new space of confusion, allowing yourself to step into new conceptual terrain. When you abandon commonly held oppressive beliefs, you might not exactly know what to do afterward, and that's where more activists need to be. Confusion is usually a symptom of decolonizing yourself from the mainstream system. Answers aren't easily laid out in front of you since you're now forced to think critically."

They further speak to an unsettling and disturbing reality embedded in the structures and institutions we find ourselves dependent on to solve the very problems these structures perpetuate. That is, in a colonial settler society rooted in slavery, genocide, oppression, and exploitation, not only do some lives not matter, not only is it critical for those lives not to matter if certain privileges are to be maintained, but those lives can never matter until the systems of white supremacy, colonialism, war-production, and heteropatriarchy are dismantled. It is my earnest hope that these writings, and this issue as a whole, can be counted as a contribution toward this end.

There is much that is missing from this issue – too much. This includes certain voices, certain stories, certain places, certain responses, certain fields that are critical to the wider project this issue seeks to develop. In a sense, this issue remains incomplete for that reason, and I must apologize for my own shortcomings in this regard. I welcome any letters, comments, questions, clarifications, refutations, stories, follow-ups and/or new articles to rectify this oversight on my part.

I would like to end with a final reflection on the first essay, "Percival and the Climate Crisis," to suggest a point of departure moving forward. We are here and now faced with a central question: what happens when we live in a world that's barren and broken and the King is dead? What is our responsibility to pull it together, knowing it will never be what it was?

The ability to grasp the meaning of our life-situation and the behaviors it calls for is the central challenge for every life-form. Yet this requires something more than becoming conscious of the difficulties we face, or even recognizing what is most valuable for each of us. The climate movement seems to be searching for its own Holy Grail, with perhaps no better symbol for eternal life than the prospect of renewable energy. Here, we are presented with a vessel for the future, at the intersection of life and death, a catalyst to help us become our best selves should we choose to do so. Such a prospect requires us to act on behalf of that value, with it in mind, and in doing so, realize the outer object of our quest for relief mirrors an inner longing for what we deeply believe will make us whole, able to heal ourselves and the land once more.

May the reader find in these articles the next steps on such a journey, and one another along its many paths.

Matt Thierry, M.A.
PJSA Liaison to Activists
Written on traditional lands of the Ramaytush (Chiguan) Ohlone -- people of the west.

Contributors



Matt Thierry is a PJSA board member and liaison to activists. He has a B.A. in world literature and cultural studies and an M.A. in philosophy and religion from University of California at Santa Cruz and the California Institute of Integral Studies (CIIS) respectively. Matt is currently the middle school social studies department chair for a California independent school and doctoral student at CIIS, with a concentration in ecology and religion. He has authored or co-authored various articles on philosophy, bioregionalism, extremism, and peacebuilding and has presented at conferences on diverse topics ranging from cosmic evolution, political religion, technology and spirituality, and green criminology. Matt's past activism has focused especially on socioecological justice work and critically endangered species.



Gabriel Ertsgaard is the Interviews Editor for The Peace Chronicle. He earned his Doctor of Letters from Drew University with a dissertation on environmental themes in a medieval legend. He previously taught university English courses in both the United States and China. His criticism, poetry, and fairy tales have appeared in various print and digital publications.



Laurel Kearns is Professor of Sociology and Religion and Environmental Studies at Drew Theological School and the Graduate Division of Religion of Drew University. She received her PhD from the Institute of Liberal Arts at Emory University. In addition to *EcoSpirit: Religions and Philosophies for the Earth*, co-edited with Catherine Keller, she has contributed chapters to volumes such as *The Oxford Handbook on Climate Change and Society*, *The Wiley-Blackwell Companion to Religion and Social Justice*, and the *Bloomsbury Handbook of Religion and Nature: The Elements*. Her research is focused on religious involvement in ecological issues and movements, with particular interests in environmental justice, climate change, and food. In addition to helping found the Green Seminary Initiative, she has served on the board of GreenFaith and chaired the Religion and Ecology Steering Committee of the American Academy of Religion.



Dr. Ruth E. McKie is a Senior Lecturer in Criminology at De Montfort University, UK. She is a scholar for the Climate Social Science Network (CSSN.org), at Brown University. Her work centres on the climate change counter movement, examining climate obstruction and delay across countries. Her specific area of research concerns expanding this area of research into the criminological discourse and examining the international elements of the climate obstruction networks including obstruction and delay in Latin America.



Dr. Shanna N. McClain is the NASA Earth Science Divisions Global Partnerships Manager and the Applied Sciences Lead for Risk Reduction and Resilience. Shanna also sits as a Visiting Scientist with the Environmental Law Institute, where she supports the program on environmental migration and displacement. She is co-chair to the Environmental Peacebuilding Association's Interest Group on Water and to the IFRC Anticipation Hub's Working Group on Earth Observations for Early Action. She holds a PhD in Environmental Resources & Policy from Southern Illinois University.



Carl Bruch is the Director of International Programs at the Environmental Law Institute and the founding President of the Environmental Peacebuilding Association. His work focuses on environmental peacebuilding, environmental governance, adaptation, and environmental emergencies. He has helped dozens of countries—including in many affected by conflict—strengthen their environmental laws, institutions, and practices. He holds a JD from the Northwestern School of Environmental Law of Lewis & Clark College.



Hello! My name is Gillian Hart-O'Brien. I am a sophomore at Youngstown State University studying Environmental Science. I also own a small handmade bath, body, beauty business called Maison de Savon.



Chantal Noa Forbes is a doctoral candidate in the Department of Ecology, Spirituality and Religion at the California Institute of Integral Studies (CIIS) and the co-founder of the non-profit, the Deep Water Initiative. Her research looks at Indigenous and Decolonial approaches to environmental engagement with a focus on human-animal relationships in hunter-gatherer cosmology. South African born and raised, Chantal's professional background spans 15 years of experience in media, corporate communications, and the agricultural development sector. She received a B.A. in film production from the internationally award-winning film school AFDA, in South Africa, and an M.A. in Middle Eastern History from Tel-Aviv University. In the past decade, Chantal has worked extensively throughout Africa, Asia, the Middle East, and the U.S. In 2017 she relocated to the U.S. to pursue a Ph.D. Chantal is passionate about effecting social change through artistic mediums of cultural expression and storytelling. Her broad fields of interest include; human-animal relations, religion and ecology, and the Primal and Indigenous origins of religious rites and practices.



Lauren Finley Jacob is a scholar, ritual healing practitioner, and decolonial studies enthusiast who dwells between the waters of Honolulu, Hawai'i. Her work focuses on the intersections of food justice, health, ecology, and spirituality, as well as the relationship between healing self and land. When she's not gardening, she's usually cooking or embroidering. Contact her at laurenfinleyj@gmail.com.



Max Wilbert is an organizer, writer, and wilderness guide. A third-generation dissident, he came of age in a family of anti-war and undoing racism activists in post-WTO Seattle, and has been part of grassroots political work for nearly 20 years. His second book, *Bright Green Lies: How The Environmental Movement Lost Its Way and What We Can Do About It*, co-authored with Derrick Jensen and Lierre Keith, was released in March. Get involved and learn more about the campaign at <https://ProtectThackerPass> and by following #ProtectThackerPass on social media.



Alexander Dunlap is a Postdoctoral Fellow at the Center for Development and Environment at the University of Oslo. He holds a PhD in Social Anthropology, his PhD thesis examined the social ecological impact of wind energy development on the indigenous people of Oaxaca, Mexico. His work has critically examined police military transformations, market-based conservation, wind energy development and other extractive projects.



Antonio Lopez, Ph.D. has a research focus on bridging ecojustice with media literacy. His most recent book is *Ecomedia Literacy: Integrating Ecology into Media Education* (Routledge). He is currently Chair and Associate Professor of Communications and Media Studies at John Cabot University in Rome, Italy. Resources and writing are available at <https://antonio-lopez.com/>



Wim Laven, Ph.D., instructor of peace studies, political science, and conflict resolution, focuses his research on forgiveness and reconciliation, which he relates to his wide range of work and research experiences. His experience in the field spans four continents and include many processes from mediating disputes in small claims court to interventions during complex humanitarian disasters. He is on the executive boards of the International Peace Research Association and the Peace and Justice Studies Association.



Matthew Johnson holds an MA in Peace and Conflict Studies from Hacettepe University (Turkey) and a BA in Journalism from the University of Maryland, where he began his activism organizing against war, poverty, racism, mass incarceration, and gender-based violence. During the Occupy Movement, he linked his activism to conflict resolution and restorative justice, introducing those practices to the Occupy encampments in D.C. He has published several articles and contributed to many books related to gender, racial, social, and restorative justice and is co-author/editor (with Dr. Laura Finley) of the 2018 book *Trumpism: The Politics of Gender in a Post-Propitious America*. He is also a contributor to *PeaceVoice* and *The Good Men Project*. He has served as an educator in a variety of contexts, most recently in the virtual space as a cross-cultural dialogue facilitator and trainer for Soliya. He currently works as a User Experience Researcher.



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Dr. Jeremy Rinker is the Institutional Liaison on the Peace and Justice Studies Association (PJSJA) Board. He is an Assistant Professor at the University of North Carolina Greensboro's Department of Peace and Conflict Studies where he is currently engaged in research that explores the intersections between marginalization, collective trauma, and systems of oppression. Dr. Rinker's research and writings have long focused on South Asian communities, untouchability, human rights, narrative meaning making, and identity in social justice movements. His first book entitled *Identity, Right, and Awareness: Anti-Caste Activism in India and the Awakening of Justice through Discursive Practices* came out from Lexington Press in 2018. With expertise in restorative justice conferencing, peace circle facilitation, program development, and social movement organization, Dr. Rinker's work aims to integrate the theory and practice of peace and conflict to achieve social justice outcomes



Dr. Laura Finley, Ph.D., is Associate Professor of Sociology and Criminology at Barry University in Miami, Florida. She is also author, co-author or editor of seventeen books and numerous book chapters and journal articles. In addition, Dr. Finley is actively involved in a number of peace, justice, and human rights groups. She serves as Board Chair for No More Tears, a non-profit organization that serves victims of domestic violence and human trafficking, and is a board member of The Humanity Project and Floridians for Alternatives to the Death Penalty. Prior to being elected co-chair, Dr. Finley was Publications Chair for PJSJA. She also coordinates PJSJA's Speakers Bureau.



Jennie Barron lives in Nelson, BC (Canada) and teaches peace studies and restorative justice at Selkirk College in Castlegar, BC. She is also the Chair of the Mir Centre for Peace at Selkirk College, where she organizes a speaker series, films, community conversations, trainings and myriad special events. Her academic background is varied and includes the study of social movement politics, allyship between environmentalists and Indigenous peoples, food justice and urban space. She is currently initiating a research project aimed at improving dialogue and listening across social and political divides.

PERCIVAL AND THE CLIMATE CRISIS

GABRIEL ERTSGAARD

From its origin in medieval romance, to Wagner's opera, to Hollywood films, Percival's quest for the Holy Grail has kept an enduring grip on the popular imagination. On the surface, this legend doesn't have anything to do with the contemporary climate change crisis. Nevertheless, one episode from the Grail legend, Percival's encounter with the Fisher King, resonates with our contemporary concerns in intriguing ways.

I'd originally intended to reflect on our *ecological* climate crisis in this essay. Midway through the drafting process, an insurrectionist, white supremacist mob breached the United States Capitol. As that invasion made clear, the people of my country now also face an unstable *political* climate. (Of lexical note, the *Oxford English Dictionary* traces the term "political climate" back to 1750.) I realize that we are hardly alone in this, but that development nonetheless shaped the course of my thoughts.

Ultimately, I believe three concepts from the Grail legend illuminate both forms of climate crisis: (1) the link between leadership and the land, (2) the importance of asking the right questions, and (3) the necessity of empathy. Let's take a closer look at the Grail legend before considering each lesson in turn.

The Legend

There are various versions of the Grail legend, dating back to the twelfth century romance by Chrétien de Troyes, but for our purposes, the following will suffice:

The young knight Percival, a new member of King Arthur's Round Table, is off looking for adventure when his travels take him through a wasteland. The wasteland is a motif from Celtic mythology; wherein the land becomes cursed through some error of the king, and a hero must accomplish a difficult task to break the spell. Percival doesn't know any of this though. He is still an innocent youth, ignorant of what the circumstances demand. Percival eventually finds an injured man fishing on a riverbed. This enigmatic figure is the king of the realm, commonly referred to as the Fisher King. At some earlier point, he received a thigh wound that refuses to heal. Explanations for the injury vary, but on a mythological level, a thigh injury suggests sterility or lack of potency. Percival helps the lame king back to his castle. The Fisher King, in turn, invites Percival to share his table and stay for the night.

During supper, the wandering knight witnesses a mysterious procession through the great hall. Young

men and women dressed in white silently march past carrying an assortment of mystical objects, culminating with the appearance of the Holy Grail itself. Percival is awed into silence by these events. When he awakens the next morning, the castle's inhabitants have vanished. Later that day, having left the empty castle behind, Percival meets a beautiful woman. To his shock, she chastises him for failing to ask questions about the Grail and the king's injury. Had the knight done so, the king and his land would have been healed. Now that he knows what is expected of him, Percival takes up his quest to find the mysterious court again, ask the required questions, and break the curse.

Although Percival was the original hero of the Grail legend, later versions substituted Gawain, Bors, or Lancelot. Eventually, all these Grail knights were superseded by a newer icon of chivalrous chastity: Galahad. With this narrative sketch in mind, let's explore those three echoes between the legend and our climate change crisis.

The Link Between Leadership and the Land

Something is wrong with the king. The land and the people suffer as a result. Can there be a stronger metaphor for linking failed human leadership to damage upon the natural world? Today's leaders aren't walking around with literal thigh wounds, and the majority of the world's governments are no longer monarchies, but powerful people still have an outsized impact on global affairs. Their errors and actions still hurt nature and other humans. Consider what former Exxon CEO and U.S. Secretary of State Rex Tillerson acknowledged regarding climate change in 2019 court testimony:

"We knew it was a serious issue and we knew it was one that's going to be with us now forever more. It's not

something that was just suddenly going to disappear off of our concern list because it is going to be with us for certainly well beyond my lifetime."

