Climate Change & Poetry

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Contents

Executive Summary	2
Introduction	4
Project Design and Methodology	5
Target Audiences and Stakeholders	
Main Outcomes and Outputs	
Lessons for Use-Inspired Outreach	
Next Steps	10
Acknowledgements	10
References	11
Appendices:	
Appendix A: Syllabus	12
Appendix B: Overview of Selected Readings Used in Co	
Appendix C: Assignment to Bring a Poem for Discussion	n14

Executive Summary

As a CLIMAS fellow, I designed and taught a community course on Climate Change & Poetry, one of the first of its kind anywhere. The course took place at the University of Arizona Poetry Center in the fall of 2015, and included six class meetings, each of which was two hours. I designed the course around the growing body of contemporary poetry that engages with climate change, and alternated readings of poetry with readings on climate change.

I drew on both my background as a geographer and as a poet in designing this course. I brought both of these approaches to the facilitation of the course, as well, drawing on both social science and humanities orientations in facilitating and leading the conversations of the texts at hand—be they poems or climate reports or chapters from books on the social aspects of climate change.

Climate change is both a social and a scientific issue and many frames exist through which we can approach it. There is not one climate change; rather, there are many climate changes. This refers to both the physical science of climate change—the awareness that different regions will see different effects of climate change, highlighted in NCA and IPCC reports, for example, and reflected in the missions of RISAs like CLIMAS or in regional assessments such as the *Assessment of Climate Change in the Southwest United States*—as well as to the social perception of climate change. A few of the differing narratives of climate change place it alternately as a 'wicked problem' to be faced by inter- or trans- disciplinary approaches, an environmental justice issue, a national and global security issue, an apocalyptic threat to life on earth, or an opportunity for social change. (For just a few examples of the literature on environmental narratives or "frames," see Boykoff 2011, Hulme 2009, Lejano et al 2013, Liverman 2009, Manzo 2012, and Wilder et al 2015)

Art and poetry offer novel ways in which those climate frames or narratives can be communicated or explored. This is true even if the poem itself is not in a narrative mode—as was often the case in the poems we explored in class. Sometimes a poem reflects common narratives, while at other times a poem may complicate or disrupt those narratives.

In situating the course theoretically, I approached the poems as boundary objects that could contain multiple climate narratives and understandings. Some of the poems we looked at addressed climate change explicitly, while others did so implicitly. Some reflected a strong sense of the environmental justice aspects of climate change; some reflected an attempt to try to find hope; some worked like elegies; some drew on a humorous or satirical tone.

The course was designed to resonate in multiple registers. While primarily designed as an outreach project, the course also was a means to do research on climate perception and literary geographies of climate change. In addition, the CLIMAS fellowship made it possible for me to donate my percentage of the course enrollment fees (\$650) to

Watershed Management Group, a local environmental nonprofit that works on water harvesting and green infrastructure. Community participants left the course with an increased awareness of the science and social impacts of climate change as well as a strong awareness of environmental poetry.

Early outputs from the course include multiple academic presentations, including "Go Deep and be Ready: Geographies and Poetries of Climate Change," which I presented at the Conference of the Association of Pacific Coast Geographers in fall 2015 in Palm Springs, CA; and "Reading Indigenous Ecopoetics and the Geographies and Poetries of Climate Change," which I will present at the 2016 Association of American Geographers Annual Meeting in San Francisco. Two academic articles are also in preparation.

The course has helped to inspire other climate change and poetry interactions. Most notably, The University of Arizona Poetry Center is now planning a full reading series for fall 2016 around climate change.

At the beginning of the class, one of the questions I asked students in a short survey was "In your own words, what is climate change?"

One of the students wrote: "a humanly caused change in the climate's temperature overall a rise of several degrees caused primarily by an increasing amount of carbon dioxide from the burning of fossil fuels, which has consequences for all life's creatures." This reflected a strong knowledge of the physical aspects of climate change, which a few of the students came to class already having.

After the class, that same student answered: "Something that is coming, that is both complicated and simple, that is overwhelmingly moral, that is disastrous yet not without hope in that it challenges us to be imaginative in its wake."

"To be imaginative in its wake." I think this insight is very important, is perhaps even one of the most crucial for those of us working on climate change.

