



Figure 1. Venue of Drylab 2023

Drylab2023, an experiment in “immersive learning,” was conducted from May 13-June 11, 2017. For 30 days, Eight participants lived in a remote desert outpost limited to four gallons of water per person per day to meet all water needs (drinking, cooking, bathing, hygiene, etc.)¹ while subsisting on a water-wise diet. Participants (half artists and half scientists, all in training) were charged to live within a “near future scenario” of water scarcity (2023); modeling how to manage a limited vital resource: fresh water.

During the experiment, narrative progress could be tracked as it unfolded through online posts at drylab2023.net (now a project archive). As time passed and participants negotiated living with each other in their harsh surroundings (temps went to 111F, with only one shared cooled space), poetic language, creative activity, and mindful movement

increased among all participants. Site postings reveal their individual and collective transformation, day by day.

As co-director of the project, I find value in capturing my thoughts about what happened during those thirty days. In the below text, I also work to connect drylab2023 to my ongoing art practice and a larger performance history. Referencing both speculative fiction and performance art, I refer to this work as “speculative performance.” As you will read, the knowledge produced by the project was a result of both conceptual/ theoretical imaginings and applied/practical actions.

Reflecting upon the drylab2023 project, I discovered that: 1) speculative performance is a powerful form of knowledge creation that can prefigure and manifest alternate ways of living with climate change; 2) the participants, scenario, environmental stage, and audience collaboratively produced the performance; 3) through performance — an embodied form of knowledge—the participants came to understand and embrace a water-wise lifestyle; and 4) the use of speculative fiction (the narrative frame of 2023) offered an opportunity for participants to reflect on the past and present as well as imagine the future.²

INTERDISCIPLINARY LEARNING AND THE SPECULATIVE FRAME

Today is the sixth anniversary of when Trump pulled out of the Paris Climate Accord sealing the fate of living in our current world of climate change, catastrophe, and [covfefe](#). [...]

Even before this there were signs we did not value the commons we shared of clean water or air. [In 2016](#), First Nations people of Standing Rock joined by what grew to be thousands of Indigenous people and allies from across the world came together to protest the Dakota Access pipeline. [After the military attacked the civilians, they](#) pushed the pipeline through without a proper environmental review. This would be a hallmark of the Trump administration, [doing away with environmental reviews](#) so we could not even be prepared for the disaster to come. The Dakota Access Pipeline would be built under the [Missouri River](#), which later connects to the Mississippi river, together they make the third largest river system in the world. Trump called for “open season” for the oil and gas industry in America, unleashing the consequences we struggle with today. One of the worst was in North Dakota, after the Sioux people tried to warn us when they put their

bodies on the line at Standing Rock. The [Bakken oil fields](#) that were getting fracked in North Dakota [caused small earthquakes](#), affecting the river bed in Missouri cracking the Dakota Access pipeline, which laid underground. It was a slow leak and it flowed underground to the Missipissi[sic] river and the many tributaries connected to the Missouri river, poisoning Middle America's water supply. This left [17 million people without water](#). [...]

This could have been avoided, if we had listened to the indigenous people when they spoke the wisdom that “water is life” as they were attacked by dogs and [shot with water cannons in freezing temperatures](#). In Trump's speech explaining why he pulled out of the Paris Climate Treaty, he said [he didn't want to “disadvantage” Americans](#) (ironically the most advantaged people in the world). [...] On this day, we reflect on what could have been if we had listened at Standing Rock and held ourselves accountable to the Paris Climate Accord. Alas, we went the wrong way.

-- excerpted blog post “Water is Life,” <http://drylab2023.net/2017/06/02/water-life/>

Over the past decade, speculative fiction has been experiencing a resurgence in American culture. The popularization of apocalyptic narratives in Young Adult fiction, the mainstreaming of AfroFuturism, and the use of future scenario planning (employing creative writers and artists in the process) by government agencies from local municipalities to the Pentagon³ are all examples of this practice writ large. As we humans struggle with the consequences of our overconsumption and waste on an earth that has physical boundaries and limited natural resources, it makes sense that the imagination would be called upon—to imagine other possible outcomes, reflect on what has been/may be lost, and dream up new worlds.

