

The Skunkwork of Ecological Engagement

John Ackerman,
*Univeristy of Colorado,
Boulder*

**Caroline Gottschalk
Druschke,**
*University of Rhode
Island*

**Bridie McGreavy,
University of Maine
& Leah Sprain,**
*University of Colorado,
Boulder*

Ecological engagement is about attending to the possibilities of dwelling in a place; skunkwork is a way of orienting this dwelling. Skunkwork refers to creative, self-coordinated, collective work in informal spaces of learning and reminds us that ecologically attuned work in the world can promote unexpected, yet collectively desired, change. In this essay, we describe how we used skunkwork to orient our ecological engagement in two workshops on ‘community resilience.’ In both workshops, Boulder Creek became our commonplace, with its history of flooding and abatements as well as one city’s planning and management of crisis and sustainability. We draw from our respective home ecologies and our collective experiences in these workshops to highlight how four attributes of skunkwork and ecological engagement, namely proximity, movement, ecological narration, and weak theory, contribute to community engagement scholarship and advocacy.

“Rhetorical ecologies” make visible an interdependency between discursive circulation within a first local and then larger community and the urban and earthly locales that give local talk or a civic

conversation their substance and credence. As defined by Edbauer (2005), rhetorical ecologies extend the concomitant attributes of rhetoric and writing in context—as literacy, as writing, as dialogue, as deliberation—to embrace their complicity with ecological scenes and the policies and economics of consequence therein. Although rhetorical situations or community-based writing practices would appear to be open to material ecologies—we doubt anyone who practices community engagement would deny the value of natural surroundings—rhetorical ecologies make material and discursive connections much more explicit. Edbauer frames her proposal for rhetorical ecologies carefully, so that rhetorical situations, counter/publics, and discursive communities coincide consequentially with lived and built ecologies and foreground a common domain of affect, flux, history, and movement.

We agree that material and immaterial agencies coexist, yet to discern why and how they matter requires a different kind of labor, working from different kinds of exposure if the motive for practice is adaptation within complex ecological systems. Edbauer underscores the ontological shift from single-sited studies to interconnection, from stable entities to those in constant circulation and from socially-indexed identities to networks of affiliation. We share her critical discernment of the political and economic consequences in affective, ecological events that rise to the threshold of public concern and action. What is needed, however, is a critical, embodied process of discovery that keeps a local ecology at the center of analysis and practice because that ecological system—a river drainage, a floodplain, a forest, a suburban tract, and the humans and other-than-humans within it—must retain the status of the object or field of analysis to sustain our attention. Edbauer's object was, ultimately, discursive—"keep Austin weird"—but equally consequential was Austin's exponential economic growth since the 1990s and the pressures placed on the Colorado River and Lake Austin.

Places—both earthly and built—substantiate any rhetorical ecology worth representing to others, and as such they are steadfastly "polyvalent" as a multiplicity of bodies, psyches, movements, forms, sexualities, and the fullest complement of ecological agencies and technological arrays (Casey, 1998). Polyvalence suggests to us that

the writer, the critic, the resident, the manager, or the entrepreneur cannot simply read or think one's way into rhetorical, ecological perception and responsibility. One must perform in place and spend time in residence, involving one's self and community in the biological attributes, rhythms, and circulation that alert people to the vitality and sustenance provided by an ecology, as well as its fragility and endangerment. Ecologies do not stand by in silent repose while a cacophonous public life churns away, and so they must be carefully attended to and respectfully engaged as work.

The work we foreground in this article is "skunkwork," a concept that was employed to describe informal spaces of learning, creativity, self-coordination, and transformation. It has since been adopted, as Gunderson (1999) shows, to invent innovative social networks in relation to dire ecological events, such as flooding along the front range in Colorado, wildfires in California and the Northwest, or hurricanes along the shorelines of New Jersey or Louisiana. Trauma of this scale crashes through received boundaries between natural and human-made terrain and between human concerns and ecological capacity. The basis for resilient, adaptive, appropriate human responses to ecological calamity reflects the timing, morphology, and complexity of the disruptive event to alter, dramatically and sometimes tragically, the scale and complicity of those effected.

The term "skunkwork" appeared first in the early 20th century cartoons of Al Capp whose "skonk works," or the illegal bootlegging of "kickapoo joy juice," appeared in the "Lil Abner" comic strip. *Skonk works* were subversively goofy and became "skunkwork" to describe secretive research and development in the private sector and with military contractors (Goldstein, 2008). Environmental studies rehabilitated the term further to foreground positive attributes of "coproduction" and the capricious events from which social networks coalesce to "think flexibly and creatively across organizational barriers" (Goldstein, 2009). This adjustment was timely because **matters** of ecological disturbance (neither inherently positive or negative) **alter** the basis for human interaction, making it "ambient" in newly political and practical ways (Rickert, 2013).