Introduction

At the September 2014 UN Climate Summit in New York, Kathy Jetnil-Kijiner, a poet from the Marshall Islands, performed a poem dedicated to her young daughter. The poem speaks of hope for the future in the midst of sea level rise for a homeland—standing just two meters above sea level—that is on the frontlines of climate change. It makes reference to climate change refugees and has a strong sense of environmental and social justice. An excerpt from the poem reads:

no one's drowning, baby no one's moving no one's losing their homeland no one's gonna become a climate change refugee

or should i say no one else

UK's *The Guardian* recently published a series of twenty poems on climate change curated by Carol Ann Duffy, the poet laureate of Britian. The winter 2014 issue of *ISLE*, *Interdisciplinary Studies in Literature and Environment*, focused its whole issue on global warming. Part of one of the poems in that issue, titled "Teaching Climate Change," by the poet Stephen Siperstein, reads:

My students arrive every Tuesday and Thursday afternoon, asking questions– "How worried should we be?"

Swiftly my voice rolls out, "very"– like a wave breaking over itself, then pulling back.

"So what should we do?" they ask– And I try to hear goodness and grace, a little luck, and the sounds of a lake falling

through trees at night, and any words that might begin an answer.

These are just a few examples of work by contemporary poets that engages with the many aspects of climate change that I looked to in designing a course around climate change and poetry. I approached the poems in two ways: 1) they helped to communicate the situations of climate change; 2) they point to other ways of understanding human-nature relationships and the role of imagination in moving forward.

Here, I think of Marshall McLuhan's idea of art as "a DEW line, a Distant Early Warning system that can always be relied on to tell the old culture what is beginning to happen to it" (quoted in Buckland, 2009). David Buckland, founder and director of Cape Farewell, an international artists group focused on the cultural response to climate change, looks to this concept from McLuhan, and I think it is also useful to approach contemporary poetry dealing with climate change.

The geographer Mike Hulme (2009) has suggested that "we need to reveal the creative, psychological, ethical and spiritual work that climate change is doing for us." This, of course, has been reflected in recent popular books like Naomi Klein's *This Changes Everything*, or in the Pope's comments on climate change as a moral issue. This is something that I found in the class, too, that moving from a perspective of hopelessness to one of agency was something that the students longed for.

Project Design and Methodology

Drawing on Latour and Callon, Star and Griesemer (1989) proposed the concept of the boundary object as "an analytic concept of those scientific objects which both inhabit several intersecting social worlds and satisfy the informational requirement of each of them." In my thinking on this course, I propose to extend the concept of boundary object outside of a scientific field to place the poems as boundary objects. A key aspect of boundary objects is their "interpretive flexibility" and a poem, by nature, has interpretive flexibility.

While this boundary concept has been taken up mostly in the realm of social studies of science, I am working through the use of the term in approaching climate change poems. The concept is often taken up through boundary organizations—particularly around connecting science with decision-making, and is mobilized to think at the organizational level (see Star 2010). I suspect that it can be approached as an analytic to think through a) the organizational level of a poem and b) to think through the poem as a boundary object between different conceptions and narratives of climate change and their audience. As part of the class, I pre- and post- surveyed the students on their knowledge and relation to climate change, and we also did writing exercises/prompts throughout—and I will use that as data to continue to think through this idea of boundary object further.

Questions of global environmental change are increasingly understood as social challenges as much as scientific challenges. In "The Social at the Heart of Global Environmental Change," Hackman et al (2014) write: "The environmental challenges that confront society are unprecedented and staggering in their scope, pace and complexity. Unless we reframe and examine them through a social lens, societal responses will be too little, too late and potentially blind to negative consequences." As an outreach project, this course was also designed to communicate this idea implicitly through discussion of the texts at hand.