Drylab2023 was initiated when Dr. Marco Janssen, my colleague in the School of Sustainability at ASU, was offered a space in Amboy, CA (an abandoned company town in the middle of the Mojave desert) through the auspices of an ongoing art/science residency program, MATZA.⁴ Because of my past work with speculative cinema and performance,⁵ he approached me with the opportunity to collaborate as co-PI/director on an art/social science experiment. The idea was to model the management of a shared vital resource—water—emerging from his long-term research conducted with and growing out of Nobel Prize-winning economist Eleanor Ostrom's work with “the commons.”⁶ Ostrom observed and documented communities throughout the world who developed governance

and accountability structures in order to sustain critical shared resources—going against the widely accepted economic construct known as “the tragedy of the commons.”⁷ Dr. Janssen, having himself observed communities in India and Mexico address water scarcity issues on a daily basis, was curious about the ways in which this research could be applied to the lives (and water use practices) of his students and peers in the Global North.

Meanwhile, I had been grappling with the role of cultural practice in social change—particularly as it relates to the massive personal and social transformations that need to be imagined and undertaken should we decide as a culture to address our effect on earth’s climate. To this end, I am drawn to the call for “ethical spectacles” as outlined by Stephen Duncombe his book *Dream*.⁸ As Duncombe writes, “...waiting for the truth to set us free is lazy politics. The truth does not reveal itself by virtue of being the truth: it must be told, and told well. It must have stories woven around it, works of art made about it; it must be communicated in new and compelling ways that can be passed from person to person, even if this requires flights of fancy and new mythologies.”⁹

As an educator and media artist, I had long come to know that making and showing often have a greater impact on lasting learning and personal change than lecturing or discussion alone. I also understand from decades in art classrooms, that the most expansive creative activity often arises within limited parameters. I was keen to see how these insights gleaned from the art classroom could be extended and tested, especially when collaborating across disciplines.

And so, we began to realize drylab2023—a learning experiment where participants would intentionally place their bodies on the line in a process of open-ended discovery on a shared, exposed environmental stage over a defined period of time. Together, Dr. Janssen and I developed the drylab2023 project parameters:

- > 4 gallons/per person per day of water (2 gallons assigned to personal use, 2 were assigned to a common pool to be cooperatively managed)
- > a water-wise diet (no meat, no dairy and only fruits, vegetables and grains that could be grown and processed with little water in the desert southwest)¹⁰
- > 30 days (28 days on site + 2 travel days)
- > limited travel offsite (determined by a modest gas budget)¹¹

- > frequent individual and group posting on webpage/social media —active during 30 days of project
- > one or both of the project co-directors would also be onsite for the entirety of the project¹²
- > once on-site, project co-directors would no longer be “directing” but observing the process of the participants managing their various shared, limited resources, and monitoring health and welfare (and at the ready to provide emergency transit if needed).

We distributed a call for student participation that cast a wide net across our art, science and sustainability networks at ASU. Though the call was broadly distributed, the participants ended up being all women¹³. Their ages spanned 21-37, they were queer and straight, equally distributed across art and science, and were from a range of cultural/ethnic backgrounds. The students had their own reasons for embarking on the experiment. Each of them had an interest in and commitment to environmental issues and concerns—ranging from an artist having conducted research on non-native plants for her MFA thesis, to a PhD student focusing on global environmental justice and a non-degree seeking student with an undergraduate anthropology degree who was attracted to learning about indigenous cultural practices. All of the participants (some who were raised in the desert and others for whom it was a new home) understood that the current standards of contemporary life in desert cities are dependent upon water that comes from somewhere else, and lots of it. All wanted to find out if they could live within the strict parameters presented by the project.

I penned the bare outlines of a near future scenario that explained “how we came to be:”¹⁴

Drought has returned to the southwest.

Previously safe water sources are contaminated.

Municipalities have shifted to private ownership/management.

Water is precious; access controlled.

The endless wars now require mandatory military conscription of women and men age 18-34. Water rights exist for those who register for the draft, are outside of the age range, are permanently disabled or the primary caretaker for young children.

Our group of young, healthy, childless women have banded together out of necessity. Though they are not fugitives, they are in exile.

[...]

This all started two days ago at the university. There was a huge demonstration that turned violent. For the past five years, protests and social conflict have increasingly become violent and usually result in arrests, disappearances and even death by the hands of police. My group of human rights defenders has persisted to demand water for underserved folks and to boycott the draft. I had become so anxious and afraid that my sense of powerfulness and will waivered, and I withdrew from my activism. I chose to stay behind as they went ahead to the demonstration. I waited and waited, but they never returned. They were arrested. I don't know if they are alive or dead.

I needed to leave the university. That's when I met Kirsten. We had heard that there might be water here, and we set out on foot. We arrived this morning.