Although Tillerson denied intentionally misleading stockholders about climate change, there can be little doubt that a coalition of business, political, and religious leaders misled the wider public about the underlying science for decades. For example, the Greenpeace website has a useful timeline of "Exxon's Climate Denial History" that maps out both how early Exxon knew about the causes and consequences of climate change, and the efforts they took to confuse the general public.

Yet the Grail legend points us toward an inescapable truth: we are always entangled with nature. What we do affects the more-than-human world, and what happens to nature in turn affects us. The king (leadership) is wounded, the land turns to wasteland, the people suffer. In the legend, at the heart of an ecological crisis lay wounded leadership. That's also what we face with our climate crisis today.

The U.S. Capitol riot had its roots in wounded leadership as well. The direct cause, of course, was the debunked conspiracy theory that denied the legitimacy of President Trump's election defeat. Trump himself championed the "stolen election" narrative at a rally immediately preceding the riot. During this rally, he even encouraged his supporters to march on the Capitol, which led to his impeachment in the House of Representatives for "incitement of insurrection."

Yet a post-mortem report by the President's own re-election campaign pointed toward deeper and earlier leadership failures. As Alex Isenstadt of Politico reported,

"The former president suffered from voter perception that he wasn't honest or trustworthy and that he was

crushed by disapproval of his handling of the coronavirus pandemic. And while Trump spread baseless accusations of ballot-stuffing in heavily Black cities, the report notes that he was done in by hemorrhaging support from white voters.”

The total U.S. coronavirus death count passed 400,000 before Trump left office. The former president incorrectly gambled that he would maximize his re-election chances by sacrificing lives to stimulate the economy. Rather than unify the country in the face of the pandemic, he politicized and undermined the response. That strategy backfired, though, contributing to his election defeat. Rather than acknowledge the consequence of his choices, Trump waged the most transparent attack on Black voters’ legitimacy since the Jim Crow era. Something was wrong with the president. The people and the republic suffered as a result.

The “thigh wound” in American civic life is hardly restricted to Donald Trump though, backed as he is by the Republican Party. When we survey the landscape of Q-Anon conspiracy theorists, enthused white supremacists, and long-serving politicians willing to accept Mr. Trump’s corruption provided he helps satiate their base, what was once the party of Abraham Lincoln looks increasingly like a wasteland. It remains to be seen whether some “Lincoln Republican” Percival may even yet accomplish a viable redemption quest.

The Importance of Asking the Right Questions

Despite the former president’s copious mendacity, he certainly didn’t invent weaponized misinformation. In fact, the notorious climate misinformation campaign discussed above points toward a second echo between the Grail legend and the climate crisis: the need to ask the right questions. Clearly, scientific research—the process of scientists asking and answering questions—has expanded our understanding of how we humans are

changing and harming this planet. As previously noted, though, asking the right questions proves just as crucial for the questing knight Percival.

Variant versions of the Grail legend differ on what the necessary questions are. In some, the knight must ask, “What is the Grail and whom does it serve?” The grail is then revealed to be Christ’s cup from the Last Supper (though this may be a Christian overlay upon an object with pagan roots). This revelation signals a transformative encounter with the sacred dimension of life. In others, Percival must ask about the Fisher King’s health. In this case, it is the expression of care that proves transformative. Some versions hedge their bets by including both question types.

Climate change is similar; just one type of question won’t suffice. To answer “what’s going on?” is a matter of science. To answer “what should we do about it?” is a matter of policy. To answer “how do we convince people to take action?” is a matter of rhetoric. The PBS Digital Studios series *It’s Okay to Be Smart* tackled this complex range of questions back in 2014 with a pair of videos entitled “Climate Science: What You Need to Know” and “Why People Don’t Believe in Climate Science.” The series host and creator Joe Hanson, who holds a Ph.D. in Cell and Molecular Biology, even suggested, “I think the psychology behind climate science might actually be more interesting than actual climate science.”

Responding to climate change requires an interdisciplinary effort spanning the natural sciences, social sciences, and humanities. In that spirit, we should also remember the mythic dimension of human experience, the powerful stories and motifs that shape how we live in the world. As these parallels between the climate crisis and the Grail legend suggest, our present disaster connects to deep mythical themes. Perhaps drawing on the power of myth will strengthen us to

confront our contemporary challenges.

Turning to the matter of political climate, the United States is infused with potent national myths, such as the promise in the Declaration of Independence for “Life, Liberty, and the Pursuit of Happiness.” These can inspire our idealism, but also impair our vision of the messier historical legacy that now bears down upon us. Where does myth diverge from history? How do both shape us today? These are crucial questions for Americans to wrestle with during this troubled time.

Beneath the false claim of a stolen election, the Capitol invasion recycles the unprocessed baggage and unfinished business of the Civil War and Civil Rights eras. In many ways, this is much easier to address as a *justice* issue than as a *peace* issue. After all, the fight against white supremacy in the United States is and has always been a fight for justice. Insofar as we are also peace advocates, though, the matter becomes more complicated.

This question now hovers over us: Will events unfold according to 1860 rules or 1960 rules? It took the most devastating war in American history to end the scourge of slavery. Conversely, the Civil Rights movement achieved powerful reforms through predominantly nonviolent means. Can we beat without violence the Proud Boys and their fellow travelers—those who wore “Camp Auschwitz” on their clothing while marching under the Confederate flag—or do the times call for some version of just war theory? I don’t have the answer to these questions.

With that said, we shouldn’t forget hard-learned nonviolent methods, nor abandon the difficult mandate to love even our apparent enemies. Resist them, yes, but love for one’s enemies can offer a critical door out from recurring cycles of violence. Furthermore, a war in the streets fought primarily through violent means—that’s

exactly what the Proud Boys and their allies want. Perhaps civil and human rights activists can use nonviolent direct action to undermine, derail, and bracket the open warfare that the insurrectionists seek.

When our civil rights history shifts toward the tone of legend, it bestows a mixed blessing. We might forget that we are just as capable of nonviolent campaigns as the heroes who accomplished those great deeds. Conversely, their stories may also seep into our souls like myths do. As a mythic model, Percival is worth consideration: a questing paladin whose greatest heroic deed was no act of violence, but the tenacious pursuit of truth. For present day Americans to save our own troubled realm, we too must ask challenging questions and follow where they lead.

The Necessity of Empathy

Let’s now consider, in particular, those versions of the Grail legend where Percival must ask about the Fisher King’s injury to break the curse. That is, Percival must show concern and empathy for another’s suffering. From the polar bears’ melting habitat to island nations being swallowed by rising sea levels, responding to climate change also requires responding to the suffering of others. In both Percival’s story and ours, empathy is crucial.

As the legend makes clear, though, it’s not enough for Percival merely to feel compassion for the wounded king. He must also *act* on those feelings. He must say something, do something. Percival’s silence, however, is rooted in neither apathy nor malice. Rather, he just doesn’t know what’s appropriate in the situation. Indeed, his upbringing works against him, having been taught to equate silence with politeness.

That condition of not knowing what to do or say feels very familiar for many of us when we think about the

climate crisis. That's why empathy must be our lodestone, as it was for Percival. We are concerned, scared, and confused, surrounded by other people who are also concerned, scared, and confused. Empathy makes it possible for us all to give each other the breathing space necessary to communicate.

In other words, the mandate for empathy taps into both the "peace" and "justice" dimensions of "peace and justice studies." Responding to the critical needs of those most harmed by climate change, but often least responsible for it—that is a clear matter of climate justice. On the other hand, to recognize how we share our fear and confusion with those who initially appear as opponents—that lays a groundwork for conflict resolution.

Unfortunately, contra the Grail legend, we can't solve this climate crisis just by uttering the right charmed words. We face a far more stubborn curse. Empathy, though, gives us a better chance of navigating the perilous path ahead. Although the Grail legend can't teach us about the science of climate change, it does have lessons about compassionate response to a crisis in our interconnected world.

In the wake of the Capitol riot, calls for unity have emerged from across the U.S. political spectrum. Indeed, this was an important theme of President Joseph Biden's inaugural address. Certainly, empathy can lead to unity, and unity to reconciliation. Nevertheless, I find myself turning to something Nobel laureate Wole Soyinka wrote about South Africa's Truth and Reconciliation Commission in *The Burden of Memory, the Muse of Forgiveness*: "Truth as prelude to reconciliation, that seems logical enough; but Truth as the justification, as the sole exaction or condition for Reconciliation? That is what constitutes a stumbling block in the South African proceedings."

Unfortunately, we seem to be in a far more dangerous rush in the United States, with many calling for "unity"—for reconciliation—without requiring even truth as a prerequisite. To unify on those terms would validate the conspiracy theories and white racial grievances that girded the Capitol attack. Indeed, if we prioritize empathy for white supremacists above empathy for their victims, then we'll merely engender a "whites only" unity in the service of a "whites first" reconciliation. That's where we landed after the collapse of Reconstruction, and the ideological descendents of those "reconciled" white supremacists eventually stormed the U.S. Capitol.

In President Biden's defense, he has made it clear that true unity involves dismantling the power of white supremacy. Nearly a half century ago, Biden was a bit like the naive Percival; that idealistic young senator was driven by empathy and goodwill when he reached across the aisle to find common ground with older, segregationist colleagues. The president appears to have learned, though, at this late stage in his political career, that his instinct for empathy must always be married to the interests of the oppressed.

Coming Together

An ecological climate crisis, a political climate crisis—with so many problems at once, we might feel besieged on all sides. Still, these aren't entirely separate problems. Ecological climate crisis is itself a political flashpoint; and many who would let the republic burn, would also let the planet do the same. (Notably, the Trump administration pulled the United States out of the Paris Agreement on climate change.) The Venn diagram may not be a circle, but it certainly isn't goggles. In a similar manner, any alliance to save the American republic—by finally breaking the power of white supremacy—will include many who also seek sustainable reforms to save our planet.

Just as our problems intersect, so do the lessons we learn from the Grail Legend. Leadership and the land are linked, but that doesn't mean we're stuck with failed leadership. We can heal the king; we can elect new presidents. In fact, grassroots efforts are often as important as legislative committees, for the former influences the latter. Effective action requires correct and relevant information though, requiring we ask the right questions. Whether confronting climate change or white supremacy, we have to look at each crisis from diverse angles. Only then will we learn what is needed to break the curse and bring new life to the wasteland. Finally, we must have empathy for all parties, even those we consider our opponents. We must recognize that they too are human beings navigating fear and confusion. Yet we cannot allow empathy for victimizers to overwhelm empathy for their victims. This is the treacherous course that nonviolent paladins traverse.

In *How We Win: A Guide to Nonviolent Direct Action Campaigning*, the veteran activist George Lakey writes about how campaigns can combine into a movement, and how movements can combine into a "movement of movements." That idea gives me hope. It reminds me that in the face of these towering challenges, I'm not alone. We're not alone. We can quest together.

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THE EARTH AS A GIFT: AN INTERVIEW WITH LAUREL KEARNS

INTERVIEWED BY
GABRIEL ERTSGAARD

Laurel Kearns is Professor of Sociology and Religion and Environmental Studies at Drew Theological School and the Graduate Division of Religion of Drew University. She received her PhD from the Institute of Liberal Arts at Emory University. In addition to *EcoSpirit: Religions and Philosophies for the Earth*, co-edited with Catherine Keller, she has contributed chapters to volumes such as *The Oxford Handbook on Climate Change and Society*, *The Wiley-Blackwell Companion to Religion and Social Justice*, and the *Bloomsbury Handbook of Religion and Nature: The Elements*. Her research is focused on religious involvement in ecological issues and movements, with particular interests in environmental justice, climate change, and food. In addition to helping found the Green Seminary Initiative, she has served on the board of GreenFaith and chaired the Religion and Ecology Steering Committee of the American Academy of Religion.

GE: You're a full professor at Drew Theological School and an expert on religious environmentalism. What set you on the path toward the work you do now?

LK: I was raised on Sanibel Island in Florida, and because some of the early conservation movement folks had been on the island, I was raised very environmentally

aware. That meant I had a deep appreciation for nature. In graduate school, I was interested in the role of religion in social movements. I heard about a group in Washington, D.C. that lobbied on environmental issues for denominations like the Methodists and the United Church of Christ. That got my dissertation rolling.

When I went on the job market, I didn't think I wanted to teach at a theology school. I was teaching in a women's college and quite liked undergraduates. But the Drew opening was a really good job, and a position of much more impact, you might say. Someone once said to me, "What you teach on Wednesday could get preached on Sunday." So I was not only able to tell the stories of the amazing religious people I was meeting through my research, but could also make a dent in shaping ministers in the Christian churches. That was 26 years ago, and I was definitely wrong to think I didn't want to teach at a seminary. I've loved it.

GE: During your time at Drew, you've also done advisory work with religious environmental groups. Could you tell us a bit about that experience?

LK: I've worked with the organization that's now called GreenFaith. As the GreenFaith mission statement puts it,

their task is “building a worldwide, multi-faith climate and environmental movement.” When it started, it was called Partners for Environmental Quality—not a really catchy name for a religious organization! I worked with them even before I arrived at Drew in 1994. I don’t play as strong a role with them anymore, but I still touch base.

Then I helped co-found the Green Seminary Initiative. Some of us realized that when visionary figures in environmental theology like Sallie McFague, Rosemary Radford Ruether, and Larry Rasmussen retired, their theological schools didn’t necessarily keep the focus on ecology. It was person-specific and not institutional. We realized that we needed to do something to make ecology an institutional investment.