The course included both facilitated discussion of texts, short mini-lectures on climate topics, as well as short in-class writing exercises based off of our readings. A few of those in-class exercises included, for example:

- After watching a video clip of Kathy Jetnil-Kijiner's performance of "dear matafele peinam" at the 2014 UN Climate Summit, draft a poem to a young person (this could be someone specific—a child, grandchild, niece, nephew—or it could be someone in the future).
- After reading W.S. Merwin's poem "Place," which beings "On the last day of the world/I would want to plant a tree," draft a poem that begins by stealing Merwin's first line. "On the last day of the world..."
- After reading the introduction to Naomi Klein's *This Changes Everything* and excerpts from Stephen Collis's *The Commons*, let's write a collaborative poem. We drafted these poems in the form of an "exquisite corpse," a surrealist collaborative writing exercise, in which each contributor adds a line to a collaborative poem after being able to see only the one line prior.

These exercises, as well as serving as a fun means to generate writing for the course participants, also allowed for multiple ways in to discussions of climate narratives.

Time ticks into the rising accord I SINK TO 25K FEET DEEP the ocean acidifies and coral, beautiful, graterque, my chieken roosts alone. IN the barnyard with the who swoop to swallow the bracelet of my wrist, creek-singing wind-wallowing, forcue-waring To the rescue, too late to sue Sell a planet, kuy & lotery chance

Figure 1: Example of "exquisite corpse" in-class writing exercise from Climate Change & Poetry. Each contributor wrote a line only seeing the one prior line, so that the poem would accrue in an organic way. Note this poem reflects rising sea level as well as an interesting connection with political economy ("Sell a planet, buy a lottery chance.")

Target Audiences and Stakeholders

The primary target audience and stakeholders for this course included:

- o CLIMAS.
- The University of Arizona Poetry Center, which hosted the course in their Fall 2015 Classes and Workshops Series, and helped to publicize the course.
- Watershed Management Group, which received a donation of \$650 out of the course fees.
- The nine students—adults up through retirement age—who enrolled in and took the course.

In addition, an expanded audience of the project to date also includes:

- Those who read about the course through my CLIMAS blog post announcing the course, or the Poetry Center's social media on the course.
- Conference-goers who attended my presentation on the course at the 2015 Conference of the Association of Pacific Coast Geographers or at the upcoming Association of American Geographers 2016 Annual Meeting.

Main Outcomes & Outputs

This course was successful in a number of ways. It has helped inspire other connections between poetry and climate change, including an upcoming series at the Poetry Center focused on climate change. In addition, Joan Engel, a student in the course, will present a talk on the "Poetry of Climate Change" at this year's international forum of the Global Ecological Integrity Group (GEIC).

In a survey on the course collected by the Poetry Center by email after the course was complete, seven students responded and all respondents rated the course as excellent (6) or good (1). Example comments included:

"Climate change is a heavy topic so it was good to experience a variety of types of materials—as well as the lively discussions..."

"We were given information on climate change and read poetry written on this topic. There was also time for group discussions and some fun writing exercises, so there was definitely a good balance and the course was structured well. I enjoyed our discussions... I didn't know very much at all about environmental poetry until I took this class. The course provided a great introduction and definitely sparked my curiosity, encouraging me to lean more, and to write some of my own poems. I have been enthusiastically talking about this class and many people I've spoken to have expressed an interest in taking the class..."

Outputs related to the course include:

- Publicity on the course, including a CLIMAS blog post that was also highlighted on the Poetry Center's social media, allowed the impact of the course to reach a broader audience (including, for example, over 200 Facebook "likes" in response to the Poetry Center post).
- Two academic articles in preparation.
- Multiple conference presentations as noted above.

Lessons for Use-Inspired Outreach

"Culture is a powerful force in our society. By exploring and scrutinizing our societal values, it challenges attitudes and changes what we deem to be 'normal'. By influencing the cultural narrative, creativity has played a key role in tackling gender, racial and sexual inequality. Now, it's time the environment became part of our cultural narrative." -from UK NGO Julie's Bicycle *Guide to Communicating Sustainability*, 2015

My work on this project—as well as on other collaborative art and environment projects—has reinforced for me the idea that research and outreach projects that draw on art and literature should be designed in mind for their ability to catalyze change and to inspire others. An out-of-the-box climate outreach project such as this can have effects both short-term and long-term. Theoretically, this is also related to the concept of boundary objects, or to iterative processes of connecting science with decision-making. The course as an outreach project can itself be looked at as a boundary object, one which has served to further connect climate and culture at the University of Arizona and in the broader community.