[...]

-- excerpted blog post, <http://drylab2023.net/2017/05/18/day-1/>

We chose 2023 (six years in the future) as a time frame that was far enough away that we will have experienced changes in our world, yet close enough that our current world is still recognizable. Within the larger narrative, each participant chose their own fictional name and background story: “Nayara” was an undocumented immigrant from Brazil; “Moso” got separated from her husband while searching for water; “Jack in the Desert” was waiting for her love to come meet her; “Kirsten” and “Na.ru” (who arrived at the site several days after the rest) were students who fled from a protest that turned violent; “Saf” was a spy within the group; and “Skip” and “BCC:” were more mysterious characters, often posting in pictures and audio streams rather than text.

Prior to arriving onsite, we held a series of regular meetings where we discussed Ostrom's work and design principles for sustaining the commons, worked out logistics, and agreed upon initial governance structures and site roles (cook/s, water overseer/s, shop attendant/s, mediator, etc.).

The participants embraced the project as their own and took seriously the commitment of the co-directors not to steer or influence their emerging "narrative" nor interfere with their governance choices. For example, although participants initially agreed with the daily apportionment of two gallons of water for personal needs and two gallons for a common pool that would have its use negotiated and decided by the group, almost immediately after arriving on site, the group decided (at the suggestion of several participants) that the apportionment be changed to 3:1 (personal/communal). I was shocked by this decision, as it seemed to move away from the key premise of the project—to negotiate a common resource pool. But the rules we had all agreed to, that included non-interference by the co-directors, were an important foundation we all needed to rely on, and so I simply listened as the participants self-organized. It should be of interest to note here that participants ended up using far less water than even the small amount that was apportioned.¹⁵

Although some participants found the narrative and their backstory related to their personal project goals, others found it too awkward to navigate on a regular basis alongside other project challenges and decided to move forward without their stories. This change resulted in an uneven relationship to the initial, speculative narrative frame. "Nayara" and "Saf" utilized their chosen characters throughout and seemed to enjoy developing their stories and written voice to bring urgency and intrigue to their time on-site. On the other end of the spectrum, "Skip" and "Moso" dropped any pretense of narrative or character development quite early on—preferring to post responses in their own voices. Here again, having abdicated directorial roles for the duration of the project, my co-director and I watched and took notes. Individual posts lessened as participants became more involved and committed to collaborating on group posts (on such topics as personal hygiene, water-wise recipes, desert time and reflections midway through and at the project's end).

The near future narrative offered an opportunity to "reframe" participants' thoughts and feelings (and research) regarding the announcement of the United States' intention to

withdrawal from the Paris Climate Accords (which occurred during the project month); indigenous resistance related to the NODAPL movement/encampment; and a locally important water use scandal—Cadiz Inc.’s resurrection of plans to build a pipeline to siphon water from an ancient aquifer to support water needs in coastal CA. However, followers of the site saw the narrative backstory fall away as the heat increased and the daily negotiations of shared space and resources took what little energy remained. In the end, although the diminution of narrative content may have affected the audience experience, it did not inhibit the personal and collective transformations that occurred amongst the women as they enacted their new life circumstances, hour by hour, in this harsh environment.



Figure 2. Water distribution at the water tank

EARTH AND SKY AS STAGE

BCC:

Time adheres to no man-made constrictions here. –

Time, like the desert itself, abides by the sun. There is no need for a watch. –

We rise with the sun to bask in the cool morning breeze as light creeps over the mountain. –

High noon is the only place holder.

Three quarters to the sun directly over head—the heat begins to pound.

A siren of mortality alerts the flesh to seek shade.

Then we rest.

We slow down and layout, lowering the heart rate.

The worst is yet to come. The internal clock slows to a murmur and the layers of hot air sit on top of themselves, elongated the day. But as the sun approaches the alternative horizon, the pace picks back up again. Bright orange-pinks flair out into the deeper blue sky.

Night is upon us. Time to gather and restore the bodies' nutrients before we do it again.

We sleep under the stars in the yard with light blankets and neck support for an arena of dreams.

***NAYARA:** [...] Because of the lack of cell service and internet, time is now measured in meals for me. In the morning, I am often on breakfast duty. I rise after the sun is up and prepare a meal before it gets too hot. Lunch is around the last bearable hours of the outdoors before nightfall. Dinner arrives once it gets dark, since it is too hot to eat in the sun, so we often have a late dinner. Bedtime for me is often once the dishes are cleaned, the meetings are over and most of everybody else is asleep. I do not know what day it is today, I don't know how close we are to*

leaving and I don't quite recall what month we are in now. None of this is important, what is important is that dusk is coming so dinner is soon.