We propose that *skunkwork* adds to the family of terms and practices that define community engagement in the field of Rhetoric and Composition and more broadly. Skunkwork sponsors different kinds of social relations respecting different kinds of social and ecological connection. The 2016 Conference on College Composition and Communication Statement on Community-Engaged Projects in Rhetoric and Composition points to many of the attributes of resilient communities that can emerge from skunkwork: the reciprocal benefits of community enhancement; partnerships that foster community responsibility and the public good. This statement is robust and germane to our scholarly and pedagogical projects, yet *the work* in skunkwork shifts the focus to pending or actual systemic perturbations, for example when climatic patterns led to historic flooding along the Front Range in Colorado in 2013. This *work* must occur outside the boundaries of organizational control, and it aspires to think and act creatively in response to different kinds of problems and toward different kinds of inclusive participation (Sprain & Carcasson, 2013).

Our own moment of flexible adaptation occurred through two conference events in 2015, the international meeting of the Conference on Communication and the Environment (COCE), followed shortly by the inaugural Conference on Community Writing (CCW), both held in Boulder, Colorado. We delivered two workshops on ‘community resilience,’ first for an international audience of resiliency experts and enthusiasts and then for an audience of environmentally attuned scholars and teachers in rhetoric and writing. Our primary motive and scene was not, initially, community engagement *per se* but was a “watershed as common-place” (Druschke, 2013). We took as our commonplace Boulder Creek with its history of flooding and abatements, as well as one city’s planning and management of crisis and sustainability. For this article, we share four attributes from those workshops applicable to resilient communities and animate the *skunkwork* we experienced across these workshops that could return to our home ecologies and academic projects. After a brief description of the workshops, we turn to *proximity*, *movement*, *ecological narration*, and *weak theory* to enrich further the ecological happenstance of skunkwork and to contribute to community engagement scholarship and advocacy.

WORKSHOPS ON RESILIENT COMMUNITIES

The 2015 Conference on Community Writing (CCW) featured four ‘deep think tanks,’ in-depth workshops that were, for us and for conference attendees, opportunities to consolidate conversations encountered at the conference while delving into specific topics relevant to community engagement. Our workshop was envisioned as an exploration into how ‘resilient communities’ are conceived and brought into being through civic engagement. We knew how to connect outreach between campuses and cities, but we wanted to invest more directly in ecological policy that reaches to different environs across the US and beyond. Our site, our *topos*, was a confluence in multiple ways. We met by Boulder Creek that flooded the city in 2013; we sat in the city’s Council Chambers; we explored the proximity between campus, city, and creek. Both workshops were designed to practice the arts of inquiry and presence and foreground the bio-logics of a community, and we looked for images, stories, data, and practices that promised to elevate what communities hold dear rather than discussing resilience as abstract, scientific frame.

The COCE workshop oriented participants to the co-construction of dialogue through a graphic recorder who captured the emergent discussion in real time through graphic murals (Figure 1) rather than presenting PowerPoint slides crafted in isolation. Co-construction became an iterative exercise of people from different ecological, economic, and professional orientations working together in place—even if most of that work was translational beyond Boulder’s boundaries. Workshops come and go in higher education and city governance, yet we propose that the labor involved, the dialogues heard, and the places encountered are worthy of closer attention with the overarching motive to find ‘natural’ and sustainable connections between engaged pedagogy, participatory policy making, and ecological conservation and management. The duality of town and gown rang hollow in the presence of rivers, residents, and visitors—everyone brought their own history of place, their own economic bedevilmments, their own aspirations for inclusion.

Our skunkwork in designing these workshops led us to ask how we could involve people in Boulder’s social and ecological environs, treating the creek and its flood zone as hypothetical on the one hand

but also, importantly, analogical on the other. The expressed purpose of our workshops on resilient communities was to forge partnerships, locally and globally and then across different spheres of exposure from the expert in resilience assessment or disaster management to the teacher, the student, the resident, the small business owner, and so on. Yet we also sought a different partnership with a local ecological system and then analogically to assume that one ecological system, for example a flood zone in Boulder, Colorado, would map onto other hydrological and urban systems. To confect this ecologically entwined relationship, we broke from typical conference practices—by leaving the campus, walking as a group along Boulder Creek, convening in small groups inside City Council Chambers and out—to try to make ecological presence and history, consequence and adaptability, the object of our critical and pedagogical attention. We now share four attributes of skunkwork, as they emerged through the workshop process and that we assign to skunkwork more generally for ecological engagement: proximity, movement, ecological narration, and “weak theory” (Gibson-Graham, 2006).