There had been an earlier program called Theological Education to Meet the Environmental Challenge (TEMEC), and out of that David Rhodes had kept a lot of materials for schools: like, if you want to green your operations, worship resources, etc. We wanted to up the game a bit by providing recognition to schools. Then a faculty member could go to their administration and say, “Look, we’re being recognized for being a green seminary. This is what else we should do.” Out of that came a request from schools for a certification program and guidance. We got a major grant from the Luce Foundation and recruited ten schools. Another organization, the Seminary Stewardship Alliance, tackled evangelical schools.

With that Luce Grant we also held six major regional conferences so that faculty could form networks. Each one had a focus on climate change, and we brought in scientists and religious leaders, scholars to talk about it. The last conference was in 2019. The point every time was to make sure it was interfaith, as we need to work together. We also included grassroots organizations there as well, particularly local environmental justice groups.

GE: What are some of the key ideas that drive religious environmentalism and religious responses to climate change?

LK: One of the key things is that the same language doesn’t work across all faith groups. In the United States, a lot of the early work came out of Christianity and then allied with Judaism, so they used the word “justice” a lot. That doesn’t necessarily translate into Hinduism in the same way. None of these were originally “green” religions. They came about in a time when we didn’t have to think about things like species going extinct and an incredible human impact that irreversibly changes things. What is clear, though, is that every religious tradition sees the Earth as a gift. Our food, our air, our water, the things that sustain us, we realize are given to us without our doing anything. So that sense of gratitude and gift is really strong in traditions.

And yet it had been lost in so many of them, particularly Judaism and Christianity, with the influence of a more “dominion” perspective. We forgot the gift part, and took to seeing the Earth as here to do with as we wanted. This perspective is connected to the climate denial movement, and it is sad how well-funded the religious anti-environmental movement is. I’m working with a PhD student right now in Brazil; he tells me that in the last five years or so, evangelical climate denial has infiltrated a lot of Brazil. There’s the same thing in Australia. The US-based climate denial movement and its religious arms have gone international.

GE: Given those challenges, can religious environmentalism still have a positive impact?

LK: Oh, absolutely. All of the work I do recognizes that the most vulnerable are the most impacted by climate change. Every religious tradition has a core concern for women and children, for the poor, immigrants and

refugees, so that unites a lot of the work. Religious traditions have been part of the climate change Conference of Parties (COP) process at the UN. GreenFaith, for example, has been at every one of those organizing major faiths. Now there is a turn toward recognizing attacks on indigenous peoples and their lands, and how those societies serve as a model for what it means to live in balance with the land.

What's harder sometimes is that the traditions have varying ways of seeing the value of animals. Every tradition has its animal tales about how they too can sometimes communicate with or be aware of the sacred, but that really varies. If the first big wave of religious environmentalism was recovering the value of nature,

recently it's been a lot more focused on animals. There's greater attention now to the treatment of animals that are eaten and finding vegetarian traditions within different religious traditions. And then, of course, we are reckoning with the whole impact of meat animals on climate.

Responding to climate change has some really difficult ethical issues. We wrestle with the questions of what is enough, of what is just, and of what it looks like to respect the goodness of creation. Religious traditions are about making moral decisions; they equip us to think about the climate crisis and talk about it.

CLIMATE CHANGE OBSTRUCTION, CRIMINAL NEGLIGENCE AND ECOLOGICAL COLLAPSE

RUTH E. MCKIE

As a criminologist, I cannot help but acknowledge the depths of the harms that have and will continue to emerge from human caused climate change: the environmental destruction and loss of biodiversity, the risks to human health from extreme temperatures, the costs bore by the most vulnerable and poorest people. Yet we seem to be at a crossroads. Even with the overwhelming scientific consensus, significant environmental movement mobilization, and the defund fossil fuels movement, there are interested individuals and organisations that are operating to obstruct international action on climate change. We can refer to these groups as climate obstruction agents, where their operations and actions result in 1) no action on climate change, or 2) limited action on climate change, that thus ultimately have ecologically harmful consequences.

Most environmental harms are committed by, or are the result of actions taken by the most powerful in society, but these may not be defined as criminal under law (Lynch et al., 2013). Human caused climate change is one of these. Scientists emphasise the ecological harm associated with the unsustainable production and consumption of natural resources; particularly fossil fuels largely in the western world that have caused climate change. This is the result of the economic infrastructure – i.e. fossil fuel global capitalism - that requires the

continuous extraction of natural resources as a means to pursue profit. This pursuit is accompanied by a political and social divide between the most powerful in society and the wider population. In fact, most of the world's population will not obtain the fruits of this extraction which are instead concentrated in the hands of the few

Those with this economic power, or the “elite,” are also those that construct legal frameworks defining behaviour or activities as environmentally criminal or harmful. Because these people are in positions of power based on these material conditions, they can negate the criticisms of the ecologically harmful unsustainable production, particularly counter-acting any ‘criminal or deviant charges’ because of their positions of power within the criminal justice system. In the USA, there are notable actors that have prevented our world's shift to protect the environment, from the influence of the Koch Brothers (Greenpeace, 2011), or Exxon Mobil who purposefully misled the public on the knowledge on climate change (Suppran and Oreskes, 2020), to think tanks and advocacy groups such as the Heartland Institute and the Cato Institute who produce research, policy reports, and campaigns championing obstruction arguments to delay climate action.

I conceptualise these obstruction actions as criminally negligent. Criminal negligence can best be understood as the purposeful conduct in which a person ignores a known or obvious risk, or disregards the life and safety of others. Human caused climate change is a risk: its consequences will lead to ecological devastation and human suffering. From this perspective, the recklessness of the employment of obstruction undoubtedly is a choice, a purposeful decision taken by these actors to protect their own interests.

To justify the recklessness and determine innocence, the denial and obstruction movement use what I have elsewhere (2019) articulated as climate change techniques of neutralization. In its traditional form, techniques of neutralization (Sykes and Matza, 1957) was

a theory used to explain the justifications used by juvenile delinquents to justify their deviant and criminal behaviour. I have applied this to Climate Change Counter Movement (CCCM) obstruction organisations, documenting how actors within the climate obstruction movement mobilise arguments that justify delaying climate action (2018). In the table you can observe the five different climate change techniques of neutralization. In some cases, actors will outright deny the scientific evidence of climate change thus 'denying' that there are any victims. Others will argue that it is natural climate change, thus denying the responsibility for climate change. Some even attack climate scientists, pro-environmental politicians, and environmental movements, condemning and criticising them.

Climate Change Counter Movement Techniques of Neutralization (McKie, 2019)

Name	Original Technique	Climate Change Counter Movement Neutralisation Techniques
Denial of Responsibility	Denial of Responsibility is used to contend that the deviant or criminal act is accidental and/or fell victim to their social environment unable to control their actions	Climate change is happening, but humans are not the cause.
Denial of Injury	Denial of Injury or Harm asserts (1) an act will not injure or significantly injure someone or something; and/or (2) there are likely positive impacts from this behaviour	(1) There is no significant harm caused by human action and (2) there may even be some benefits
Denial of Victim	Denial of Victim on the one hand juxtaposes victim and offender as the deviant becomes the condemner and law enforcer	(1) There are no climate change nor climate change victims. (2) If climate change victims do exist, they deserve to be victimised.
Condemnation of the Condemner	Condemnation of the Condemner shifts negative or criticisms of a deviant those condemning that person's actions, thereby rejecting the higher status of the condemners.	<input type="checkbox"/> Climate change research is misrepresented by scientists, and manipulated by media, politicians and environmentalists.
Appeal to Higher Loyalties	Appeal to Higher Loyalties imitates a sacrifice to satisfy the requirements of an intimate social group	Economic progress and development are more important than preventing climate change.

In 2016, we saw the rise of Donald Trump, an explicit climate denier who held the highest position in office, and the 'leader of the free world' (in a mythical sense). His own and his administration's actions – symptomatic of the Republican Party - saw the USA withdraw from the Paris Climate Accords. Donald Trump even used these techniques of neutralization in tweets and speeches. He uses the conspiratorial position on China and climate change as a form of Appealing to Higher Loyalties, arguing:

"the concept of global warming was created by and for the Chinese in order to make USA manufacturing non-competitive" (@realdonaldtrump, Nov 6, 2012)

He uses condemnation of the condemner, referring to Greta Thunberg in a tweet as:

"So ridiculous. Greta must work on her Anger Management problem, then go to a good old fashioned movie with a friend! Chill Greta, Chill"
(@realdonaldtrump, Dec 12, 2019)."

To have success in minimizing or stalling action on climate change by obstruction actors, it is based on the compliance of the public and policy makers to in part accept these delays or be in a position unable to act. In the USA, the distinct political and cultural extremities that exist within the country means it has essentially become near impossible to pursue significant action on climate change. This means we sit on the cusp of complete human and ecological destruction, yet the elite hope to protect their interests historically based on the destruction of the environment without any consequences.

In short, climate change is the biggest existential crisis the world faces, affecting every corner of the planet. No one will escape its implications, and the effects will most dominantly be harming those who are the poorest and

marginalised within global society. Even with facts and data, there are still purposeful actions taken by delaying and obstruction individuals and organisations, who in the pursuit of their own social and economic interests have systematically risked the lives of billions of people by failing to comprehend and stall action on climate change. Their recklessness, coupled with the knowledge that 'they know' the impacts of climate change must be addressed, surely means in the future, as the world deals with the consequences of its past, those most responsible will be held to account.

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MIGRATION WITH DIGNITY: A FRAMEWORK TO MANAGE CLIMATE CHANGE AND PREVENT CONFLICT

SHANNA N. MCCLAIN AND CARL BRUCH

While people migrate for myriad reasons, historically the primary reasons for migration have been related to work, family, education, and health.(1)(2) Many also migrate for reasons relating to conflict, persecution, and disasters. Increasingly, people are migrating due to environmental change. Indeed, climate change is widely recognized as contributing to and exacerbating both migration and conflict.(3)

Great uncertainty exists in identifying the number of people that will be displaced due to climate change and other environmental factors. While the World Bank reported in 2018 that internal climate migration could amount to 143 million people by 2050 in Latin America, sub-Saharan Africa, and Southeast Asia,(4) the International Organization for Migration indicates that projections of climate migrations range between 25 million and 1 billion by 2050.(5)

There are challenges to addressing climate migrants. For example, given the mixed reasons for migration, it can be difficult to determine whether a person is being pushed to migrate because of climate change or pulled to migrate due to job opportunities.(6) The scale and timing of migration is difficult to predict, in part because it can be driven by acute events (e.g., disaster, crisis or conflict) and long-term trends (e.g., climate and

environmental change, economic development), and in part because migration depends on how governments and society respond to those events and trends.(7) With an abundance of economic, environmental, and social factors shaping migration, the ability to unpack the precise relationship between climate change and migration has been difficult.

Though the reasons for migration may be increasingly diffuse and uncertain, the science of climate change is growing in confidence. From a meteorological perspective, there are two key dimensions—or drivers—of climate-related migration. The first is connected with climate processes including sea-level rise, salination or saltwater intrusion on agricultural land, drought and desertification; the second is related to climate events, such as hurricanes or cyclones, flooding, and heatwaves. (8) These processes and events impact people at different rates of time and at different scales – from one individual to thousands, suddenly or over time. These climate-related processes and events contribute to vulnerability, and it is often the poorest countries that are disproportionately impacted by climate shocks and stresses. Furthermore, while early warning systems often exist to alert communities and countries of impending climate-related hazards, there are very few protocols that connect the necessary actions and financing

needed to support populations to prepare for and mitigate the far-reaching impacts to lives and livelihoods. (9)

Migration can be an adaptive response to climate stresses. It can be either temporary (e.g., when there is a flood) or permanent (for sea level rise). However, national adaptation strategies often fail to account for large-scale migration domestically or otherwise.⁽¹⁰⁾ Mobility, or the ability to move, is a function of financial resources and social support mechanisms. Unfortunately, the people who are most vulnerable to impacts from climate change are also often the ones least equipped to migrate.⁽¹¹⁾

Large-scale migrations can generate tensions, which can escalate to conflict if not managed well. In Syria, for example, historic drought pushed many farmers into urban areas, fanning grievances and conflict; notably, though, Jordan and Lebanon experienced the same historic drought, but the government responded more appropriately and there was no serious conflict. At the same time, conflict has led directly to the total number of persons displaced internally doubling in number since 2000, with a significant rise in the last decade.⁽¹²⁾

The number of challenges faced by migrants as they move can be staggering. Discrimination and violence, lack of adequate healthcare and legal services, forced labor and possible detention, limited access to information, resources, and assistance – all of these leave human rights and human dignity as an afterthought.

Migration with Dignity

In considering the need for more human-centered adaptive approaches that work across the migration process and drivers such as climate change and conflict, the concept of “Migration with Dignity” seeks to maintain cultural integrity and ensure access to education,

employment, and healthcare without losing the skills and knowledge gained from the parent country. First advanced by then-President of Kiribati Anote Tong, Migration with Dignity was conceived as a way to give Kiribati people power and choice over whether, when, and how they migrated. It recognized the need for educational and vocational support to ensure that those who migrate did so with the necessary skills to transition to a life equal to or better than the one they left behind. (13) Migration with Dignity is increasingly used by international communities to promote migration through the pursuit of life with dignity.

In our research with the Environmental Law Institute, the Dignity Rights Initiative, Delaware Law School, the International Organization for Migration, and the Ocean Policy Research Institute, we have drawn upon the large body of international and national law on dignity rights, applying it in the context of migration, to give life and legal force to Migration with Dignity. As framed in international human rights law and national constitutions, dignity rights apply to all persons regardless of circumstances. They include, among others, the right to be treated humanely and fairly, rights to education and housing, rights to employment, legal representation, welfare, and medical treatment, and the right to protect one’s rights. Recognizing dignity as a right held by people who migrate is critical for three fundamental reasons. First, dignity travels with the person across jurisdictional boundaries, independent of sovereign-based rules or restrictions. Second, it touches every important aspect of life; it reflects the human experience, as humans experience it. And, third, unlike other claims that may be barred by doctrinal and technical rules of interpretation, the inherent right to dignity extends protections beyond those offered by international migration law.