JACK IN THE DESERT: *My phone is my clock. In the city I checked it often and by habit for notifications of one type or another. Noting the time was a perfectly good excuse for this compulsion. But there is no cell reception here, so: habit broken.*

I barely look at the time now that we are out here in the desert.

The increments of time are now told by the sun and the shade. There is short splinter of time when the sun cracks the horizon and the entire desert glows pinky-orange. This is one increment and its my favorite to wake up in. Then there is another, and its longer and golden blue. This increment casts shadows westward and it's when we drink tea and talk in low voices and read or draw. Or hike. Or do physical work. The next increment is long and hot and bright and more challenging than the other ones. We each have our own way of moving through this chunk. And then it jumps to the eastward shadows when the tips of the desert glow golden yellow. This increment is for walks and blends into the next, when the sky is hazy and pastel. Then it's the moon's turn- she holds us in night until its time for the pinky-orange glow again.

-- excerpted group blog post "In Desert Time"
<http://drylab2023.net/2017/06/04/desert-time/>

In drylab2023, the "stage" of the extreme Mojave environment became an important, even vital, variable in the performance of the "now." This was not completely unforeseen—after all, we chose the site because of its remoteness and lack of running water (which we surmised would reinforce the near future water scarcity narrative and inhibit transgressing the project parameters). Our "stage" was surrounded by the recently created Mojave Trails National Monument.¹⁶ Land managed by The Bureau of Land Management abutted the northern side of the property, and an ancient cinder-cone volcano was a bike ride away. An inhabitant of the Mojave desert over many summers,¹⁷ I understood that the heat would become fierce during our project dates. Even with this experience and our expectations, the environment asserted itself in unexpected ways.

As participants grew to better understand their bodies in the environment (both how they physically felt in this new circumstance and how they affected each other), their

experience was deepened and enriched, and their commitment to the experiment strengthened. For example, an installation of hanging teabags became an unstated evolving group artwork. Some participants bonded in the extremes of midday heat by lounging together for hours in a shallow pool of water. By midway through the month, everyone had placed their mattresses in common areas outside, sleeping and dreaming under the stars and alongside each other. Unexpectedly, after the project concluded, some participants expressed a desire to remain at the site, continuing to live in this way.

Before reporting more on project specifics, it is important to note that this use of environment as “stage” is nothing new. When considering the full frame of human history, novelty can instead be located in the *displacement* of the aesthetic gesture from its environment and community into an amphitheater, proscenium, stage or gallery. Nevertheless, the expansiveness of the drylab2023 project (which took place in both private and public spaces across an extended period of time), shaped this piece in important ways. The type of practice that emerged—one with parameters, yet with open-ended outcomes which engaged its participants in a process with natural systems that could lead to their own transformation—recalls the experiments of several earlier California-based artists including Anna Halprin and Allen Kaprow.¹⁸ Halprin’s work (which has only recently come to be celebrated for its influence on the field) articulated an “ethics of embodiment,” where “ethics were instantiated in motion rather than in sedentary thought.”¹⁹ Shunning the New York performance scene, Halprin redirected her entire creative practice away from culminating moments presented on a stage, to running workshops and hosting performance experiments on a tree-pierced deck at her home in the scenic northern Californian hills. As a historian of her practice writes, “the body [...] *is* the environment, the experience of nature, an ecological unit fundamental to communitarian survival.”²⁰

The drylab2023 site was a derelict motel (which provided individual rooms for the participants) and adjacent trailer (which housed the kitchen, bathroom, and some additional shared work spaces). We understood from the start that the individual rooms were not equipped with running water, cooling or internet—though they were lockable and did have electricity to run fans and lights. The shared trailer was identified as the common cooled space, where the internet could be accessed, as well as providing relief from the heat. It became clear after the first week, however, that neither the original plan for the internet

nor the equipment for cooling were fully operational or able to support our comfort.²¹ An “unlimited” data plan and Wi-Fi hotspot ended up being unpredictably spotty in the rural setting, with the maximum monthly data upload limit (detailed in the contract’s fine print) reached within a single evening. Another less spotty provider plan was secured, and a single computer was configured to support rationed access in order to maintain project posting throughout the month. As a result, internet access became another commonly managed, severely limited resource—a difficult challenge for many of our young participants (and an incentive to go into town for shopping trips where cell service was strong and Wi-Fi could be accessed at a local community non-profit space). As the temperature rose to 111F (dangerously hot²²), everyone’s rhythms changed drastically—cooking stopped during daytime hours, all but basic physical activity was restricted to early morning and evening hours, and the entire group moved their mattresses outside to a common sleeping area under the moon and stars (as their individual rooms became stiflingly hot, even at night).