PROXIMITY

We had to disturb the obviousness and thus invisibility of dwelling near water, in pipe or stream, an obviousness that points to an endangered condition in late modern life. Not only is water endangered and a vital source of life in the world, it circulates through urban environments often treated as a commodity and divided into different jurisdictions—those who monitor its use for recreation, for flood abatement, for health—all of which are essential to how a city manages a natural resource but distinct from the bio-logics of water in circulation that sustain and enhance everyday life. Both workshops, in retrospect, required a proxemic relation to ecological systems in civilized spaces as the basis for generative dialogue and local action, the imaginings of new ways to dwell and act. Our consortium required different kinds of affiliations and dialogues across divides (across disciplines, across campus, between campus and local communities), as well as with natural and built environments. The difference between one voice or another was clarified in the presence of water in motion—without proximity the language depends on distant recollection.

We suggest that any single ecological or economic policy debate—the kinds of social controversies and biological spectacles that energize an engaged classroom or community partnership—requires a local and global regionalism (Rice, 2012) that finds commonality not in life along a single stream but across continental watersheds and ecological hemispheres. We heard and felt the necessity of a territorial attunement that jointly configured snowmelt and water tables, potable water and sewage treatment, the economies of fishing and snowpack—a territorial attunement based on affective ecologies that connected one water source to another, one story to another, one expertise to another—to pry ourselves away from the limiting effects of localized expertise in times of planetary and systemic duress.

The COCE workshop in June put specialists in resilience assessment in dialogue with city governance in the disciplinary context of environmental communication. Ecological scholars and researchers gathered from universities across the US who work with governmental agencies (e.g., World Health Organization, NASA Earth Science Education Program) to dialogue with Boulder managers working in public works, flood recovery, and sustainability. Because the field of Rhetoric and Composition gathered at CCW, four months later, we had no shortage of experts on service learning, community partnerships, and local advocacy, once more in the company of city officials who told their stories of flood preparations and unimagined consequences of extreme weather and mountain runoff for canals and streams that pulse through the city's floodplain. As productively cacophonous as both these related groups might sound, a third authority emerged with coalescent force, no matter the region, no matter the scientific or linguistic expertise—the motive and medium for coalescence was for all of us the rivers, tide pools, estuaries, canals, waste systems, and coastal shores that brought a common frame of reference, a common vitality of exposure, and a common limitation of the figurative capacity of representation (McGreavy, 2016).

It is tempting to collapse all social and ecological complicity into a single term, such as “interconnection” or “network,” but we thought it more useful to graphically capture at least some of the proxemic relations that mattered to participants. We share one of five graphic panels by Karina Branson (<http://www.converssketch.com/>)