As yet, there is no comprehensive legal framework designed to protect this growing group of more than

272 million current international migrants. The Global Compact on Orderly and Safe Migration recognizes environmental and climate-related migration, while acknowledging myriad other reasons for moving.(14) Further, though the Global Compact sets out guiding principles that intend to be people-centered, they are not binding.

A Conceptual Framework for Migration with Dignity

Drawing upon a range of dignity rights, and identified needs across the cycle of migration, the conceptual framework for Migration with Dignity emphasizes six fundamental elements: 1) *movement*, that is, the right to choose when to leave and when to return; 2) *security*, namely, the right to be free from sexual violence including rape and sexual exploitation, human trafficking, slavery, forced labor, and arbitrary and abusive detention; 3) *equality*, that is, the right to be treated as a human being of equal worth, including access to benefits, services, and legal protections; 4) *a standard of living*, including to work and shelter; 5) *access to services*, including healthcare, education, and legal services; and 6) civil and political rights, including freedom of speech, religion, assembly, and political participation.(15)

Freedom of movement represents an essential aspect of the migration process, and includes consideration of 1) freedom to leave one's country of origin; 2) freedom to return to one's country of origin; 3) admission to a foreign country, and 4) freedom of movement between country of origin or country of destination. Countries often limit these freedoms through restrictions such as passport or visa requirements, imposed quotas, or perceived threats to national security. However, in situations of forced displacement, statelessness, or internally displaced persons, the necessary paperwork to facilitate freedom of movement rarely exists.

The right to be secure can implicate migrants before, during, and after they migrate. Criminal networks are often involved in migrant smuggling. These networks often morph into human trafficking that entail substantial human rights violations, including sexual and gender-based violence, forced labor, arbitrary detention, extortion, and exploitation.(16) Certain migrants are at particular risk, including those fleeing violence and conflict; those dislocated from community and family support structures without access to legitimate forms of employment, legal status, or social protection; and those who move or work through irregular channels.(17)

Equality, intrinsic to the idea of human rights and human dignity, focuses on rights related to non-discrimination, oppression, humiliation, or the denial of equal protections under the law. Increasingly xenophobic and anti-immigrant sentiment globally has resulted in intolerance, discrimination, racism, and even acts of extreme violence against and toward migrants, particularly in countries where nationalism, patriotism, and populism have been on the rise.

The right to a basic standard of living includes adequate access to food, water, housing, health care, and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age, or other livelihood limitations beyond a person's control. In the case of internally displaced persons, access to these services can be tenuous.

Access to services includes education, healthcare, welfare, and other benefits, and legal service. Access is often approached through two pathways: first through the shared information or knowledge pathways that must exist in order to ensure that migrants are aware of services that might be available to them; second to ensure the ability to use the service as needed and in a sustained manner. Even when services are available, lack

of knowledge as well as language barriers can make it difficult for migrants to access services.

Finally, civil and political rights ensure that migrants are given the opportunity to participate meaningfully in their communities. In part, it ensures freedom of speech and (to a lesser extent) political participation, but it also guarantees religious and cultural protections. Many migration policies reflect approaches of assimilation, and assimilation has often been suggested as a path to avoid ethnic or cultural differences by adaptation intended to blur ethnic distinctions. Conversely, the protection of civil rights can reflect policies of accommodation which enable livelihood strategies that include maintenance of cultural and societal practices that can strengthen the survival and reduce the vulnerability of migrant populations.⁽¹⁸⁾

In parallel with the development of this conceptual framework, the authors have developed an analytic tool to examine the extent to which the different dimensions of Migration with Dignity are addressed across the migration lifecycle. Use of the analytic tool—and the underlying conceptual framework—can assist countries, communities, and advocates to identify and develop better policies and practices that enable free movement, access to services, and promote circulation and socialization of migrants within and across societies.

Looking Ahead

Case studies are underway to apply the conceptual framework across several different migrant perspectives, including impacts from COVID-19, the recent anti-immigration rhetoric and policies stemming from the previous US administration, and perceptions of climate change impacts on general health and well-being. As the framework emerges and matures, it is important to continue testing its relevance to the range of migration realities faced.

The framework can offer opportunities to address migration, understand and consider a variety of migration contexts, and better consider what policies are working or where gaps exist in order to develop more accommodating solutions. For example, following consultations on the Migration with Dignity framework with Marshallese residents in Springdale, Arkansas,⁽¹⁹⁾ it was learned that the professional certificates and degrees of Marshallese were not being recognized once they migrated from the Marshall Islands to Arkansas. This left a number of skilled workers forced to find employment in low-skilled positions such as local chicken processing plants, and with no hope for upward mobility. Further research revealed that agreements existed between Utah's Brigham Young University (home to a small population of Marshallese) and the College of Marshall Islands (CMI) to facilitate equitable transfer and acknowledgement of education and certificates. This has since been used as a template to inform the development of agreements between CMI and the University of Arkansas (home to a large population of Marshallese).

Moving forward, this conceptual framework would benefit from broader consultation on the dimensions and applications considered, and increased awareness and adoption of the opportunities offered through its use. Implementation of the Migration with Dignity framework across the migration cycle can also spur complementary development of multilevel governance instruments to improve cooperation between cities, states, and regional bodies. Moreover, the application of the framework can have the added benefit of further strengthening the legal and normative frameworks protecting human rights.

To learn more about the Migration with Dignity framework and the Environmental Law Institute's work on environmental migration and displacement, please visit www.eli.org.

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THE LEGACY FOREST

GILLIAN HART-O'BRIEN

Earth is in a constant threat of global temperature rising caused by greenhouse gasses. Among one of the most important gasses is carbon dioxide. Carbon dioxide comes from a multitude of sources; of these sources, human production is the most substantial. We often hear about our "carbon footprint," but what does that really mean? One's carbon footprint refers to the amount of carbon dioxide and other carbon compounds emitted by a particular person, group, etc. Every year tons of carbon dioxide are being emitted into the atmosphere due to human production. We emit carbon every day through travel, manufacturing, and the largest producer of carbon emissions: fossil fuels.

But really, how dangerous can this be? Do humans really produce enough carbon to alter global temperatures? The sad answer to this question is: yes. We have already begun to see the effects of global temperature rising. In

recent years we can see an increase in intensity and frequency of natural disasters such as hurricanes, forest fires, and droughts. We have reached a point of no return. We must not ask what have we done to the planet, but instead what can we do for it? How can we make change before it is too late?

In an effort to sequester carbon dioxide emissions and reduce the community's carbon footprint, Youngstown State University created the YSU Legacy Forest with the goal to plant one tree for every incoming freshman starting with the freshman class of 2020. As each year of new incoming freshmen attend the university, another micro forest is planted. These micro forests will aid in offsetting carbon emissions in the Mahoning Valley. The idea for the Legacy Forest came about by a committee of students and faculty members within the environmental science program. The committee drafted

the proposal with the intent to plant 600 trees as soon as possible.

But why "Legacy Forest?" Yes, we are planting trees which will be around for decades and have their own legacy, but it is much more than that. So much of what we study as environmentalists is the result of past human behavior. We know what the mistakes are, we know that we can do better. We want to give back a better planet than what was given to us. The name was created to be the most meaningful way to convey the intent of the initiative; these micro forests represent the legacy we want to leave behind for future generations.

I first learned of the Legacy Forest from my professor who was on the committee, when she shared with us this new, exciting upcoming project. She explained that our class would not only be the ones to plant the first micro forest, but we would also be the first to test the soil for its organic carbon content to see if the trees would be able to flourish and mature at this site.

I am an environmentalist which means I am someone who advocates for the protection of the environment. Projects like the YSU Legacy Forest are so important to me because they give me voice. Oftentimes, as an environmentalist, you feel like you're yelling into the void, that no one cares or is even listening. What the Legacy Forest means to me is being able to have a platform to share important information and benefit the planet on a larger scale. It is one thing to plant a tree in your backyard, but to plant an entire micro forest is a completely different feeling of accomplishment. This project also allowed me to express myself by doing what I am most passionate about. Additionally, it is very honoring and humbling to be one of the first to have planted. To know that mine, and my classmates' work will be seen decades into the future, that this is a part of my legacy, is truly gratifying.

The day we planted was full of excitement and togetherness. Our class was joined by faculty within the environmental science program, YSU alumni, retired faculty, volunteers from the community, local politicians, and a swarm of media who came to promote our project. The response we got from the community was astonishing, a pleasant reminder that people DO in fact care. To see so many students and educators, some who weren't even in the environmental science program grab a shovel and to see the curiosity and enthusiasm on their face will be a memory I will never forget.

So where does this leave us? Well, it sadly leaves us at melting glaciers, ocean acidification, rising sea levels, more frequent and intense natural disasters, thousands of extinct species, and still increasing global temperatures. Although we did our small part in our small community, our work is far from over. We must make change on a global scale. If we do not act soon, our lives on Earth will completely change.

What will life look like on our planet in 10 years if we do not take action now? What will our children, our grandchildren's lives look like if we do not take climate change seriously? This is why projects like the YSU Legacy Forest are so essential. The Legacy Forest demonstrates the importance of academic leadership and provides an opportunity for educators and students to come together, to get involved, promote positive change, and make a difference. It may seem like "just a few trees" but this is merely the beginning. The goal of the Legacy Forest is not just to help sequester carbon in our community; it is to inspire others across the country, around the world, to encourage other universities, students, educators, and communities to join the fight against climate change. Individually, we are one drop. Together, we are an ocean. If you would like to learn more, volunteer, or donate to the YSU legacy forest, please visit our website.

THE LAST ICE FILM REVIEW

CHANTAL NOA FORBES

Filmmaker Scott Ressler has traveled the globe covering environmental stories for the National Geographic Society for over a decade. In 2008 he became the documentary producer for *Pristine Seas*, a film and photographic project to highlight the last wild places in the ocean. He frequently came into contact with Inuit communities living in the Arctic between Canada and Greenland. As Ressler came to know these communities who have been living in the Arctic since the last ice age, he realized that they have a unique perspective to share on climate change. Through this, *THE LAST ICE*, Ressler's first feature-length documentary, first screened this year at the Mountain Film Festival, was born.

THE LAST ICE is a beautifully complex film that juxtaposes a universal story of Arctic ice's disappearance with a very personal story of the disappearance of an Inuit hunter-gatherer way of life. The film combines majestic and intimate cinematography with a unique interplay of historical and factual footage about the recent history of people and place in the Arctic. The film's perspective is shared by Inuk musician and hunter Aleqatsiaq Peary and Inuit youth advocate Maatalii Okalik, themselves part of a generation torn between two worlds. As Maatalii and Aleqatsiaq share the stories of their family histories, Ressler skillfully weaves the brutal colonial history of the Arctic and Inuit people in between scenes. Here, the director builds a messy and complicated picture of the history of capitalism and the nation state in this region. Maatalii and Aleqatsiaq are a part of a generation who themselves have in some way

been raised in the contemporary world and, at the same time, know that their identity as people is deeply rooted in the traditions of their ancestral past. They are responsible for taking on the task of generational healing and shaping the future for generations to come.

The film follows Maatalii and Aleqatsiaq's very intimate exploration of these themes against the backdrop of increasing extractivist economic opportunities arising from ice melt. Oil, gas, tourism, faster shipping routes are all new economic opportunities for corporate and national enterprises seeking to take advantage of these newly opened waterways.

For the Inuit, the psychological, ecological, and emotional impact of colonialism has barely settled as they turn their attention to the future. How will a new opportunistic economic onslaught affect their environment and their renewed cultural ways of being in the world? Maatalii and Aleqatsiaq share their experiences of generating hope in what often looks like a hopeless situation. This film is about being committed to the social and environmental education of the next generation. It is a film about reclaiming one's Indigenous lifeways and remaining connected to a place. The film highlights what the Inuit, who have lived in the Arctic for 10,000 years, can teach us about climate change, reconnecting to one's ecological environment through a connection of people and culture to place.

THE LAST ICE is streaming on NatGeo TV and is available for rent on VUDU.

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FROM WATERFALLS TO WALLS

LAUREN FINLEY JACOB

Note to the reader: This piece will follow with a glossary for the translations and colloquial understanding of various Hawaiian words. It is my intention to challenge English as the assumed language and honor the language born of place and context.

Ho'i hou ka i'a i ke 'ehu kai

The fish returns to the foamy sea

Said of one who returns to a previous home
or former habit(1)

Wind, rain, sea

And plantation have carved you

Naked, helpless

Desirable to developer.

Washed on your pebbled shore

A doomed vessel turned on its side,

Nails rust in salt air,

An example of things to come.

— excerpt from "Maha'ulepu"

by Tamara Wong-Morrison

In *'olelo Hawai'i*, *wai* means water but it also means the essence of life. *Wai* refers to freshwater places, streams, and rivers, which all eventually connect out to the salty sea. Paired with the winds, this cycle gives way to the rains, the mists, the pools, and all of the surrounding lifeforms. As a known *kino lau* of the god Kane, *wai* carved its path through the land and life was born of it. From the sinuous streams to one's coursing blood, *wai* is the liquid of all life flowing.

The Sacred Waters

The ancestors of the land on which I was born and currently reside have over 500 names for rain. The *Kānaka Maoli* are a people of deep connection to land, sea, and all things between, but rain invokes a special familiarity. Collette Leimomi Akana writes, "[Our kupuna] knew when a particular rain would fall, its color, duration, intensity, the path it would take, the sound it made on the trees, the scent it carried, and the effect it had on people."⁽²⁾

This understanding of the shape-shifting nature of water holds a sacred relationship intact. Each stream recharges the watershed and underground aquifers by passing over the earth. The rock beds and plant life both hold and slow this water, allowing it the time it needs to seep deep into the underground. Aquifers bridge springs to the surface and the cycle continues.