When first encountering their environment (most participants only knew of it from pictures and information presented by the co-directors), participants joined with the co-directors to create a long list of items that needed to be purchased to support their comfort. At their first group meeting, an artist in the group interrupted their impulse to load up a shopping cart, noting that they were surrounded by refuse—both on the extended project site and in the plethora of illegal dump sites that extended just beyond the site boundaries. Why not first explore what needs could be met by repurposing this detritus? This would become the group’s first challenge of living sustainably, within their means—not turning to consumption of new resources for solutions on how to live, but instead applying their creativity and effort toward reconfiguring what they already had, *and* adjusting their desires to fit these limitations. This repurposing can be seen on proud display in the blog post featuring a video “tour” of their newly constructed composting toilet made of discarded tires, rammed earth, “plastic brick” and rusted metal walls arranged in an aesthetically pleasing fashion.²³

The openness of the site boundaries, forced shared common space, limited access to internet, communal eating and decision-making (the participants began with a self-chosen governance structure of consensus with a voting majority rule backup prior to

arriving onsite), and the need to discuss private details related to their bodies and hygiene attendant to their existence together with little water all contributed to an increased intimacy among participants. Since time was one resource that was not in short supply (there were no strict requirements of how participants spent their time each day), issues that arose could be attended to and even resolved without the pressure of being in a rush. The environment supported, even necessitated that they trust each other with their wellbeing. The participants took this seriously and decided to raise the bar on their list of challenges—together they committed to move beyond simply “surviving” the thirty days, and instead to push themselves to live in harmony with one another, not reproducing usual hierarchies or domination.²⁴ They supported this commitment by adding additional participant-only “emotional check-ins” (exclusive of the co-directors) following nightly meetings.

Long walks, group and individual art and sustainability research projects, shared enjoyment of desert flora and fauna, bike rides and vegan recipe discoveries filled the days. Nights were spent sharing dinner, meeting, posting to the site, and star and moon gazing. Most of the participants had never lived this close to “the land” before.

As drylab2023 participants realized how relatively easy it was to navigate the water restrictions, they shifted focus to the much more difficult task of being able to live harmoniously with each other; challenging themselves and each other in new and unexpected ways.

	5/14	5/15	5/16	5/17	5/18	5/19	5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	5/29	5/30	5/31
Poppe	2	3	6	7	9	11	12	14	16	18	21	22	24	26	26			
Jack	2	3	6	7	8	9	10	11	12	13	16	19	21	21	21			
BCC	2	3			6 ^{1/2}	8 ^{1/2}	11 ^{1/2}	11 ^{1/2}	11 ^{1/2}	13 ^{1/2}	15 ^{1/2}	15	17.5	20.5	20.5			
Sof	2	4 ^{1/4}	7	9	11	13	15	17	19	20 ^{3/8}	24	26	29	31				
Kirsten				2	3	5	6	7	8	9	10	13	14	17	19			
Na-ra				1 ^{1/2}	3 ^{1/4}	5 ^{1/4}	6 ^{1/4}	8 ^{1/4}	10 ^{1/4}	13 ^{1/4}	14	15	17	20	22			
Comm-Unit	0	8	4	8	6 ^{1/2}	8	8	10	2	4	7	4	1	4				
Moso	2	1	4	6	9	10	12	14	16	17	18	18	20	23	25			

	5/14	5/15	5/16	5/17	5/18	5/19	5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	5/29	5/30	5/31
Star	1																	
Na-ra																		
Jack	1							1/2										
BCC	1								1									
Sof							2					2.5						
Kirsten																		
Na-ra					1													
Comm-Unit							6											
Moso	2																	

Figure 3: Log book of water collection. Number show the number of gallons banked for each person.