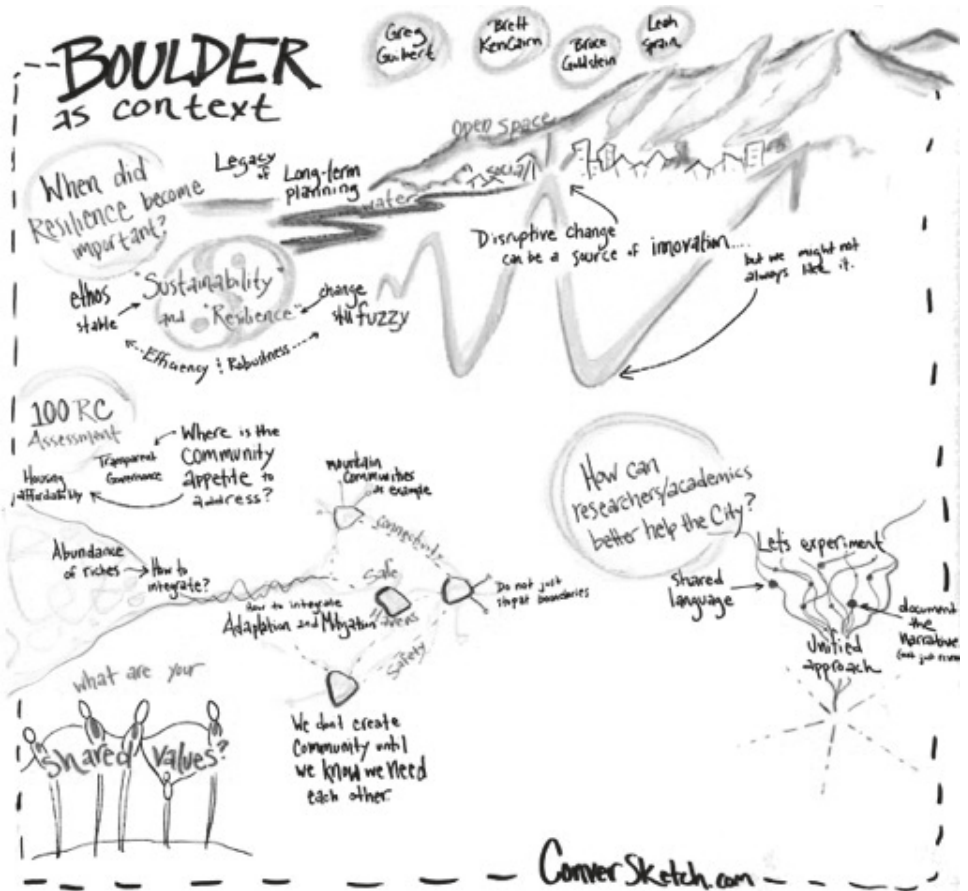


Figure 1: Graphic recording about resilience in Boulder from the COCE workshop.

(Figure 1) that connects the city to the Flatiron mountain range, Boulder Creek to “disruptive change,” shared values to geographic tolerances, experts to novices who know the creek differently, and experimentation to the role of shared language, shared abundances, and a shared commitment to community resilience in the ideal and as a daily practice. The proxemics for us were geographic as well as institutional or logical.

Two days and five panels later, resilience became more graphically rich because abstract language gave way to the sound and touch of a river system analogic to working together in places near and far.

MOVEMENT

There are a host of proximities in play for any sort of consequential ecological engagement, and the challenges are in finding the right relations, to remember or capture them in some archival way for engagement and then bring them closer in mind and in the body collective. Across our collaborations, we found movement to be a critical practice to make sure our bodies were in play and to find commonality across our distinct ecological systems and locales. One of the key tenets of the 100 Resilient Communities (100RC) project that included Boulder was learning about a socio-ecological system and how to live resiliently within it. To be near the creek, we had to walk to it and in it; to sense and measure the powers of hydrological rhythm and circulation, we had to traverse it: *we sought a peripatetic* relation among ourselves, always on the move and in parallel with the pulsing fluctuation known to the creek. *Peripatesis* for Aristotle meant learning from the sage while walking together, but for us, the sage we needed to learn from was the creek and its banks and their proximity to the city, the universities, and analogous spaces near and far. Boulder Creek was, for the day, our resident ecological authority given its power to shatter the spaces that separate natural and built features of life in the city, including our personal identities and titles. And by granting that authority, by paying close attention to what a river or tide pool or shoreline might say, ecological systems were pluralized and diversified—they all claimed a seat at the table.

For the COCE workshop, we realized that the pathway between campus and the city, a link between the conference room with its structured learning spaces and the creek banks, needed to be forged, so we met at the Boulder Public Library. For the CCW workshop four months later, we met on campus, but our first task was to stand, to greet, to leave, and to walk down Broadway to the Boulder Creek path and bridge to the city's Council Chambers within earshot of the creek. We asked our participants to walk with first, one person and then another and answer the question: how does resiliency appear in your homelands? As our brief records demonstrate, to walk in

someone else's city brought about nervous chatter and spatial transgressions. It brought out the fragility of community relations on the fly and prompted memories of home (<https://storify.com/rhodycaroline/resilient-communities-deepthink-tank>). We proposed, and we enjoyed, a commonality of territorial exposure for the sake of teaching, assessment, policy debate, or residential attunement.

Peripatesis, by necessity, reveals an authority given place, and there could be the inklings of a kind of ecological wisdom learned over time then re-acquired through movement near, through, and toward earthly and worldly ecologies. We borrowed an ethic of exposure shared from Apache tribal customs and articulated by Basso (1996) for both workshops: there is learning to be found in collective movement across different scenes and locales. Bodily movement in the most practical sense pulled currents into alignment: a common traverse from campus to the river in the city, commonplace tales of ecological duress around the work or home life. The scale of the body's movement, so present yet so obscured by mindful behavior can miss that "In the whole context of a whole universe in motion, the human body becomes a small-scale version of motion with its own principles" (Hawhee, 2009, p. 337). As we walked, we began to sense the possibility of a shared ecological imaginary that brought our distant worlds closer.