However, modern society has destroyed the pathways laid out by the water's own agency. These waterways were drained and replaced with ports, power facilities, hotels, military bases, and roads all in favor of profit, progress, infrastructure, energy, development, and global trade. This is not unique to Hawai'i; this pattern is global. While the water in Colombia is disappearing, the floods in Hawai'i are increasing. In 2020, Hawai'i had persistent drought conditions and increased wildfires. The islands

are seeing 100-year floods every couple of years while our stream beds lay dry. This influx of water has no sponge to hold it and the damage is catastrophic.⁽³⁾⁽⁴⁾

Water Diversion

Unfortunately, this problem is an old one. With the rise of plantation agriculture beginning in the late 1800s, the abundant waters of Hawai'i were rerouted into an irrigation ditch system to transport moisture across the fertile, dry plains of the island. A sea of green sugarcane washed in, parching the waterways of origin and clogging up the veins of the mountains. This legacy has lasted over a century, beginning with the first ditch, built in 1878 by Alexander & Baldwin—still one of the top five private landowners in the state.

Concrete was poured and land blasted apart. Tunnels, built by the thousands, funneled water underneath the towering island mountains. Carol Wilcox expounds,

"The water development systems went by the title of 'ditches.' It is a term both humble and misleading: misleading because they were not all ditches—many were mostly flumes, siphons, and tunnels—and humble because their size and scale were often quite large. And they were everywhere. Very few watersheds escaped the winding, burrowing network of ditches."⁽⁵⁾

Kapua Sproat, an attorney for EarthJustice, declares that in the 21st century, over 90% of Hawai'i's streams are diverted at least in part; this rerouting often bypasses the aquifer beds that feed and regenerate the hydrological system. To top it off, the infrastructure is failing.⁽⁶⁾ The American Society of Civil Engineer's Infrastructure Report Card issues Hawai'i a D+ in safe and updated infrastructure, addressing their concerns, "Due to old age, these dams have deteriorated over time and present risks to downstream, now developed,

communities. Of the 132 state-regulated dams, 123 (93%) are classified as high-hazard potential (HHP).”(7)

Hawai'i is a microcosmic example of the macrocosmic situations that created climate change: establishing poor land and water management (especially regarding industrialized agriculture) and prioritizing profit over the responsibility to care for the natural systems that offer life. But Hawai'i did not always have such devastating environmental realities.

For hundreds of years, *Kānaka Maoli* traditionally used *'auwai* diversion systems to feed the *lo'i*, diverting water from a stream into the muddy shallows and returning it at the end of the *lo'i* to nourish the larger stream it was borrowed from. This was how the plantation industry set up their first ditches. But as the greed grew and the foreign business empire began to flourish, the cultural landscape and Hawaiian way of life were torn apart. Many families had to leave their homes because the stream water resources that sustained them had diminished or completely disappeared. Thousands of acres of *kalo* lands once fed directly by these streams became dominated by the sugarcane plantation industry. For many decades, *kalo* was no longer an accessible staple crop and the stream habitat for native aquatic species completely vanished.

Water's Dependents

It is not just humans that depend on this water. Most native species are considered endemic to the islands of Hawai'i; they are found nowhere else in the world. Of them, the freshwater dwellers *'o'opu*, *'opae*, and *hīhīwai* rely on the continuous pathway of *wai* to *kai*. Each of these species is reliant upon both freshwater and saltwater in their lives emblematically demonstrating the necessity of this unbroken water cycle. An *'o'opu* is born and gets swept into the ocean, spending the first three

to six months in the great waters eating plankton. Those that survive begin the journey home.

People say that the strong *'o'opu* fish can climb waterfalls 1,000 feet tall. The *'o'opu* kisses the cliffs as it climbs *makai* to *mauka*, and supports itself upward with its fused pelvic fins, functioning as a second sucker. Constituted of five separate species, four of which are endemic, the *'o'opu* used to be so abundant that “one couldn't go into the water without rubbing against them.”(8) *'O'opu* is eaten by the community and used in ceremony, but with the restricted water and invasive species pressures in the stream, *'o'opu* now exist in limited numbers.

Supported by decades of intimate and observed knowledge of the *'o'opu's* waterways, aquatic biologist, Skippy Hau, describes that when these natural streams are paved over with concrete, there is a rapid influx of water. The expediency creates a new pace of water that creates dry periods between flushes. As the *wai* comes, the *'opae* and *'o'opu* make the trek across the foreign concrete from the ocean, until they hit a concrete wall, a terrace. Unable to climb this wall, the *'opae* and *'o'opu* get stuck, the water dries out, and they get isolated into tiny pools. But because the concrete holds so much heat, these creatures end up boiling to death.(9)

Our island communities have experienced this reality for far too long. Activists, *kalo* stewards, and concerned citizens are encouraging both the removal of stream diversions and the return of maximum streamflow to counteract this reality. According to the activist group, Hui o Nā Wai 'Ehā, the environmental impact of streamflow restoration will:

1. Facilitate upstream and downstream passage for native aquatic stream species (*'o'opu*, *hīhīwai*, *'ōpae*).
2. Safeguard groundwater and aquifer recharge

3. Revive native ecosystems such as upland watersheds, estuaries, wetlands, riparian native vegetation and nearshore fisheries.
4. Advocate for traditional and customary practices of Native Hawaiians such as lo'i kalo cultivation, nearshore fishing, and gathering.
5. Support aesthetic values and outdoor community recreational activities along streams.
6. Promote education and research.(10)

Restoring water flow will not resolve our dependence on concrete infrastructure, but it is the first step to take towards replenishing the islands' water supply.

Peace through Water

In *'olelo Hawai'i*, *maluhia* means peace, while *ho'omaluhia* means to give peace, to protect.(11) The only possibility for peaceful, abundant futures lies in protecting *wai*. The state government as water protectors (so named in the Hawai'i State Constitution) must integrate a management system where one cannot separate giving and receiving. Luckily for us, that model already exists.

Instead of water disruptors, the people of Hawai'i can be the conduits of a water sustaining future. We have a pathway to peace. By shifting the focus of programs like civil engineering to reimagine what water infrastructure can become—an opening of the walled-up streams back into permeable forms—a new and old story awaits us. We must collectively loosen our grip on our need to control and regulate the water (also named in the Hawai'i State Constitution) and instead support the water where it wants to flow.

A return to the *'auwai* system and the values it's based upon supports not only subsistence crop farming and traditional land tending ways but could once again nourish the ecosystem around it. *Waiwai* means

abundance, but abundance depends on water. In this pivotal moment, water depends on us.

Glossary

- 'olelo Hawai'i*—the Hawaiian language
Kānaka Maoli—native Hawaiian
kupuna—elder, grandparent, ancestor; starting point, source
kino lau—manifestation
wai—freshwater, life, blood
kai—ocean
makai—seaward, toward the ocean
mauka—inland, toward the mountain
'auwai—part of a stream diversion system; ditch, canal
lo'i—irrigated terrace or paddy for growing crops, usually
kalo
kalo—taro
'o'opu—goby
'opae—shrimp
hīhīwai—water snail
maluhia—peace
ho'omaluhia—the creation of peace and tranquility; to make peace, protect
waiwai—abundance, value, worth, wealth

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THACKER PASS AND THE “GREEN” MINING BOOM

MAX WILBERT

I sit perched atop a cliff, overlooking Thacker Pass in northern Nevada. The sun nears the horizon to the west. Mountains loom at my back and on the far side of the pass, in front of me. There are no trees — just endless sage rolling toward the horizon; this is the sagebrush ocean.

Discordant, a vision of the future flashes into sight. Bulldozer treads crush the sagebrush and churn the soil into mud. The sagebrush is replaced with a vast open pit. The growl of heavy machinery replaces the yips of coyotes. The glow of the milky way is drowned in the backwash of floodlights. Trickle of melting snow are replaced with trickles of sulfuric acid and toxic runoff from vast tailings heaps.

On January 15th, on the same day the Bureau of Land Management approved the Environmental Impact Statement for Lithium America’s proposed \$1.4 billion open-pit lithium mine here, a small group of us

established a protest camp to stop this vision from becoming reality. We mean to stop the mine, and so we have setup camp directly on the proposed site of the open-pit mine.

You might already be wondering, “Why are people protesting lithium? Isn’t it true that lithium is a key ingredient in the transition to electric cars, and moving away from fossil fuels? Shouldn’t people be protesting fossil fuels?”

I am a strong opponent of fossil fuels, and have fought against the industry for over a decade. I’ve fought tar sands pipelines, stopped coal trains, and personally climbed on top of heavy equipment to stop fossil fuel mining from going forward. In terms of the impact on the planet, there’s little difference between a lithium mine and an open-pit coal mine. Both require bulldozing entire ecosystems. Both use huge amounts of water. Both leave behind poisoned aquifers. Both are



operated with heavy machinery fueled by diesel. The lithium mine here would burn more than 11,000 gallons of diesel fuel per day, and use sulfur from oil refineries as the key processing ingredient. And it would suck up more than 1.4 billion gallons of water per year.

And so, water protectors—the children of Standing Rock—converge.

Here at Thacker Pass, birds flit overhead, calling to each other, flying to their nests. The ears of a pygmy rabbit twitch in the shadow of a sagebrush. A kangaroo rat noses out of his burrow. This place is a critical migratory corridor for pronghorn antelope, and part of the best remaining habitat of the Greater sage-grouse, who hang on despite 97-99% of their population being lost. There is even an endemic species here – a rare snail who lives only in fourteen springs that burble up beneath the tall cliffs on this southern flank of the Montana Mountains.

I breathe deeply, and smell the wild scent of sage and snow on the west wind.

The plan to destroy all of this life is the toxic fruit of the new green economy. Demand for lithium is driven largely by the growth in the electric vehicle (EV) market. GM, Tesla, Nissan, BMW, Jaguar – major car corporations all around the planet are investing heavily in EVs. The election of Biden has caused a boom in lithium mining stocks, fueling the industry with fresh infusions of cash.

Lithium Americas is a bi-partisan earth-destroyer, however; the Trump Administration fast-tracked this project, pushing through the permits despite serious opposition from local communities who are deeply worried about hundreds of semi-trucks traversing quiet country roads, toxic materials passing by the community school daily, wells going dry, meadows turning to dust, and what water remains being poisoned with arsenic, antimony, and uranium.

If the environmental movement will not oppose this, who will?

Global warming is a symptom, not the root of the problems we face. Any solutions that do not perceive this basic truth will be, at best, incomplete. At worst,



they will perpetuate ecocide and drag us deeper into the 6th mass extinction event, as we see here.

The green economy is a continuation of the fossil-fuel powered war on the planet. And so, just as when colonizers arrived in this land in the 1850's and began to cut down the pine-nut groves of the Northern Paiute and Western Shoshone, and used the wood to smelt silver and gold ore, armed men are coming to blow up the mountains, steal the water, and leave behind a toxic wasteland.

The methods of imperialism have grown more sophisticated. Where before, U.S. armies would simply invade a nation and take what they wanted, now imperialism is primarily economic. Military tools are more discreet: drone strikes, cruise missiles, special operations forces. So it goes with the war on the land. Our vision has been blinded by bright green lies, those most important tools of greenwashing.

What will our future look like? Will it be a fossil-fuel apocalypse? A solar-powered greenwashed dystopia?

Or will we find a third way, a way to fundamentally change our culture of consumption, to abandon our energy addictions, to degrow our economy, to dethrone the technocrats of capitalism and dismantle the industrial war machine that decimates the planet? Will we find a way to adopt a more local way of life?

The answer to that question is up to us.

I do not know who will read this, but I do know that my heart rebels against the destruction of wild nature — my kin, these species who share the same DNA as you and me. My friend Will Falk says that “in defending the living planet, too often we ask ‘what can I do,’ rather than asking ‘what needs to be done?’” And so here we sit, asking “what must be done” to protect Thacker Pass —

and by extension, the entire planet. Our fight against greenwashing has begun in earnest, here. Earth destroyers are relentless, so we must surpass them. Like at Standing Rock, we need people from all walks of life to rise to protect water and defend this place.

This story is a signpost: peace between human beings first requires peace with the land; without peace with the land, conflict is almost inevitable. We can't save the planet by destroying it. Transitioning away from fossil fuels and fixing humanity's broken relationship with the planet will require a more critical approach.





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RENEWABLE ENERGY AND THE WAR OF PROGRESS

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Ambiguous and positively loaded words are dangerous. Not only for their multiple interpretations, but also because people want to believe in what is being sold, and the imaginary attached to them. Everyone can rally behind “change,” “peace,” “justice” and, now with the popular acknowledgement of ecological and climate catastrophe, “renewable energy.” These words, as peace studies is well aware, are double-edged, have many interpretations, and, as with “peace,” are often a euphemism for social pacification (Dunlap, 2014). We know all too well that “social peace” is enforced by coercive violence of the police (Dunlap, 2014; Bachmann et al., 2015; Shanahan, 2021), and stands on military conquest of Indigenous territories (Galeano, 1997; Moses, 2008; Rodney, 2009) and the corresponding ecological degradation, if not ecocide (Brock, 2020a; Crook and Short, 2020), necessary for state formation, development, and modernity.

Justice, like peace, is not much different. There are many interpretations of justice (Foucault, 1980), and Indigenous groups and decolonial scholars have long contested dominant or Western conceptions of justice (Mignolo and Escobar, 2010; Tuck and Yang, 2012). Recently, environmental justice studies has been brought to account by acknowledging multiple forms of justice that extend beyond the distribution of costs and

benefits of development projects, the recognition of identity and rights; participation in project design and operation, and capabilities to engage in the latter three processes (Álvarez and Coolsaet, 2020; Menton et al., 2020). Lina Álvarez and Brendan Coolsaet (2020) demonstrate how there is a liberal presupposition embedded within environmental justice studies and the framework of ecological distribution conflicts, that assumes people desire integration into the hegemonic national, or transnational, techno-capitalist culture of “development” as opposed to rejecting it outright or tailoring it significantly to local cultures.