Time and relationship-building cannot be understated as an extremely important aspect of use-inspired research and outreach. These kinds of projects take time; for me, this project was in part possible because of a long-established relationship that I already had in place with the Poetry Center, including teaching classes such as Ecopoetics in their Classes and Workshops program in the past.

In the first class meeting I asked the participants: "What is climate change?" I noted some of the responses on the board.

What is climate change? What changes are occuring because of a changing climate? - an issue that the Pope talles about (or Leame) - living organisms rendting to A temps, also affecting inorganic processes - Effects are different in different regions - If we limit discussion, we limit a times - It we limit discussion, we limit outcomes - Scientic Evidence, Social Evidence, Eronomic evidence - Costs of climate chanse, economics + Emotional costs Fair, Anxiety, Alicuntion - Riodisekity effects Solastalgia - food effects - Ambiguous - in statistics and attitudes - contreversion -

Figure 2: What is climate change? A few of the group responses to this question posed to class participants on the first class meeting.

We then proceeded to weave an ongoing discussion of this question throughout the course, building on our original notes.

I found that mixing different types of readings on climate change with poems worked very well. However, I also found, as I had suspected, that in teaching such a course it is important to let each form of text do its own work. In other words, my impression was that those instances in which I let the poems lead the way—letting the discussion of climate narratives happen organically from our interpretation of the poems at hand, seemed to have more impact than when I began with discussion of a climate narrative/frame, and then read poems through that narrative/frame.

Poems, in their close attention to detail—and in their use of concise and distilled language and imagery—can help to translate a presence in the world that brings a climate change that many in the public still envision as an abstract concept out there in the future clearly into an embodied and felt present moment. This increased awareness then hopefully—helps create momentum and support for action at scales from the individual to the global.

Next Steps

Over the next months I will draft two academic articles from this work: one will be a piece that reflects on the course's methodology and poetry's use in climate communication, drawing on the concept of boundary objects. The other article will be a piece that does a literary geography of some of the specific poems from the course, in particular work from Indigenous poets. I will present this article at a featured Literary Geographies session at the spring 2016 Association of American Geographers annual meeting.

I also look to this class as a baseline for the development of further Climate Change & Poetry or broader Art & Environment courses, ones that could be taught in the community as well as at undergraduate or graduate levels.

Acknowledgements

I am grateful to everyone at CLIMAS for their support on this project and to the continued inspiring conversations on art and environment that happen through the Institute of the Environment's Arts & Environment Network. This project also could not have happened without the collaboration of the University of Arizona Poetry Center, and in particular Cybele Knowles, Tyler Meier, and Wendy Burk. At the Poetry Center, Hannah Ensor has also been a driving force in bringing climate change further into the programming through development of an upcoming reading series connected to climate change. And, last but not least, I am of course grateful to the inspiring and insightful students who enrolled in this first Climate Change & Poetry course.

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Appendix A: Syllabus

Climate Change & Poetry

Instructor: Eric Magrane Contact: eric@ericmagrane.com

Six Mondays, 6:15 to 8:00 pm, University of Arizona Poetry Center September 28 through November 9, 2015 (no class on 10/26)

Course description

Climate scientist Mike Hulme has written, "we need to reveal the creative, psychological, ethical and spiritual work that climate change is doing for us." That is precisely what we'll consider in this class. By blending readings of poetry with social and scientific readings of climate change, we'll learn more about environmental poetry *and* about climate change, and we'll think about how poetry and creativity may have a role in adapting to a warming world. We'll read poetry that both directly and indirectly addresses climate change, including work by Patricia Smith, Brenda Hillman, Stephen Collis, Kathy Jetnil-Kijiner, and many others.

Narratives of climate change place it alternately as an environmental justice issue, a national and global security issue, an apocalyptic threat to life on earth, an opportunity for social change, and more. In this course, we'll explore how poets are increasingly taking up the issue of climate change in their work, and consider how poems reflect or complicate some of these climate narratives. We will primarily be reading and discussing poetry in conjunction with climate reports and texts, but we will also incorporate some writing exercises throughout, generating our own work. The course is open to students of all skill and experience levels.