ECOLOGICAL NARRATION

Pausing before the turbulent water in Boulder Creek in June and its quiet eddies in late fall, our skunkwork required ecological reflection and biological recapture. People wanted to talk about places they hailed from and places in need of care or under duress. Workshops on resilient communities imply a commonplace of awareness to ordinary features, the light shadow down an alleyway, or the time spent learning how to engage the places of our origin. We cannot replicate all the stories that needed telling, but to stand in for those now silent, here are ours.

Water and Mud in Western and Coastal Maine (Bridie McGreavy)

I grew up on the edge of a floodplain of the Saco River, a large watershed that drains much of western Maine and parts of New Hampshire. In April, the low areas behind our house would fill with

little pools not much bigger than puddles that remained wet into the summer. A few weeks into frog chorus season, my sisters and I would clamber down the steep banks to the floodplain in search of egg masses which we would collect and watch hatch in buckets on our porch. Amphibians, with their dual lives in water and on land and their propensity for metamorphosis, are a material incarnation of liminality.

I learned later in life that the emergence of frog song was connected with a natural phenomenon known as Big Night: the annual migration of frogs and salamanders to vernal pools, small wetlands where they mate and lay eggs. Big Night occurs during the first warm rain of spring. Big Night is that evening when we step out into the rain and can feel spring seep into our lungs. This is the night when we can, in a bodily way, remember the movement of our planet around its sun. This remembering is, as I imagine it, similar to how frogs, salamanders, and other sentient beings remember their migrations: navigating by stars and smells and other sensate cues. When frogs sense this seasonal shift, they start to sing. The chorus, for me, has become one way of keeping time following a different rhythm: embodied, sonic, cyclical.

Following frog song down into the river floodplain was the first of many migrations to these places that exist in the sweet spot between stability and change. I started by following salamanders, and I now follow tides too, working with clam diggers who work in the most liminal of habitats: intertidal mudflats that on twice daily cycles completely reconfigure their material composition. In seeking these liminal territories, I have learned that my capacity to do anything—be it organize a group to go out and meet the spring rains and save salamanders from getting hit by cars or schedule a meeting to make progress on opening clam flats that have long been closed due to pollution—depends on a vast set of material interconnections, processes, and patterns. Getting a finer-grained and embodied sense of some of these patterns has helped me learn where to go, when, and with whom (human and otherwise) and in doing so, how to work with the world to become something different, and maybe more sustainable.

Haunted by Waters (Caroline Gottschalk Druschke)

The rhythms of my life have always been organized around rivers. In my earliest memory, I'm cross-legged on the cold aluminum bottom of a canoe on a hot July day, pebbles cutting into my legs, eyes not quite up to the gunwales. I feel chilled metal, sharp rocks, drops of water off my dad's paddle from the stern. I hear birds, other paddlers, paddles scraping against the sides of the canoe, water. And I'm pulled downstream in the quick flow of western Michigan's Pere Marquette River. An effortless migration.

I returned to that river every summer, fascinated first by the way its strong, cold current would wind its way through pools and riffles, eventually linking up with Lake Michigan, the body of water I swam in—and sometimes got sick from—during my regular life in Chicago. Later, I learned about the seasonal rhythms of insect hatches and their perfect symmetry with the migrations of trout and salmon that populated that river, introduced in the last century but pulling migrating fishermen from around the country to its banks every fall and spring no matter their nativity—the central role of circulation, rhythm, and flow.

I carried that orientation to eastern Iowa, where my knowledge of migrating fish was useless, but I learned intimately about—and tried to provide solutions to—a new migration as farmers broadcast pesticides and synthetic fertilizers onto their fields that leached into Iowa's creeks and rivers with every spring rain and strangled aquatic life from Iowa to the Gulf of Mexico. I then left the Mississippi River watershed for coastal Rhode Island and encountered—on my first day—a large man balancing on a small board over a medium sized mill dam, hoisting fish over his head because tens of thousands of migrating river herring were stuck below this dam each year on their way to spawn upstream. This dam, river, fish, town became my place to dwell.

I've waded that river with my two sons and watched them get sick—like I used to—from the body of water they love. I've been reminded of the porosity of the human body and the bacteria with whom we always co-exist. Rivers have taught me patience and seasonal rhythm. Lunar cycles and fish reproduction. Visibility and invisibility. The

increasingly syncopated rhythm of their 100 year floods: always—but now visibly so—a measure of intensity, not of time. Flows of capital, fish, nutrients, sediment, contaminants, people, ideas. Possibilities for community action, pedagogy, human-fish connection, policymaking, science communication, interspecies communication. Hope.