The political stakes are high with this liberal assumption. First, this approach narrows the infinite field of pluriversal possibilities of (post)development (see Kothari et al., 2019), slowly regimenting people into more equitable and participatory forms of (techno-capitalist) development and/or extractivism. A development agenda largely set by states and executed by national and transnational consortiums further impoverishes and/or regiments local imaginaries and diverse cultural approaches to (post)development in a time when new socio-ecological practices are needed more than ever. Second, this liberal imposition represents another “friendly” approach for integrating infrastructural- psychosocial apparatuses (see Dunlap, 2020a), or

development projects into different habitats and cultures, thus leaving the ability to say “no” and propose alternative forms of life and co-creation off the table in favor of development as we know it. Moreover, developmental desires and aspirations are complicated (Dunlap and Sullivan, 2020), where desire-effects are engineered in various ways by the media industrial-complex, institutional signals, political violence, and concerted ecosystem degradation (Verweijen and Dunlap, 2021). The overall concern is how environmental, let alone other forms of justice, can prolong, integrate, and expand techno-capitalist cultural values and infrastructures into social fabrics and habitats across the world, at the expense of culturally appropriate alternatives.

Finally, the focus of this article is “renewable energy.” What part does so-called “renewable energy” or “low-carbon” infrastructures play in this struggle for real peace and environmental justice? Low-carbon infrastructures such as wind, solar, and hydrological power sources are celebrated as key technologies to mitigate climate and ecological catastrophe (GreenPeace, 2015; 350.org, 2020). Renewable energy is “good” and fossil fuels—as symbolized by the Trump administration—are “bad.” The Green New Deal (GND), or the European Green Deal (EGD), are sold as a political possibility and environmental hope (see Aronoff et al., 2019; Chomsky and Pollin, 2020), yet these plans hinge on low-carbon infrastructures and digital technologies.

Jennifer Franco and Saturnino Borrás (2019: 193) recognize “climate change politics may or can displace or dispossess more people from their land than actual climate change.” This article demonstrates, like conceptions of peace and justice, that so-called renewable energy continues the negative trajectory of development or the “war of progress” (Dunlap, 2014: 55). While the proliferation of “low-carbon” energy infrastructure conflicts are becoming well documented

(Avila, 2018; Temper et al., 2020), the negative socio-ecological impacts are far greater than we realize once the multi-dimensional harms of their supply-webs are acknowledged. This article proceeds by introducing the concept of renewable energy, before breaking down five ways to understand its reality, demonstrating the serious stakes involved in the uncritical embrace and celebration of so-called “renewable energy.” The final section concludes by discussing what appropriate low-carbon technologies might look like and forms of renewable energy we should aim to create.

Rebranding Destruction: 5 Stages of Injustice

Why do people think that wind, solar, and hydrological energy factories are “renewable?” Provisionally, two reasons. Long-term marketing arising from the 1973 Oil Crisis, which gave birth to the US Department of Energy and other institutions (Bonneuil and Fressoz, 2016), which began promoting the idea of energy transition and renewable energy (see also Smil, 2016). Then, once juxtaposed to the ecological horrors of thermal energy and nuclear power (Mitchell, 2011; Churchill, 2003), solar, hydropower, and wind energy factories could be positioned as “clean,” if not “renewable.” Second, the knowledge claims that wind, solar, and hydrological resources are infinite. This perspective is limited and disrespectful, neglecting the reality of vital forces, or kinetic energy, and how they are harvested. While the effects might be subtle, even marginal (compared to mineral and hydrocarbon extraction), there is a vital degradation and dissipation that accumulates resulting in the domestication of rivers, wind, and solar resources from different environments. In the case of large-scale wind factory zones, a wind “velocity deficiency” heats up downwind climates and landscapes (Abbasi et al., 2016). Because of ecological insensitivities, or ignorance, a form of epistemic violence occurs that neglects the cumulative impact of kinetic energy extractivisms.

The application of the concept of “renewable energy” remains riddled with epistemic prejudice and embedded with techno-capitalist values: utility, profit, and socio-ecological control. The category of “energy” itself and the laws of thermodynamics are highly problematic and deserve reorientation given their historical foundations (see Daggett, 2019). Epistemic insensitivity and the normalization of violence remains central to the war of techno-capitalist progress. These are animated further by briefly outlining five stages by which we should judge low-carbon energy generation technologies: raw material extraction, land contracting, operational impacts, energy use, and decommissioning. The intention here is to highlight how so-called “renewable energy” is a myth, perpetuating the war of progress predicated on injustice and skewed forms of peace.

Raw Material Extraction

The violence of low-carbon technologies hides within banal, yet complex supply-webs. This includes the procurement of raw materials, for example copper, aluminum, iron ore, rare earth elements, cobalt, lead, zinc, concrete, and so on. These procurement processes depend on large-scale hydrocarbon fueled infrastructures, from factories that produce mining equipment, mining operations, metal processing, smelting, manufacturing, and transportation. Coke coal is a key ingredient to smelting metal to create wind turbine steel towers or solar panel frames (Smil, 2016). The point, however, is more profound: every single aspect of so-called renewable energy infrastructure depends on extensive processes of hydrocarbon and mineral extraction. Which, as has been said elsewhere (Dunlap, 2018, 2019a), we might conceive so-called renewable energy as an accumulation of fossil fuel based extraction and manufacturing processes or fossil fuel+ technologies. The plus, here, symbolizes and recognizes the additional capturing of wind, solar or hydrological kinetic energy in

connection with an enormous supply-web built on hydrocarbon extractivism.

There are, however, efforts to confront this, from wood based wind turbine towers (Lavars, 2020) to smelting plants operating on dam power (Hobson, 2017), to electric mega-dump trucks and digitalized or “smart” mining infrastructure (Fedulova et al., 2020). Despite these efforts, the enormous amount of resources needed for manufacturing “smart” technologies, the continuing reality of mineral extraction, and the expansive growth imperative within capitalism remain ignored (with the exception of Degrowth advocates, see D’Alisa, 2014; Hickel, 2020). According to the World Bank (Hund et al., 2020: 11), under the moderate low-carbon development scenarios, “production of graphite, lithium, and cobalt will need to be significantly ramped up by more than 450 percent by 2050—from 2018 levels—to meet demand from energy storage technologies.” This includes a demand for aluminum and copper, under the same scenario, to rise to “103 million tons and 29 million tons by 2050, respectively.” This is across the board with other minerals, which are conservative (and incomplete) estimates that ignore secondary energy infrastructure needs (e.g. transmission towers and substations). While being positive about low-carbon energy infrastructures, the World Bank acknowledges the issue that “clean energy technologies... need more materials than fossil-fuel-based electricity generation technologies” (Hund et al., 2020: 11). This is why, when the Green New Deal (GND) makes righteous—and justified—proclamations against the fossil fuel industry, but claims smart technologies and electric vehicles are the remedy, we are witnessing a concerning combination of cognitive dissonance and green capitalist opportunism. There is a high-level unaccountability for digital technology supply chains/webs and, in reality, the GND should be negotiating with the hydrocarbon industry to redirect their efforts to create a flourishing green capitalism.

Because unfortunately, as the term fossil fuel+ suggests, these industries are intimately intertwined and both affirm the existing ecological and climatic trajectory.

Land Contracting

The next central issue is the process of securing land for developing “low-carbon” energy infrastructures. Land grabbing and control is more complicated than originally theorized (Franco and Borras, 2019; Oliveira et al., 2020), reflected in forms of how land is negotiated and controlled. It is analytically useful to think of land control emerging on a porous and cross-pollinating spectrum based on various intensities—or speeds—of coercion. At one end of the spectrum, there is “land expropriation,” which entails dispossessing populations rapidly with the military, police and extra-judicial forces in a “scorched-earth” or “bulldozer” approach. Said differently, people are violently taken from their land by security forces. Secondly, there is the “moderate” approach. While always backed by the threat of coercive force, the moderate approach “rolls out” a process of institutional, sometimes “democratic” or market-based procedures to accomplish land expropriation. Land expropriation, in this approach, is time consuming, entangled with a series of bureaucratic legal procedures, consultations exercises, and compensation schemes for proposed land acquisitions and deals (Dunlap, 2020b). Important, however, is the controversial and contested nature in which these procedures unfold. Ideally, these land acquisitions—or “grabs”—seek to legitimize the land expropriation process, having inhabitants accept the offered processes that reinforce the socio-economic exchange for the desired land and/or natural resources.

The third approach is a market-based focused land expropriation. Land acquisitions, embedded with statist-economic logics, are justified by market-mechanisms. Companies or government agencies negotiate with individual landowners or collective bodies to acquire land. This form of land control is more common in

democratic countries and depends on old and new land regularization and privatization schemes. The coercive aspect, which transforms land deals into land grabbing (see Dunlap, 2020a), emerges with elite manipulation of institutions, acts of deception by companies or intermediaries (e.g. terms and conditions; payments; collective and individual benefits) and various forms of intimidation and threats of violence (e.g. verbal, physical and social) by intermediaries, police or other extra-judicial actors.

Finally, at the other end of the spectrum, are land deals (as opposed to land grabs), which are non-coercive, legally and socially understood as legitimate by local populations. This coincides with increasingly complicated production webs and (sub)contracting schemes (see Franco and Borras, 2019; Oliveira et al., 2020). Observably, highly contested land deals are often portrayed this way, when in actuality they operate within the former three spectrums. The point, however, is that land contracting for different energy infrastructure projects, especially in the Global South, operates between a wide spectrum of coercive land grabbing and non-coercive land deals.

Operational Impacts

The arrival of low-carbon energy generation technologies has significant operational impacts. Principally, there are three overlapping categories to consider: ecological, social and economic. Social and economic impacts relate to the arrival of foreign capital and workers to the region. This includes different class and cultural dynamics entering rural areas, which entails a new gentry of developers: managers and skilled workers. Different socio-cultural backgrounds merge, which entails new habits and lifestyles—or the reinforcement of existing lifestyles—that center on drugs, sex workers, and other “Boomtown” or “Man Camp” dynamics associated with (skilled) migrant labor (Kirsch, 2014; Ennis and Finlayson, 2015; Ruddell and Ray, 2018).

Similar developments emerge with large-scale wind energy development (see Lucio, 2016; Dunlap, 2017; 2019), which, in general, deserve greater acknowledgement and scrutiny across the development of low-carbon infrastructural projects.

Ecologically, solar and wind projects require the clearing of land, which necessitates, depending on the geography, different levels of deforestation, habitat loss, and soil compaction with the construction of roads (Yenneti et al., 2016; Dunlap, 2019a; Yang et al., 2017; Dar et al., 2020). Wind turbines have, depending on subsoil features, between 7-14 meters (32-45 ft.) deep and about 16-21 meters (52-68 ft.) in diameter concrete foundations, that along with roads, subterranean, or above ground power lines, will also have significant environmental impacts (Dunlap, 2017, 2019a; Tabassum-Abbasi et al., 2014; Dar et al., 2020). In the unique Santa Teresa sand bar, in Oaxaca, Mexico, bedrock depths ranged between 17-48 meters (56-157 ft.) for wind turbines.[1] Geographic, hydrological and socio-cultural perspective and/or relationships will dictate levels of resistance and, consequently, reveal the socio-ecological impacts.

While wind turbines have reportedly leaked oil (lubricating the turbines) into the ground and open wells (Dunlap, 2019a), solar plants risk leaking coolant liquids (Yang et al., 2018). Dar *and colleagues* (2020: 9) claim that “many activities can continue to occur among the operating turbines, such as agriculture, aquaculture, and grazing.” Empirical studies, however, suggest greater complications. Animals grazing around wind turbines has led to numerous reports from locals claiming that oil leaking from wind turbines has affected the health, reproduction, and has even killed cattle (see Dunlap, 2019a; Siamanta, 2019), which combines with negative soil compaction and changes in hydrology that can negatively impact agricultural practices (Lucio, 2016; Dunlap, 2019a). Wind parks are also known for killing avian species—birds and bats (Tabassum-Abbasi et al.,

2014) – and solar projects contribute to four types of light pollution: urban sky glow, light trespass, glare, and clutter (see Yang et al., 2018). This includes variegated marine life and human impacts (Tabassum-Abbasi et al., 2014), which requires greater acknowledgement, further research, and connecting ecological studies with social science research to further unravel the total impact of low-carbon infrastructures. There are increasing and unexpected ecological costs, the severity of which depends on geographic location, quantity of turbines or solar park density, and the mitigation measures put in place.

Energy Use

Energy use remains another central factor in analyzing low-carbon infrastructures. “Clean,” “renewable,” and low-carbon infrastructures are celebrated for their environmentally friendly qualities, yet they often emerge to power ecologically destructive practices. The Isthmus of Tehuantepec region, as mentioned before, with over 2,000 wind turbines, powers Wal-Mart, CENMEX, Grupo Bimbo (industrial food), mining companies (GrupoMexico & Peñoles), and various industrial construction companies. This also includes exporting energy to Guatemala, Belize, and the United States, while towns are engulfed by wind turbines as electricity prices are increasing (Dunlap, 2019a). In Catalunya, Jaume Franquesa (2018: 231) recognizes the “extractive, centralized character of wind energy development has emerged without any concomitant vision of development for the locals.” National and transnational companies managing so-called renewable energy in southern Catalunya, articulate ownership, decision making, and profiteering schemes that are largely external to the region (Franquesa, 2018). Greece and Crete exemplify similar dynamics with solar and wind energy development. As Christina Siamanta explains (2017, 2019: 289), in post-crisis Greece, wind and solar energy are employed as “interrelated marketisation, reregulation, deregulation and privatisation strategies.”

Siamanta and Dunlap (2019) contend the privatization and profiteering from “renewable” resources exemplifies a process of “accumulation by wind energy.”