THE ROLE OF THE AUDIENCE

In the introduction to his book-length analysis of contemporary artwork that engages environmental issues, *Decolonizing Nature*, the scholar and theorist T.J. Demos writes of the role of art in a time of climate crisis: “In its most ambitious and far-ranging sense, art holds the promise of initiating exactly these kinds of creative perceptual and philosophical shifts, offering new ways of comprehending ourselves and our relation to the world differently than the destructive traditions of colonizing nature.”²⁵

The drylab2023 project fulfilled this promise among its directors and participants, but what of the “audience”? The participants had an understanding that some friends and family would be tracking their activities through the site (especially as poor and non-existent cell service mitigated against the use of regular communication channels), but as the month progressed and the announcement about the project circulated, the audience expanded. In addition to site statistics that reflected numbers of pages accessed from

various countries,²⁶ audience members were visible when posting comments or questions to the site.

In my own recent series of live-streamed endurance performances,²⁷ I have begun to conceive of my non-proximal audience members as “witnesses” to my activity. In this ongoing work, which I call Data Humanization, I choose a number or data point that troubles or baffles me, and move it through my body via a gesture or series of gestures. The audience is usually not present with me as I perform, but logs on to the live-stream of the event (which can stretch over multiple days and nights). This practice has so far focused on numbers related to the consequences of US military aggression, and are usually quite repetitive; not at all entertaining. Yet the audience logging in feels compelled to watch, often for lengthy periods of time (as evidenced by the viewing access lengths and return rates for logins). This conceptualization of the role of the audience recasts the art event beyond the usual pressures to entertain or stimulate the audience, and any attendant judgment or anticipation. Instead, the audience is implicated in the action and compelled to remain and witness the activity. I was fascinated to discover Halprin had also asserted an interest in the idea of her audience as witness. In Halprin’s words, “a witness has to have a commitment.”²⁸ In the instance of drylab2023, those who made the effort to witness the performance over the course of the month were rewarded with the realization of the subtle yet powerful transformations taking place in the participants. For many in the audience, as evidenced through comments on blog posts, the women became proxies for their own longing to change their habits; understanding that living within a more conscious ecological frame is not just desirable but necessary if we hope to sustain human life beyond this century.

During the drylab2023 project, the audience became more than witnesses when they directed questions to the group via a Q+A area on the project website. Each evening the participants would take turns answering these queries, with thorny questions becoming topics of discussion. One question, in particular, continued to challenge the participants: “How do you navigate your own privilege playing out a future scenario when this is many people’s lived reality?” The participants had considered the general question of privilege prior to commencing the project and developed some thoughts as individuals. But prompted by their audience, they decided to address the question as a group. Following

several meetings where this was a main topic for discussion, several participants drafted a response, which was then further discussed, amended, approved by the group and finally posted. I include an excerpt here as it marks an important transition for the group in how they came to understand the purpose of their time together and introduces another role that an audience can take in such an experiment—that of the active questioner/shaper of action and instigator of debate.

Q: “How do you navigate your own privilege playing out a future scenario when this is many people’s lived reality?”

A: We recognize we are very privileged through many layers, we are being educated at a university and we have the ability to leave if we wanted to, we recognize this is other people’s reality and they do not have the option to quit. Most of all, we come from places with running water, a huge privilege.

The more money you have the more water you use, there is a direct correlation between wealth and water use. If we are the ones using the most resources, then we are the ones who need to learn how to use less. If privileged people won’t change their water usage, then inequalities won’t change. Drylab is a simulation of the work that privileged folks ought to be doing: experiencing water scarcity and sustainable living, phenomena which we are currently free to dismiss. We also hope to bring this information not to people who already live in scarcity, but to other privileged people who are wasteful with their water and have never had to experience scarcity or consider the ramifications of their over consumption. We hope to use our privilege and platform that we have created to bring awareness to these issues.

As a privileged society, our lifestyles are problematic because they are unsustainable. We are considered to be of a “higher standard of living,” when in reality, these supposed higher standards of living do not bring us happiness. It is the old ways, the resourceful ways and the indigenous ways that are now solutions which we must revert to in order to navigate this scarcity. It is going to take humility on both sides, the ones that were wrong and the ones that were wronged so that we can work together and learn from each other and relearn the indigenous sustainable ways. This is also going to take privileged people giving up some of their privileges, such as not having showers every day or green lawns.

We are practicing empathy, not sympathy, putting our bodies on the line to better understand other people's reality. [...]

This is not just an exercise on eating only local food (no coffee, chocolate, sugar, tropical fruits like bananas), and eating water wise food (vegan, gluten free and no rice), but also a huge exercise in community building, learning how to not be individualistic and how to work together. [...] We have had to learn how to be mindful with each other, to be kind to each other, and to embrace each other's needs as our own.