River Towns (John Ackerman)

Listening to colleagues, kneeling beside a creek in Boulder, I admit that much of what I do for the university does not begin, nor end, with an ecological system nor water. Upon reflection, however, water ways are constant, pulsing at the periphery of my academic work that looks at the rise and fall of urban neighborhoods and the often awkward policy realms that connect a campus to its host city or county or region. My writing about cities brings rivers and neighborhoods into closer syncopation, though I didn't think to frame it that way. I suspect there is a re-reading of almost any theory and description to better capture the daily dialogues we have with local ecologies, silence by over-thinking this, or over-working that.

The workshops not only reminded me that water was everywhere in my upbringing in the Western Missouri; it coursed through every degree earned, every study conducted, every document written, every policy debated, and it would be my loss to forget that presence. My childhood was graced with hot July afternoons, with burgeoning cloud systems and air too thick to breathe. I'd sit beside a neighborhood pond, where I tossed rocks to skip over the top or plumb the depths. I fished for perch and skated in the winter, unaware that this pond was built by a farmer, one of millions of artificial ponds that in time fade away from sediment or worthlessness when the farms turn to housing and retail tracts. My graduate work in Pittsburgh occurred at the confluence of the Cuyahoga and the Monongahela rivers, the origins of the Ohio that flows in fettered ways to the Gulf. My fieldwork in late-industrial neighborhoods depends upon the Cuyahoga River to connect the now extinct canal system in Portage Country with the placid estuaries that fade into Lake Erie in Cleveland.

There is no city, no neighborhood, no campus, nor jurisdictional authority, no economic matrix without a river or body of water in sight—our history of expropriated rivers, streams, and lakes as

industrial commodities, yet they archive local history as much as any library or archive. No *mere* history in this—if you want to know how cities produce life or deny it, go down to the river or the lake or the stream and look to the miracle of clean water under tap to consider water’s inextricable capacity to make life possible. Put your toes in the water and look upstream and beyond the banks to find the vitality of your neighborhood and to listen to its collective force.

Flooding and scarcity along Colorado’s Front Range (Leah Sprain)

I grew up in the shadow of a historic flood. Heavy mountain rains funneled into the Big Thompson Canyon creating a 20-foot wall of water that would later be known as Colorado’s deadliest flash flood in recorded history. Born four years later, we didn’t talk much about floods except when we glanced at signs in the canyon to “climb to safety.” In the semi-arid desert landscape, rain and snow were monitored and celebrated. Water seemed most destructive when it didn’t come. When history-making rains threatened my August wedding, I cheerfully told out of town guests to be prepared for weather: Coloradoans are always thankful for rain. I maintained this stance until the 2013 flood “ravaged” the riverside park where I got married in front of a sensible crowd dressed in layers and galoshes purchased that morning at Target. The park has not yet reopened.

Dwelling in Colorado now means talking about the flood, rebuilding and recovering, recognizing how flood damage has not been shared equally. I hiked with a naturalist-lead group in Boulder’s open space where local residents returned to trails that had been closed for a year to see Volkswagen-sized boulders in now dry streambeds and ate popcorn at a community meeting as citizen committees shared plans for rebuilding while noting not all residents returned home. This fieldwork informed an interdisciplinary project that designed a game on flood risk to get people talking about flood damage. Some conversations need prompting. Others are demanded like when a community member interrupted a public forum on community resilience I facilitated last week to demand: Where does flooding fit in? Floods are how Boulder got money for resilience.

As a high school student enrolled in the Thompson River Project, I did citizen science before I knew that was a thing—learning how to test

for nitrogen, phosphate, fecal coliform, and more, while contributing this data to official channels that enabled raising the regulatory classification of the river (a truly rare occurrence). Some relationships between ecology and policy are well-trod; sometimes water, flooding, creates new relationships. Environmental communication means the messy work of finding new ways to dwell in this dynamic place that raised me.

WEAK THEORY

We propose that the skunkwork of ecological connectivity, in moments of change or duress, is relevant to community engagement for several reasons we trust are now more apparent. It invites active engagements with places near and far as it invites movement and reflection within those places. Skunkwork in ecological networking emphasizes flexibility, creativity, and transformation when adaptation is of necessity, and skunkwork fosters an acuity to making use of the place and time to acquire diverse sets of assumptions and practices. We seek skunkwork as respectfully post-human because it actively dislodges the self and the arrogance of mastery over either social or ecological scenes. We seek a participatory engagement that does not always begin and end with a well-defined problem or plan. When walking or traversing, the outcome of movement is wrapped up in the doing or being open to exposure and recollection. It is an intentional intervention that is open to surprise. It is important to practice relations and movements though less-charted regions because, in times of planetary duress, with so much pain and inequity circulating, we cannot walk the same paths, think the same thoughts, depend on the old bonds, and lose track of where we reside.