Various mining and construction companies, as well as Google, are utilizing solar, wind, and other renewable energy sources for their operations. Examples of energy extraction companies range from Gas Natural Fenosa, which is investing in wind parks in Mexico (Dunlap, 2019a) and RWE coal mines in Germany, which is setting up their own green daughter company – “Innogy” – to invest in wind energy and other “renewables” after spending years subverting and lobbying against them (Brock, 2020b). Grupo Mexico also owns a wind park in Mexico and solar parks in the US to refine a “green” image, while mining copper and other minerals in southern Peru (Dunlap, 2019b). Chile, meanwhile, has developed wind and solar energy generation as central to expanding mining operations (Furnaro, 2019). The magazine *Energy and Mines* is completely dedicated to promoting the use of renewable energy in mining, documenting the rising quantity of mining projects, enlisting the help of wind, solar, and other forms of kinetic energy extraction in the service of conventional resource extraction. Dunlap and Andrea Brock (2021) call this the “renewable energy-extraction nexus” (Dunlap, 2018),^[2] which demonstrates the intimate and mutually reinforcing web of conventional and green resource extraction that collaborate in the processes of capital accumulation and techno-capitalist development.

Decommissioning

Finally, decommissioning solar and wind energy projects happens after 25-40 years. The high-grade industrial toxics associated with photovoltaic solar leads to various concerns about proper disposal and recycling methods, which companies are hesitant to take up (Aman et al., 2015). The World Bank report discusses two recycling analyses: End of life (EOL), which gives how much of a mineral is recycled at the end of its use in a product; and

recycled content (RC), which gives the percentage of secondary material that goes into end-use demand for a mineral” (Hund et al., 2020: 25). Recycling analysis, moreover, needs to account for four factors that the WB report (Hund et al., 2020: 28) describe as “shifting electricity mix, reducing ore grades, relative prices of commodities, and changing mining and production techniques.” As the WB report (Hund, et al., 2020: 25) explains, aluminum, which has “recycling rates as high as 90 percent in some countries,” has further issues:

[T]he recycled content of new aluminum products has been estimated at between 34 and 36 percent. This is because the availability of scrap is simply not enough to meet the growing demand for aluminum. In addition, some recycling processes cause losses in the material itself and it may not be technically or economically feasible to recover material suitable for recycling from some applications.

This demonstrates the complications of different recycling analyses, as well as the intense levels of aluminum extraction required for energy transition.

Lithium, for Li-ion batteries, has a particularly low recycling rate, less than 1%. Between 2017-2030, it is expected that there will be 11 million tons of spent lithium ion batteries in need of recycling (Sovacool et al., 2020). This relates to material losses in recycling processes, which includes the technical or economic feasibility to recover the suitable quality of material from the recycling process (Hund et al., 2020). The WB report states that Aluminum has a 42-70% EOL and 34-36% RC rate; Cobalt has a 68% EOL and 32% RC rate; Copper has a 43-53% EOL and 20-37% RC rate; and Nickel has 57-63% EOL and 29-41% RC rate (Hund et al., 2020: 25). Recycling rates will vary according to technological changes, valuation and institutional regulations. Yet, it should be remembered, while steels have high-levels of recyclability (between 80-90%), they are often “locked-

up in long-term, durable structures, limiting the amount of steel that is available for recycling, especially when demand is increasing" (Hund et al., 2020: 84). A typical household solar system entails roughly 80 kgs of waste, compared to 3.5 kgs from computer notebooks, while the 2016 global solar panel waste stands around 3250,000t and 2050 estimations are 60 million tons (Sovacool et al., 2020). A 3.1-megawatt wind turbine, according to Sovacool and colleagues (2020: 4), creates "772 to 1807 tons of landfill waste, 40 to 85 tons of waste sent for incineration, and about 7.3 tons of e-waste per unit," with estimates of 100,000 new wind turbines by 2050, creating 730,000 tons of e-waste.

The amount of industrial waste generated for low-carbon technologies is extensive and under acknowledged. Forthcoming articles will elaborate more on these issues. The purpose here, however, is to recognize this problem associated with industrial and low-carbon infrastructural development. This should revitalize and begin creating new pressures on the developmental direction and trajectory most familiar to people acclimated to industrial environments. Green capitalism and so-called "renewable" energy generation technologies are not creating a future predicated on peace, justice, and sustainability. Instead, low-carbon technologies are animating and advancing the war of progress in line with the development of industrial civilization and techno-capitalism -- a trend that must change for the better.

Conclusion

This article has outlined how so-called "renewable" energy and low-carbon infrastructures in fact advance environmental discord and injustice. By examining the concept of "renewable energy" and outlining five central processes of low-carbon energy development and life cycles, issues of extreme socio-ecological concern arise. This, however, in no way suggests that low-carbon technologies cannot perform a positive

(post)developmental role. In fact, they do (on micro and community scales) and can continue to develop in a more positive and ecologically reaffirming direction (see Burke and Stephens, 2018; Batel and Rudolph, 2020; Siamanta, 2021). Yet, this will require structural changes in how we think about low-carbon technologies, and further grounding our perceptions and conceptions of them to acknowledge their extensive socio-ecological costs, which must be reconciled.

The challenge begins by asking: how can we make renewable energy a reality and practice? This, arguably, necessitates taking control of how one produces and consumes electricity; understanding its socio-ecological costs; and trying to create a reciprocal relationship to repair and nourish the costs of extractivism associated with energy infrastructure. This is a significant challenge obstructed by energy infrastructure designed for profit, breakdown, and expansion. This is a call for building nourishing socio-ecological infrastructures or, as Christina Siamanta (2021) charts, community renewable energy ecologies (CREE) that improve the qualitative and relational dimensions of environments. All infrastructures must be genuinely socially and ecologically renewable to humans, nonhumans, and their habitats. This is challenging and antithetical to techno-capitalist development, but a multi-dimensional necessity for a truer sense of peace and justice.

The first step is minimizing energy-use, encouraging strategies of (material-energy) degrowth, and employing existing micro and meso (community) scale fossil fuel+ technologies in a responsible way. This even entails asserting aspirations for "energy autonomy," which means organizing autonomous energy use and resisting grid dependence and control (despite its convenience and benefit). Using existing technology to consume less in reasonable ways, disassociated from the techno-capitalist industrial complex that empowers militarism, political control, and rampant extractivism. Public policy

can play an instrumental role in supporting this transitional development, but at present this looks disappointing. For the more organizationally concerned, bioregional political proposals (Sale, 2000) and libertarian Municipalism (Bookchin, 2015) are clear avenues to organize socio-ecologically renewable habitats. This, however, is not to discount chaotic organizing and antagonistic praxis in times with enormous challenges (Dunlap, 2020c). All experiments are open for creating real renewable energy and reciprocal habitats.

Briefly considered. In urban areas, this might look like neighborhood or block cooperatives that are creating new architectural spaces utilizing passive solar, de-paving specific roads, innovative gardening and construction techniques that utilize space to employ micro-meso scale solar and wind energy generation systems. This can take communal or individual forms, yet state regulations are noticeable obstructions in this regard, highlighting a point of political intervention for the bureaucratically inclined. In suburban and rural areas, micro and meso scale wind and solar energy generation systems are feasible, which again can be direct or based on small-scale and decentralized grid systems. An industrial scale-wind turbine can generate a great deal of energy, and there are innovative ways for energy storage (e.g. pumped-storage electricity). All of these strategies, however, must work towards the active degrowth of consumer and techno-capitalist society, which entails focusing more on joyful activities (Hiking, surfing, skateboarding, meditating, climbing, etc.), improving ecological relationships through Indigenous knowledges (where you are located) and permaculture techniques. While this conclusion is limited and underdeveloped, the point is to create experiments in post-development to turn the term “renewable energy” into a reality and not just a billboard on the highway to permanent ecological and climate catastrophe.

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ECOMEDIA LITERACY: DECOLONIZING MEDIA AND THE CLIMATE EMERGENCY

ANTONIO LÓPEZ

Media literacy is currently hyped as a necessary salve for the proliferation of fake news, conspiracy theories, and propaganda. There is some truth to this, but as a veteran media educator working to address the climate crisis, I don't believe conventional media literacy methods go far enough to tackle urgent problems like ecojustice and global heating. Media literacy practitioners tend not to question the ideology of technological progress, but under the current conditions of our global economic system, environmentally harmful technology and exploitation combine to form an anthropocentric system of media production and consumption. Our gadgets are produced by a neo-colonial system predicated on externalizing health and environmental costs to lower-income regions of the world, requiring resource extraction, disposable populations, and the enclosure of our global commons. Media normalize this system, making environmental risks acceptable to consumers as long as their effects are unevenly distributed and remain out of sight.

From this perspective, media are pedagogical: they teach us how to act upon and live within the world's ecological systems. This corresponds with Orr's (1994) proposition that all education is environmental education—regardless if it is anthropocentric or ecocentric. The anthropocentric worldview becomes the

taken-for-granted knowledge system where education policy is formulated, as well as the background in which media literacy education is conceived. Media education entails an implicit environmental worldview that is often not acknowledged or reconciled. In response I propose ecomedia literacy, which starts with the proposition that all media are embedded within earth's living systems, calling for an ethic of care that extends to all humans and nonhuman alike.

Ecomedia literacy highlights how on a daily basis we encounter the interrelationship between media and living systems. Our devices leave a scorched earth footprint through their manufacture and disposal, while all the data our gadgets access and store in the "cloud" requires a planetary infrastructure of server farms that produce as much CO₂ as the airline industry. Major environmental problems associated with media include e-waste; contamination; loss of biodiverse habitats; damaged health of consumers and workers; EMF pollution; and excessive CO₂ emissions (Gabrys, 2013; Lewis, 2013; Maxwell & Miller, 2012; Rust et al., 2016; Walker & Starosielski, 2016).

Ecomedia literacy also addresses media's ecological mindprint, which is the way that media influence how we define and act upon living systems (Corbett, 2006).

Media shape our experience of the world by propagating an ideology of unlimited growth; reinforcing the view that nature is separate from humans; marginalizing alternative ecological perspectives; and favoring industry discourses surrounding environmental policy. Not only has our mainstream media model co-evolved with the system of advertising, consumption, and the ideology of unlimited growth, but the rise of global mass media clearly parallels the increasing destruction of our biosphere. Mundane media (software, networks, databases, satellite data, etc.) facilitate finance, surveillance, commoditization, and the coordination of economic, military, and police activities that ensure the system works and is effectively reproduced. Artificial intelligence; social media; facial and voice recognition; video and music streaming; and cryptocurrency mining are all emerging technologies that expand resource extraction and fossil fuel energy use.

Another dimension of media's mindprint is the phenomenological experience of how media impact our sense of place, space, and time. This area of inquiry has traditionally been the focus of media ecology, an academic field that views media as technological environments (Lum, 2006). Its practitioners often use the term "ecology" to mean a system of systems, as opposed to the conventional understanding of ecology as a system of biological communities. Though media ecologists do not explicitly discuss living systems, many of the celebrated scholars at the core of their tradition—such as Ellul, Mumford, and Postman—were quite critical of modernity. They argued that technology and media alter our cognitive environments: they shape not *what* we think, but *how* we think and experience the world. The most prominent example is the idea that the alphabet and print media have reconfigured perception in the West to favor abstractions over embodied experience.

Importantly, ecomedia literacy is not just about critically

engaging media, but also actively making, communicating, and promoting eco-citizenship through media. Unlike the traditional media literacy approach that focuses on the study of texts, symbols, and messages as separate from living systems, to encourage eco-citizenship, ecomedia literacy supports learners to:

- Recognize how ecomedia are materially interconnected with living systems by how they affect biodiversity loss, water and soil contamination, global heating, and the health of workers.
- Analyze how ICTs are interdependent with the global economy and development models, and how the current model of globalization correlates with the history of colonialism and its impacts on living systems and ecojustice.
- Analyze how media form symbolic associations, narratives, and myths that promote environmental ideologies and ethics, including learning to distinguish between anthropocentric and ecocentric discourses.
- Evaluate media's phenomenological influence (affect) on the perception of time, space, and place.
- Identify and critically engage modernity's epistemological bias.
- Cultivate an awareness of the ecomedia commons.
- Apply eco-ethics and eco-citizenship to actively respond to the climate crisis.

Research shows that students learn better when they study something that is personally relevant, so usually I have them analyze their personal gadget. Ecomedia literacy is based on complexity and systems thinking, so I have them perform a holistic analysis that explores four areas of inquiry: culture, political ecology, materiality, and lifeworld. Culture involves studying the discourses, symbols, and stories associated with the gadget, such as marketing, news reports, or general cultural beliefs about technology and progress. Political ecology relates to the ideological aspects of gadgets and how their

production chain is facilitated by social structures. Materiality corresponds with how the gadget is actually made and what materials it's composed of. Lifeworld is the phenomenological experience of the gadget and how it impacts sensory and emotional experience, such as feelings of addiction, alienation, or connection. Students write a research paper and also produce some kind of media that demonstrates their findings. For their concluding remarks, they are prompted to envision how ecojustice can be incorporated into the system of gadget production, consumption, and usage.

Ecomedia literacy advocates eco-citizenship, which means embodying ecologically resilient behaviors and cultural practices that shape and promote ecocentric values within the interconnected realms of society, economy, and environment. Unlike conventional media education, ecomedia literacy addresses the climate crisis and seeks to decolonize media by promoting ecojustice. When students become ecomedia literate, they are motivated to care more for the environment and to advocate for change.

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A CLIMATE OF POLITICAL TURMOIL; HOW CAN WE HELP THE PEOPLE OF MYANMAR?

WIM LAVEN

When I taught a workshop on designing peace and social justice for Myanmar in 2012, I heard horror stories I've never forgotten. My work exposes me to cruelty I wish I could forget, and I understand why collectively we have strong desires to look away and ignore atrocities while "minding our own business." No training will ever prepare a person for questions like, "how do I forgive the soldier who assaulted me and killed my sister?"