-- excerpted answer, <http://drylab2023.net/questions/>

CONCLUSION

Can this type of immersive learning experiment be claimed as performance? Director and performance scholar Richard Schechner's conception of "performance" that evinces a broad inclusivity applies well here—allowing for the full expression of performance practices understood as dynamically shifting within an "axiom of frames."²⁹ Using his rubric, drylab2023 is perched somewhere between play activity and ritual—and transformation may be primarily located in the self. In this way, the work is similar to the work of Halprin when she writes "my concern is form in nature—like the structure of a plant—not in its outer appearance, but in its internal growth process."³⁰

And yet, for many of these participants (and the co-directors and audience witnesses), the dance/performance/experience extended beyond the conclusion of the project. During the project month, many participants (and by extension, audience members) were surprised to learn that they could live under extremes of scarcity and heat *and* emerge both enriched and enlivened. This happened because of their experience of community-building and their intense immersion in and negotiation with the desert. It took all thirty days, but by the end of the time period, this small group had grown to live in the knowledge that we drink the same water, breathe the same air, walk upon the same earth, and affect each other's spirits.³¹

I am heartened to know that scholars and public intellectuals like Demos and Naomi Klein are actively considering the importance of imaginative practices and performative models in their influential presentations and publications. In the final pages of *This*

Changes Everything Klein writes, “fundamentally, the task is to articulate not just an alternative set of policy proposals, but an *alternative worldview* to rival the one at the heart of the ecological crisis—embedded in interdependence rather than hyper-individualism, reciprocity rather than dominance, and cooperation rather than hierarchy. This is required not only to create a political context to dramatically lower emissions, but also to help us cope with the disasters we can no longer avoid.”³²

As usual, there remain both lessons learned and more questions: What types of performance and art forms will extreme changes in climate instigate? What new forms of criticism and conceptions of audience need to be developed to support the development and proliferation of these forms? How can we both utilize and steward our natural resources as partners in these processes of discovery and enactment? One of the clear lessons learned from drylab2023 that we will carry with us is the extent to which speculative performance (combining body-based practices and imaginative world-building) can catalyze personal and interpersonal transformation: the kind of transformation needed to prepare us to confront the dramatic changes ahead.

¹ The average daily water usage per person in the US is 80-100 gallons. Most of this goes toward bathing/showering and flushing of toilets.

² I am indebted to Jillian Sandell for her notes on an early draft of this paper that helped hone these claims.

³ The adoption of “future fictions” and “scenario development” by business, government, and insurance entities during the past decade raises ethical questions for the artist creating what historian/theorist TJ Demos calls “speculative realisms.” This is the subject of forthcoming research by myself and co-PI Dr. Michael Bennet. For an earlier analysis of this trend see Rosalyn Berne “Science Fiction, Nano-ethics, and the Moral Imagination,” *Presenting Futures* (Springer Netherlands, 2008): 291-302.

⁴ MATZA is an ongoing art/science residency project directed by Séverin Guelpa. see <https://matza.net> for more information

⁵ I directed the live TV program “El Naftazteca: Cyber-Aztec TV for 2000 A.D.” (1995) featuring Guillermo Gomez-Peña, and wrote, conceived and directed the iterative speculative cinema project “SPECFLIC” versions 1.0, 1.9, 2.0, 2.5 and 2.6 (2005-2013)

⁶ see John Anderies and Marco Janssen, *Sustaining the Commons* (Minneapolis: Center for Open Education, 2013). For more information about Eleanor Ostrom see https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2009/ostrom-facts.html

⁷ The “tragedy of the commons” had been an accepted rule within economic thought since it was introduced in the 1830s by influential economic writer William Forster Lloyd.

Simply put, the phrase represents the idea that when faced with a shared common and vital resource, people will act independently and in their own interest leading to the diminishment and eventual loss of that resource. Lloyd's ideas were introduced and expanded into contemporary discourse around sustainability in the late 1990s by ecologist Garrett Hardin.