Gibson-Graham (2006) proposes weak theory (as opposed to hide-bound strong theories of structure and blame) to “deexoticize power” and to recover more local, inclusive economies (p. 7). Weak theory is one of the results of skunkwork, taking rudimentary form through the habits of bodily exposure that we’ve forgotten along the way and that are common with people from distant environs. If rivers are to be protected, we have to wade and work in those waters; if shorelines are to be adapted, we have to learn from and create with humans and non-humans who live in those places and the natural and built infrastructure they live within; if cities are to remain or

become healthy, we have to take seriously our residence in them and work with those employed to enhance them and with the bodies, bacteria, materials, and chemicals that contribute to or detract from their health.

We understand that some readers might question the practical value of telling stories about human ecologies in the face of disaster, but ecological engagement depends on place-based memories in addition to all the archives of knowledge and policy that shape university life and the management of cities and waterways. Water—as would be true for any natural or built system—has the power to enforce a lively, structuring agency to frame a community’s orientation to labor and schooling; to privilege forgotten identities and heritages; to alter economic vitality in regional and global spaces; and to guide the master plans for parks and civic centers and neighborhoods. We embrace the fullest methodologies for community engagement, but engagement for us would never deny the collective powers of articulation and illumination granted by the natural and built ecologies that greet each waking day (Ackerman, 2003).

Were we to conduct our workshops again, we would invite the same array of people, adding more artists, children, financiers, the police—working people of all walks of life who share common proximities and exposure to rivers (and lakes, canals, mudflats). We would listen to experts and stand before them as experts in the analytics and vocalization of locality. We imagine giving more time to *peripatesis* as a collective project of arriving and departing, of working, playing, and learning in the hydrological systems that circulate through our cities and neighborhoods. We would practice the virtualizing analogic that affect theory induces to compare rivers to boulevards, shorelines to neighborhood boundaries, and writing to mapping.

Ecological engagement as skunkwork points to actual existing ecologies: flows of energy and matter through interrelated systems. Those flows circulate through texts but also beyond texts: in policies, bodies, rivers, food webs, funding streams, and the like. We push the rhetorical interest in ecologies past the point of metaphor and into a more productive engagement with (and not just view on or even attunement to) the ecologies in which we find ourselves and

through which we deliberate with our words and our bodies about our collective futures. By focusing on engagement, we wish to build from the strong, normative tradition in R/C that values commitment, connection, engagement, and the move to work beyond the classroom and university walls.

We are moved by a commitment not only to rhetorical listening (Ratcliffe, 2005) but *radical* listening to everyday places. The rare birdcall that stops you dead in your tracks. The surprising sliver of sun on a grey day. The sinkhole in the road. The flash flood. The interruption that opens your ears and minds. We suggest that academia has a too highly developed sense of talking and a less fostered sense of listening. And we hope that a methodology like skunkwork would encourage listening, attentiveness, and attunement that might open us to possibilities for action. In short, we hope to point Rhetoric and Composition toward a model of engagement that accounts for and is accountable to resilient ecologies—whether starting with water or resilience or community gardens or climate change. That opens itself to the material world—rocks, waters, texts, humans, non-humans, things—and builds from those interactions and energies to find opportunities for intervention in ways that promote a more just and more sustainable collectivity.