What the promise of democracy brought to Myanmar in 2012, the military junta is now attempting to take away in 2021. The violence is escalating as the coup d'état crashes against massive nonviolent protests in defense of a democratic peace. The contrasts could not be more stark; the strategic superiority and creative energy of nonviolence has undermined the violent force of military efforts, but now the body count is growing and there are many reasons to fear the worst.

I imagine those students I trained then are now amongst the activist leadership responsible for flooding the streets to resist efforts at overturning the election. I am proud of their great work, but I'm also deeply worried. The reports of violence, both indiscriminate and targeted killings, are a testament to the sacrifices people are making to hold onto their rights and liberties, but the suppression is real. Several people I know have gone silent and every day I hope to see a post "they turned off our internet, but I'm back on..." I know in my gut that bad things are happening to good people and I feel powerless to help them.

I have fond memories of the place and time. I do not know if I was naïve in believing things were getting better; my head sits somewhere between unsurprised and disappointed.

On April 1st 2012 the spectacle of democracy in Myanmar was tangible—you could feel it in the air. Like the chants at a protest: “this is what democracy looks like!” Mr. Wintin was a favorite taxi driver, he worked hard on his English so that he could take care of expatriates, and his charm radiated. I was in the country as an English teacher and had hired him to drive me to different poll sites to soak in the celebration.

It was a marvelous contrast, the day of pranks and silliness in the US was a day of seriousness, pride, and hope. The first stop on the adventure was Wintin’s polling place; his grey hair was a sign he could have voted many times, but he never trusted that the elections had mattered and this was his first time.

While Wintin disappeared for a few minutes to cast his vote, an international news team started conducting an interview with me. I made it clear that I thought the real story was with Wintin, who’d brought me. His smile extended from ear to ear, and he beamed with delight in telling his story of voting for “The Lady,” the affectionate nickname the people of Myanmar had for Aung San Suu Kyi.



Mr. Wintin enjoying lunch near Bago Myanmar

On most days, the politics in Myanmar were not so palpable. Complaints about traffic, taxes, and gas prices

seem universal, but there really was not much to say, people generally went about their business. I enjoyed asking Wintin questions and getting explanations. There were stories about the time when the country switched from driving on the left side of the road to the right—overnight. He didn’t remember it being a big deal. I asked if it was an effort to abandon the former colonial ways, or the advice of an astrologer, and he said: probably the astrologer, because people take the advice from their gurus very seriously. He would ask me why tourists were always fascinated with the strange stories they heard? We would go back and forth. The idea of ‘paid vacation’ was as foreign to him as taking advice from an oracle was to me. The friends of mine who introduced me to Wintin gave him a paid vacation a few years later. It worked well because the country had opened up to more tourism and it also had more facilities for residents.

Flash-forward to the present. The freedom of movement is something easily taken for granted and it is one of the freedoms currently being taken away from the people of Myanmar.

Friday, April 9th, 2021 the regime massacred 82 people in the town of Bago, about 50 miles north of the capital Yangon; it was the bloodiest day yet (according to the Assistance Association for Political Prisoners, as of April 18th 737 protestors have been killed). Pictures in the news brought back acute memories of visiting Bago with Wintin. Famous for its large reclining Buddha, about 180 feet long, it is hard to imagine Bago as the location of anti-democratic violence. The military junta has reportedly used heavy weapons including rocket-propelled grenades (RPGs) to silence protesters. The Committee Representing the Pyidaungsu Hluttaw (CRPH) the anti-coup/parallel civilian government warns that more attacks are imminent if the international community does not intervene. So far the United Nations has issued a statement including demands (like

freeing political prisoners) but has not implemented an intervention.

One of the fundamental truths of conflict is that there is no guarantee, no universal answers, and no one-size-fits-all approaches. In Myanmar the junta has been disrupted by simple acts of civil disobedience; blocking traffic has literally jammed up their plans. People have abandoned cars in roadways claiming “it broke down” or stopped in crosswalks to take their time in tying shoelaces. The people reclaim their power when they refuse illegitimate orders. But it is a sacrifice at the same time: drivers do not make money when they are not working and people have to make complicated arrangements.

The failure to honor the promise “Never again” is a guilt shared by many. There are too many excuses to even review. The playbook of disputing election results has been used around the world in recent months. We all can stand strong in the protections of democratic norms at home and abroad. Be it the United States, Uganda, or Myanmar the vote is fundamental to the peaceful transfer of power. Unfortunately, while Trump and the GOP were leading the Big Lie in the US others saw a green-light for their own efforts to undermine people-power. I really wonder about the success and viability of early warning systems when responses are so easily delayed by other disruptions. Support for organizations that provide election assistance and election monitoring is always needed. Perceptions are as important as accuracy when evaluating the quality and legitimacy of the electoral process. These are some of the high return on investment activities that are first to be cut during budget cuts on foreign aid. The bigger picture almost always showcases that investment in the protection of human rights saves money in comparison with the price tag of the eventual fallout.

The anemic reaction to human rights violations in Myanmar is delivering predictable outcomes, and they



Simple game of checkers in Yangon Myanmar

will only get worse. There has already been a crisis of refugees and displaced people; the Rohingya literally have no place to go and the displacement is only getting worse. Organizations like the International Rescue Committee are already engaged in such struggles; ten years of aiding people in Syria, six years of dealing with the crisis in Yemen, and 40 more countries of crisis-affected people needing help with survival are just part of their humanitarian portfolio. The scale and persistence of global suffering is alarming, but I remember highlighting success and opportunities for progress with the young leaders. It seemed so simple, everyone wanted peace and a chance to heal.

The greatest hope for the return of democracy in Myanmar comes from the creativity and resourcefulness of the people. I know they can use help, but our (outsiders) ability to effect help on the ground will be limited. Absolutely essential is both international condemnation and a broad coalition promoting accountability in order to restore the democratically elected government. Decades of sanctions which crippled the country were being eased, and it is important to note that young people—with experiences of freedom—are not willing to give those freedoms up. Independent reporting is again one of the first freedoms to be taken away and protests have continued despite

the efforts of violent suppression. We must double down on our efforts to get their story of resistance out to the world.

Part of me wants to write my typical message. I normally remind folks that the easiest steps we can take are the actions we can impact in our own homes and communities. Responding to the racism and xenophobia where we live are the best ways to help address these persistent vulnerabilities. Myopic policies are commonly rooted in bigoted thinking and politics. The 1/6 attacks in the US were inflamed by 'fake news,' propaganda, and misinformation; education and awareness can stifle the promulgation of prejudice. I want to encourage students and readers to travel when it is safe to go back out into the world. We need to have conversations with people from different cultures and political backgrounds. Real life experiences help us to avoid the problems with misinformation and action is where the magic happens, but...

Part of me is paralyzed with fear. I know the problems are huge and increasing dialogue at home is hardly an answer to the carnage taking place. It feels like we are watching and doing nothing—again. Even worse, our governments are not innocent bystanders. I wish I could tell those young leaders I met how proud of them I am. To let them know that I believe in them. That their good deeds will be recorded in history, for the difference they are making would set me at ease, but I'm afraid. They are smart and the people are resisting—they have no choice—but I wish there were not so much sacrifice and suffering along the way. I know the lesson too well: there is nothing worse than watching someone you love die, and no injustice greater than knowing that loss is unnecessary.

HOW TO BUILD AN ECOLOGICAL CULTURE

WRITTEN BY MEMBERS OF THE BIOREGIONAL CONGRESS OF THE AMERICAS,
INSPIRED BY THE SYRACUSE CULTURAL WORKERS

Befriend a wren
Imagine how a river thinks
Listen to the music of the spheres
Dance in the muddy rain
Watch a tree drop its leaves,
and then bud out again
Ask at whose expense your comfort comes
Build soil
Grow turnips
Meet your neighbors
Teach a child how to hold a frog, or raise a butterfly, or make compost
Learn the boundary of your Bioregion
and then let it dissolve
Write a love poem to a mountain
or a pond
or a mushroom
Envision an economy that gives more than it takes
Cut your energy use in half
Then do it again
Plant a forest
Preserve a marsh
Know where your water comes from,
and how it goes
Strive to leave no waste
Thank someone who is standing up to the powerful
Look to your possessions for the seeds of destruction
Leave a piece of this world better than you found it
and envision the whole thing renewed.

LETTER FROM THE BOARD CO-CHAIRS

Greetings, PJSA, from your Co-Chairs!

We hope this issue of The Chronicle finds everyone safe and off to a wonderful 2021!

As always, there is a lot of behind-the-scenes work going on with PJSA's Board and we would like your input. The Board is considering which of our two journals (The Journal of Transdisciplinary Peace Practice and Resistance Studies Journal) we would like to continue offering, or perhaps whether members would continue to enjoy both. Please feel free to send any thoughts to Publications Chair Matthew Johnson (mwjohnson19@gmail.com). Thanks to the leadership of The Chronicle Editor in Chief Wim Laven, Board members are co-editing forthcoming issues of the magazine and we hope you like it!

We want to thank everyone for their patience with the listserv migration. We know this is a very valuable tool but it needed some adjustments. Special thanks to Board Member Dean Johnson for his hard work on that project. Additionally, we are pleased that our membership grew in fall 2020! Thanks to Dean and to Jeremy Rinker, and always to our tireless Executive Director Michael Loadenthal, for their membership outreach. You can reach them at djohnson4@wcupa.edu, jarinker@uncg.edu and michael@peacejusticestudies.org, respectively.

As we noted in our end of year message, the Board is quite pleased with the turnout for the fall 2020 virtual conference. In particular, we wanted to thank all those

who encouraged or required students to participate. Planning for the fall 2021 conference is well under way and we look forward to sharing more about that as details become clearer. It will definitely include virtual participation options for those unable or uncomfortable traveling. We are also looking forward to hosting more collaborative events with partners. Any suggested collaborations are welcome! You can always contact us at lfinley@barry.edu and jbarron@selkirk.ca.

The Board is happy to report that it awarded its first mini grants! They have been awarded to Alexander Dunlap for his project Translating the Extractive Nature of Energy Transition, and Vanessa Meng and the Energy Justice Network for the project, Little Dragons for a Better World, to facilitate workshops that fight environmental and institutional racism. Details about this work we helped to fund will be shared at the conclusion of the projects. We encourage members engaged in activist projects to check out the simple application to support your work. Thanks to Niki Johnson for spearheading that program.

While these remain challenging times due to the COVID-19 pandemic and to racial, political and other divisions, we remain optimistic that things are moving in a better direction and that our work as peace and conflict resolution scholars, activists and educators is more essential than ever.

In Peace;

Laura Finley and Jennie Barron, Co-Chairs

MEMBERSHIP UPDATE

As of February 4th we have 277 members which includes 28 Programs and Organizations (formerly known as Institutions) representing 59 of those members. Please note that there are many ways to join and support PJSA as members, including as various types of group program/organizational members. See <https://www.peacejusticestudies.org/membership/> for all possible options.

The transition to the new members-only listserv has gone well, having just a few minor bumps along the way. Thank you all for your patience and support as we made the transition.

We wanted to send you a few updates, things discovered, and reminders.

If you have any problems posting to the list, please let us know by emailing membership@peacejusticestudies.org. We are tracking these difficulties. If we see patterns it will help us if/when we need to talk with our webhosts.

We have identified several common problems:

If your post is not showing up, then the cause may be: a) The email used for sending the message is not the email subscribed to the list. b) The spam and/or security filter used by your provider does not allow emails with your name to come back through your email system. Your message may have posted and you just did not get a copy.

You may need to contact your provider and add the listserv and your email to your "whitelist." c) Your membership has expired. d) You have posted your message to the old list.

If your post is being held for moderation, then the cause might be: a) The message is being sent from an address that is not subscribed to the list. b) The message contains a file that has been flagged as a security threat. c) The size of the file is very large. d) You bcc'd the list rather than putting the address into the "To" line. We have tried to reduce moderation as much as possible. We will continue to tweak things as we go along.

Just a couple of reminders: 1) Remember the email for the list is members@lists.peacejusticestudies.org. 2) If you would like to change your email or switch to digest post, please email us at membership@peacejusticestudies.org.

Thank you all for your continued witness and work. And thank you for your support of PJSA.

In solidarity and struggle,

Dean Johnson (membership chair) and Jeremy Rinker (institutional liaison)

PJSA PUBLICATIONS CHAIR UPDATE

MATTHEW JOHNSON

The cold winter (for those of us in areas that received snow and ice) coupled with the pandemic has given me no excuse not to catch up on reading. I hope PJSA members have taken the time to explore their subscriptions.

This year marks the 7th year of publication for the *Journal of Resistance Studies* (JRS). Its editors would like me to promote its most recent call for papers. Potential authors should “describe, analyze, and build theories of resistance in new areas” while challenging conventions. The energy of resistance studies is focused now on what James C. Scott called “everyday resistance.” One way to think about it is an emphasis on smaller acts of resistance as opposed to sweeping revolutionary currents or upheavals. Of course, these conceptions are not mutually exclusive. I am certain there are countless acts of resistance that are going undocumented.

The JRS takes journal articles, book reviews, and debate contributions. (Full disclosure: I have had a couple book reviews published in the past.) If you would like to submit, please visit www.resistance-journal.org

By the time this letter is published, the 5th issue of the *Journal of Transdisciplinary Peace Praxis* (JTTP) will be out. It is a co-edited issue on justice and healing that includes content directly from conversations at last year’s PJSA conference.

All PJSA members will receive access to this issue and the next one (to be released in August) online. PJSA members can subscribe for hard copies at the discounted rate of \$35 (individual) and \$50 (institutional) for the year. If you are affiliated with an institution, the JTTP’s editors would appreciate your support in ordering hard copies for libraries.

I have not yet read the 5th issue, but the 4th issue has a lot of great content—including an essay on forgiveness from our own Wim Laven. If you would like to contribute to the August issue, which will focus on the role of the public intellectual, please visit <https://jtpp.uk/call-for-papers/>

As always, please feel free to send me any feedback on the journals or questions on how to access, promote, or contribute to them.
