

The Politics of Media and the Environment: Climate Change, Contested Energy Technologies and Mobile Disruptions

My research program explores the interface of people, the environment, new media technologies and social movements. Drawing on networked society and political ecology theory, I study the role of digital media in activism on climate justice and extractive industries. Methodologically, I am interested in how social network analysis and digital methods can help make sense of large-scale datasets, as well developing new methods for analyzing visual social media depicting contention over climate and energy issues. In my research, I ask how environmental justice activists are using new media technologies to challenge socio-political power structures.

In my early scholarship I examine Salvadoran press discourses of conflict over mining, published in *Environmental Communication*. I argue that by reframing dominant narratives of economic progress toward community rights and environmental justice, alternative media can act in synergy with environmental movements to discursively break a cycle of environmental inequity. In related work on post-colonial extractive industries, with colleagues from the University of Wisconsin-Madison and the Universidad Externado de Colombia, I have contributed to a volume on mining in Colombia, *Minería y comunidades: Impactos, conflictos y participación ciudadana (Mining and communities: Impacts, conflict and civic participation)*.

In my dissertation, *Contesting technologies in the networked society: A case study of hydraulic fracturing and shale development*, I studied the network structure and content of a transnational movement against fracking, Global Frackdown. This research was funded through a Louis and Elsa Thomsen Wisconsin Distinguished Graduate Fellowship from College of Agricultural and Life Sciences, as well as research grants from the Robert F. and Jean E. Holtz Center for Science and Technology Studies and the European Union Center of Excellence, at the University of Wisconsin-Madison. Using mixed methods, I apply a relational perspective to the study of role of digital technologies in transnational environmental organizing. My findings show how activists use Twitter as a cohesive “hashtag public” to forge linkages between localized groups on a transnational scale and with aligned social movements. Using big data methods I find statistically significant differences in the relative prominence of negative messaging about shale development in relation to pro-shale messaging on Twitter across five hashtags.

My research intervenes in the paradigm that considers international nongovernmental organizations as the key nodes to understanding transnational advocacy networks. Adopting a relational perspective shows that this focus on the international scale obscures the role of globally minded local organizations in mediating global issues back to the hyper-local scale. My work provides new insight into environmental justice movements connecting localized natural resource struggles to international energy and climate policy. I argue that reconfigured networked relations combined with the diffused nature of unconventional shale extraction have given rise to an emerging form of movement, which I term translocal environmental movements.

Peer-reviewed publications based on my dissertation research have appeared in *Environmental Communication*, *Public Understanding of Science* and the open-access journal *Social Media + Society*. Furthermore, I have a book chapter manuscript in revision, co-authored with a colleague from the University of Wisconsin-Madison, for a book project, *Expanding the boundaries of*

communication and public participation in environmental decision-making, edited by Kathleen Hunt (Iowa State University), Gregg Walker (Oregon State University) and Steve Depoe (University of Cincinnati). In the chapter, “Fracking, the Elsipogtog First Nation and police repression: The role of images in amplifying outrage on Twitter,” we examine the dynamics of environmental conflict over extractive economies through the potential for amplification effects with visual social media. This research was presented as part of the 2016 Iowa State University Summer Symposium on Science Communication.

In another peer-reviewed publication in *Convergence: The International Journal of Research into New Media Technologies*, I compare the origins and early development of the Occupy movement with that of the Spanish 15M, the *Indignados* or ‘outraged’, movement. I argue that the similarities in the structural hyperlinked network properties of the 15M and Occupy movements and their transnational interlinkages can be explained in part by commonalities in the two movements’ collective identities and dominant narratives.

In my current project, I collaborate with a colleague, Luis Hestres (University of Texas, San Antonio), to study an emerging climate justice movement strategy, fossil fuel divestment and the “Keep it in the Ground” divestment campaign of *The Guardian*. We examine traditional press and social media framing of fossil fuel divestment during the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21), as a case study to investigate the ways in which traditional tenets of framing theory are being challenged by content shared through social platforms. Using a dataset of Twitter posts collected during COP21 and in-depth interviews with staff of *The Guardian*, we compare *The Guardian*’s framing of divestment during COP21 with other news outlets, climate stakeholders, and with its coverage of the talks. This project has been funded by grants from DePaul University and the University of Texas, San Antonio. I was also one of only two scholars from DePaul University nominated for the Carnegie Corporation of New York’s national 2016 Andrew Carnegie Fellows Program.

In July 2016, we presented preliminary findings from the divestment project at the International Conference on Social Media and Society at Goldsmiths University in London. Furthermore, we are contributing two invited, peer-reviewed, articles to the open access *Oxford Encyclopedia of Climate Change Communication*, edited by Matt Nisbet (Northeastern University), also to appear as part of the *Oxford Research Encyclopedia of Climate Science*. In [the article](#) I am leading, we argue there is a tension within climate action between policy-based means and technological advances to address climate change; and that since 2012, the divestment movement has been gaining traction internationally. Following the 2015 Paris climate agreement, climate justice activists are shifting increased attention towards fossil fuel divestment as a climate action tactic, making it an important area for study that bridges the politics of anthropogenic climate change and extractive industries.

My research program contributes to a greater understanding of the dynamics of climate and energy justice movement tactics to pressure nation-states to take policy action on climate and invest in the development of sustainable energy systems. It also contributes to public knowledge of the role of social media in climate action efforts. In order for my research to have a broader international impact, I have published two articles in *The Conversation*, relating my scholarship to current events, the [Paris climate talks](#) and the U.S. presidential election [primary cycle](#).