REFERENCES

- Ackerman, J. 2003. The space for rhetoric in everyday life. *Towards a rhetoric of everyday life: New directions in research on writing, text, and discourse*. M. Nystrand and J. Duffy, eds. Madison: The University of Wisconsin Press.
- Basso, K. 1996. Wisdom sits in places: Notes on a Western Apache landscape. *Senses of place*. S. Field and K. Basso, eds. Santa Fe: School of American Research Press.
- Casey, E. 1998. *The fate of place: A philosophical history*. University of California Press.
- CCCC Statement on Community-Engaged Projects in Rhetoric and Composition. National Council of Teacher's of English: College Composition and Communication [<http://www.ncte.org/cccc/resources/positions/community-engaged>].
- Druschke, C.G. 2013. Watershed as common-place: Communicating for conservation at the watershed scale. *Environmental Communication: A Journal of Nature and Culture*, 7(1), 80-96.
- Edbauer, J. 2005. Unframing models of public distribution: From rhetorical situation to rhetorical ecologies. *Rhetoric Society Quarterly*, 35(4), 5-24.
- Gibson-Graham, J. K. 2006. *A post capitalist politics*. University of Minnesota Press.
- Goldstein, B. E. (2009). Resilience to surprises through communicative planning. *Ecology and Society*, 14(2): 33.
- Goldstein, B. E. 2008. Skunkworks in the embers of the cedar fire: Enhancing resilience in the aftermath of disaster. *Human Ecology*, 36(1), 15-28. <http://doi.org/10.1007/s10745-007-9133-6>.
- Gunderson, L. 1999. Resilience, flexibility, and adaptive management: Antidotes for spurious certitude? *Conservation Ecology* 3 (1), 7. <http://www.consecol.org/vol3/iss1/art7/>
- Hawhee, D. 2009. *Moving bodies: Kenneth Burke at the edges of language*. Columbia: University of South Carolina Press.
- McGreavy, B. 2016. Resilience as discourse. *Environmental Communication* 10 (1), 104-121.
- Ratcliffe, K. 2005. *Rhetorical listening: Identification, gender, whiteness*. Southern Illinois University Press.
- Rice, J. 2012. *From Architectonic to Tectonics: Introducing Regional Rhetorics*. *Rhetoric Society Quarterly*, 42 (3), 201-213.

Rickert, T. 2013. *Ambient rhetoric: The attunements of rhetorical being*.

University of Pittsburgh Press.

Sprain, L. and Carcasson, M. 2013. Democratic engagement through an ethic of passionate impartiality. *Tamara: The Journal for Critical Organizational Inquiry*, 11 (4), 13-26. http://alk.nazwa.pl/tamarajournal.com/index.php/tamara/article/viewFile/350/pdf_118

Dr. John Ackerman is an associate professor of Communication in the rhetoric area at the University of Colorado, Boulder, where he teaches graduate courses on material and public space, social technologies and participatory design. He is rostered in the Program for Writing and Rhetoric, where he assists in program administration with a focus on program assessment, environmental design, and community outreach. His scholarship attends to cultural and economic change in late-industrial neighborhoods. His fieldwork is situated in the industrial northeast and most recently in Boulder and the Front Range and framed there by the idea of resilient communities. He brings qualitative and critical methods to bear on how economic performance, collective memory and material circulation help to constitute a vibrant community.

Dr. Caroline Gottschalk Druschke is an associate professor in Writing & Rhetoric and Natural Resources Science at the University of Rhode Island, where she directs the Society, Ecology & Communication lab and teaches undergraduate and graduate courses in public engagement with science, river restoration, community-based and science writing, and environmental communication. Never straying too far from the intersections of rhetoric, rivers, and restoration, Druschke's research spans environmental management, rhetorical field methods, engaged curricula, and other-than-human rhetoric. Druschke has long maintained that Herman Hesse's Vasudeva was right: "The river knows everything, and everything can be learned from it."

Dr. Bridie McGreavy studies how, through communication, individuals and communities become resilient and sustainable. Her research and teaching focuses on communication within sustainability science teams and organizations; community-based marine conservation and shellfish management; and discourses of resilience and sustainability in media and academic institutions. She is Assistant Professor of Environmental Communication in the Department of Communication and Journalism at the University of Maine. Her research has been published in *Environmental Communication: A Journal of Nature and Culture*, *Ecology and Society*, and the *International Journal of Sustainable Development*. Dr. McGreavy

has received fellowships from the National Science Foundation and the Switzer Foundation for environmental leadership and served as the Director of Environmental Education for fifteen years for two non-profit organizations. She teaches courses in communication research, environmental communication, and sustainability science. She received her Ph.D. in Communication and Sustainability Science from the University of Maine.

Dr. Leah Sprain's research focuses on democratic engagement, studying how specific communication practices facilitate and inhibit democratic action. Her research and teaching draw on language and social interaction perspectives to explore environmental communication, deliberation, and social movement activism. Outreach and praxis are crucial to democratic engagement thus much of her research is collaborative and focused on the practice-theory interface. As an ethnographer of communication, she has conducted extended fieldwork in Nicaragua and the United States. She co-edited *Social Movement to Address Climate Change: Local Steps for Global Action*, and her work appears in the *Journal of Applied Communication Research*, *Environmental Communication: A Journal of Nature and Culture*, and *Communication Theory*. She received her Ph.D. from the University of Washington and is currently an assistant professor in the Department of Communication at the University of Colorado, Boulder.