Readings

Readings will consist of both poems and readings on climate change. Please do read each week's readings before class. Packets of readings for the following week will be handed out each week. Please bring all packets each week, as we may refer to poems in earlier packets. If you have to miss a class, I will leave the packet for you at the Poetry Center.

Appendix B: Overview of Selected Readings Used in Course

Readings for class 1 & 2

- 1. Mike Hulme, Preface to *Why We Disagree About Climate Change* (Cambridge, 2009)
- 2. Selected poems from *ISLE*'s issue on Global Warming (Volume 21, Issue 1, Winter 2014)
- 3. Selected poems from *So Little Time: Words and Images for a World in Climate Crisis* (Green Writers Press, 2014)
- 4. Selected poems from *Streaming* by Allison Adelle Hedge Coke (Coffee House Press, 2014)
- 5. "dear matafele peinam" by Kathy Jetnil-Kijiner
- 6. "A typology of climate change frames" from Manzo, K. Earthworks: The geopolitical visions of climate change cartoons. (*Political Geography*, 2012)
- 7. U.S National Climate Assessment Overview (brochure)
- 8. Assessment of Climate Change in the Southwest United States ("Key Findings" brochure)

Readings for class 3

- Selected poems from *Blood Dazzler* by Patricia Smith (Coffee House Press, 2008)
- Selected poems from *Meaning to Go to the Origin in Some Way* by Linda Russo (Shearsman, 2014)
- Selected poems from *Through the Second Skin* by Derek Sheffield (Orchises, 2013)
- Selected poems from *Hyperboreal* by Joan Naviyuk Kane (University of Pittsburgh Press, 2013)
- Selected poems from *undercurrent* by Rita Wong (Nightwood Editions, 2015)
- Selection from *Flood Song* by Sherwin Bitsui (Copper Canyon, 2009)
- Selection from *To See the Earth Before the End of the World* by Ed Roberson (Wesleyan, 2010)

Readings for class 4

- Introduction from *This Changes Everything* by Naomi Klein (Simon & Schuster, 2014)
- Selected poems from *The Commons* by Stephen Collis (Talonbooks, 2014) and excerpt from "A Working Manifesto for the Biotariat" (from *Spiral Orb* nine)
- Selected poems from Seasonal Works With Letters on Fire by Brenda Hillman (Wesleyan, 2013)
- Selected poems from *catalog of unabashed gratitude* by Ross Gay (University of Pittsburgh Press, 2015)

Readings for class 5 and 6

- Selected perceptual challenges from *Big Energy Poets of the Anthropocene: When Ecopoets Think Climate Change* edited by Heidi Lynn Staples and Amy King (forthcoming BlazeVOX)
- Ten copies of a poem of your choice (see suggested links/resources)

Appendix C: Assignment to Bring a Poem for Discussion

Please bring ten copies of a poem of your choice that somehow interacts with our discussion of climate change and poetry. You are welcome to choose a poem from any source. I'd suggest looking at contemporary and recent poetry, and some sources you might look at are included below. (This is by no means an exhaustive list, but is something to get you started.)

A Few Websites:

• *The Guardian* Keep it in the Ground: a poem a day series is "a series of 20 original poems by various authors on the theme of climate change curated by the UK's poet laureate Carol Ann Duffy"

http://www.theguardian.com/environment/series/keep-it-in-the-ground-a-poem-a-day

- Poets for Living Waters "is a poetry forum begun in 2010 as a response to the Gulf Oil Disaster of April 20, 2010, one of the most profound man-made ecological catastrophes in history. The initial project included hundreds of poetry and poetics publications, and a series of international reading events." https://poetsgulfcoast.wordpress.com/
- Cape Farewell: "Switch: Youth Poetics has been developed by Cape Farewell in partnership with The Poetry Society. Now in it's second year, Switch 2013/14 featured poet Helen Mort (nominated for the prestigious T.S. Eliot Award), and was for writers up to 25 years-old. It took place online and in secondary schools based in London and Sheffield, from December 2013 to March 2014." http://www.capefarewell.com/explore/switch-and-the-poetry-society.html

I will also leave a few books on reserve at the Poetry Center. These will be available on the reserve shelf in the librarian's office during Poetry Center regular hours.