- ⁸ Stephen Duncombe, *Dream: Re-Imagining Progressive Politics in an Age of Fantasy*, (New York: The New Press, 2007)
- ⁹ Andrew Boyd and Dave Oswald Mitchell eds., *Beautiful Trouble: A Toolbox for Revolution* (New York and London: OR Books, 2013): 103,104.
- ¹⁰ Since the project was conducted during a thirty-day period, there was not enough time to grow and harvest our own food. Food was sourced from local, organic and NCO (pesticide free) sources in and around the small community of Joshua Tree, 75 miles away from the site. Every three or four days a subgroup of participants would undertake this travel, often timed with the weekly farmers market.
- ¹¹ Drylab2023 was made possible through a combination of small grants from the School of Sustainability at Arizona State University and the Foundation for Scientific Symbiosis and research funds associated with my appointment as the Katherine K. Herberger endowed chair of fine arts
- ¹² In addition to the participants and co-directors, also onsite for portions of the project time period were the host of MATZA Amboy artist Séverin Guelpa and Lucha Pfister (the spouse of Dr. Janssen, who was our webmaster and is a trained physician).
- ¹³ In alphabetical order, the drylab2023 participants were: Krista L. Davis (aka Jack in the Desert); Shalae Flores (aka Na.ru); Willa Gibbs (aka Saf); Molly Koehn (aka Moso); Valerie Lyons (aka BCC:); Cydnei Mallory (aka Skip); Sydney Rood (aka Kirsten); and Sarra Tekola (aka Nayara)
- ¹⁴ I wrote a more detailed backstory after participants were selected. It was discussed and accepted by the group during weekly meetings that happened in advance of our time on site.
- ¹⁵ A remarkable outcome was that the four gallons of water a day was not a real constraint. The participants organized themselves in such a way that they used on average about two to two-and-a-half gallons of water a day.
- ¹⁶ One of many monuments whose boundaries are currently under review by the US Department of Interior, see <https://www.doi.gov/pressreleases/interior-department-releases-list-monuments-under-review-announces-first-ever-formal>
- ¹⁷ I have maintained a studio in the high desert just outside Joshua Tree National Park since 1996.
- ¹⁸ Though Allen Kaprow's work will not be discussed at length here, the exceptionalism of his performances can be seen in how they are noted by Schechner to fall outside the boundaries of performance practice rubric. This is echoed in the ways that drylab2023 elides these frames.
- ¹⁹ Ninotchka Bennahum, "Anna Halprin's Radical Body in Motion," *Radical Bodies: Anna Halprin, Simone Forti, and Yvonne Rainer in California and New York, 1955-1972* (Oakland: University of California Press, 2017): 57.
- ²⁰ Bennahum, 63.
- ²¹ When on site, the co-directors agreed to live within the same water and diet parameters.

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- ²² In fact, the only emergency that occurred onsite was heat related. I was running around on an extremely hot day checking on everyone and warning them of the dangers of heat stroke/exhaustion, and though I stayed hydrated, I neglected to replenish my electrolytes. I began to feel cold and became nauseous. Thankfully the spouse of co-director Janssen (a trained physician) was also onsite and assessed my condition (a temperature of 101.5) and immediately swung into action placing ice in my armpit and groin and soaking me with cold water. I left site the next day and returned a few days later once my temperature began to regulate itself again. The scare served to humble me – a long-term desert dweller! – and provided a demonstration to the participants of both the seriousness of the heat and how quickly even someone perceived of as strong can be taken down.
- ²³ The video can be viewed at <http://drylab2023.net/2017/05/31/grand-opening/>
- ²⁴ This process was assisted by the experience and training of one participant in conflict resolution and mediation.
- ²⁵ T.J. Demos *Decolonizing Nature: Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016): 19.
- ²⁶ Site visitors averaging 50-100 each day, were primarily based in the US, but the site was also accessed from 15 other countries including Canada, China, Malaysia, The Phillipines, Sri Lanka, Brazil, Israel, France, and Sweden.
- ²⁷ My *Data Humanization Project* series – see “3 Days of Counting 7 Years of War,” “56 Hours – NOT IN MY NAME,” and “The Sky is Falling...” at <http://www.adrienejenik.net/>
- ²⁸ Bennahum, 83.
- ²⁹ Richard Schechner, *Performance Theory* (London and New York: Routledge, 1988) Figures 1.2, 1.3 and 1.4, 16-17.
- ³⁰ Bennahum, 75.
- ³¹ These phrases formed the basis of a simple ritual the group held to close the project. Comparisons of pre- and post- water footprint data reveal a 90% reduction in water usage patterns. Several participants (including the author) have shifted to eating vegan following the project, and a deep level of intimacy and respect is in evidence among the women when they are in a shared spaced, like a recent roundtable on the project at the 2017 Society of Literature, Science and Art conference.
- ³² Naomi Klein, *This Changes Everything: Capitalism vs. The Climate* (New York: Simon & Schuster, 2014): 462, *emphasis* mine.