

Between the Event and the Ordinary:
Climate Crises and the Ecologies of
Everyday Life in the California Desert

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This dissertation is submitted for the degree of Doctor of Philosophy.

Declaration

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text.

This dissertation is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my dissertation has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text.

This dissertation does not exceed the prescribed word limit for the relevant Degree Committee.

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Introduction: Locating the Ordinary Crisis

After a long day fixing farm equipment in California's Central Valley, there's nothing that mechanic Anthony¹ craves more than a long, hot shower to remove the viscous mixture of sweat, dust, and grease that coats his body. "Just standing there under the running water—that used to be the favorite part of my day," Anthony, aged 52, tells me during a trip to his family's home in East Porterville—a small rural community of mostly migrant farmworkers. "It's like all my worries would wash away, just for a moment." It's June 2015. As my year's fieldwork in California draws to a close, the state is now entering its fifth year of a record-breaking drought. Last summer, Anthony turned on his shower to find that it had been reduced to a mere dribble. "Then one day we turned it on, and nothing came out but a noise. I heard the well running, and getting louder and louder, and I'm thinking 'uh oh,' something's going on here.' Before it turned off completely, the water came out very slowly... And that's when it suddenly stopped."

First a dribble; then a sputter; and then nothing at all. Like many others in rural Southern and Central California, Anthony's only source of water, his well, had finally run dry. At that moment, life was transformed: the everyday tasks that Anthony had previously taken for granted became either a tightly rationed extravagance or a precarious achievement. Today, over a year later, he still "showers" sparingly with a bucket, uses paper plates to avoid washing dishes, and eats sandwiches rather than spaghetti so that there's no need to boil any water. He collects the wastewater used for cooking and washing to flush the toilet or else pour onto the trees and plants in his yard—although most of these now have withered and died anyway. Teeth are brushed each morning with bottled water; clothes are hand washed and then air-dried in the desert sun. While at first utterly upended, then, Anthony's everyday life has now settled into a new rhythm, although one marked by a certain degree of hardship and fragility. Having lived through two other major droughts over the past four decades (in 1976-1977 and 1987-1992), Anthony remembers a collective confidence among his fellow Californians that things would before long return to normal: the event would soon pass. But this time, he tells me, things seem somehow "different." As the dry spell drags on and on, Anthony says, there's a growing concern that this drought might mark the start of something else: "something much bigger."

This short episode speaks to the main concern of this thesis, namely, the everyday lived experience of space, time, and the environment amidst a specific moment of historical uncertainty and ecological volatility in California. Each of the

¹ All names are pseudonyms.

chapters tracks from a different vantage point the ways in which people like Anthony are improvising with the material, practical, and symbolic elements of their everyday lives in response to a sense of escalating instability in the physical environment—erupting most spectacularly with the state’s so-called “historic” drought, which lasted from 2011 to 2017 and peaked during the period of fieldwork on which this thesis is based (June 2014 to July 2015). As I will show, people are calling upon these different material, practical, and symbolic elements in innovative ways in order to repair the discontinuities introduced into day-to-day life by forces beyond their control. It is my assertion that these ongoing and open-ended processes of improvisation and experimentation are poorly captured by the concept of “recovery”—a recurrent and yet somewhat underdetermined analytical figure within the anthropology of natural disasters (see Oliver-Smith 1996; but cf. F. Hastrup 2011), which strongly suggests a telos of return to some or another pre-disaster way of life.

More often than not, the notion of environmental crisis conjures connotations of rupture, emergency, and impermanence: “an intermediary moment of chaos” (Vigh 2008:8) in which the “normal order of things” collapses in on itself only to be resuscitated after the crisis is finished or overcome (also see Redfield 2005, 2013; Roitman 2013). It is by definition an event out of the ordinary, which in turn is idealized as the realm of unthinking repetition and routine (Bourdieu 1977; but cf. Mattingly 2014). The ethnographic material contained within these pages illustrates a significant blind spot in viewing crisis and the everyday in stark contradistinction to one another. At times, crisis can transform from an isolated occurrence into a constitutive condition of everyday life—less a turning point located in time than an all-encompassing environment in which people live, work, play, and otherwise conduct themselves (Vigh *ibid.*). This invites us to rethink the categories of the ordinary and the crisis as well as their interrelationship. On the one hand, it calls on us to take into account the improvisational and experimental as well the habitual or settled aspects of the ordinary (Das 2006, 2010, 2012). On the other, it calls attention to the generative as well as the destructive dimensions of environmental crises (Bode 1990). Sure enough, environmental crises can incite shock and trauma in those that live through them (Erikson 1978, 1994). At their most extreme, they may also reduce life to a state of bare survival (Redfield 2005, 2013). Yet my friends, neighbors, and interlocutors took great pride in their collective capacities not only to “weather the storm” but also to improvise new modes of self-sufficiency in response to their altered surroundings and circumstances. In doing so, they all drew heavily upon

images of California's past in order to make sense of their present and chart paths for future action (cf. Knight & Stewart 2016).

The central argument of my thesis, then, is that such processes of improvisation, experimentation, and reconfiguration worked upon the form and content of everyday life must be understood within an analytical framework that embraces rather than disavows the "mutual absorption" (Das 2006:7) of the event and the everyday. As such, it builds upon the insights generated by a collection of scholars working across anthropology and allied disciplines who have investigated the ways in which the extraordinary event "folds itself into the recesses of the ordinary" (ibid.:1). As described below, these scholars have examined the imbrication of the ordinary and the event in the realm of human intimacy across a very wide range of settings. On the whole, however, they have not included episodes of ecological unrest or environmental crisis in the frame of their analysis (but cf. F. Hastrup 2011; Thurnheer 2014), nor extended that frame to the realm of human-nonhuman intimacies (cf. Weston 2017). By contrast, then, the present project examines a particular historical juncture characterised by proliferating appeals not only to social or political but also environmental catastrophes of a great many kinds. Whether these catastrophes are understood at their root to be natural, social, or some hybrid of the two, they nevertheless still entail a heightened attentiveness to the nonhuman materials that constitute in large part the terrain of everyday life, including landscapes, objects, and infrastructures—each of which figures prominently in the pages that follow. Rather than the agency of these objects (cf. Latour 2007; Bennett 2010), however, I am more interested in how they constrain, enable, and otherwise participate within a wide range of intimate encounters.

The empirical focal point for this thesis is everyday life in the arid lands of contemporary Central and Southern California. Alongside the state's historic drought and its second order ramifications like wild fires and dust storms, the local manifestations of a rapidly changing climate are converging within these arid lands to generate a sense of near-constant crisis that is both powerful and widespread. In turn, this sense of crisis is percolating into the most intimate spheres of everyday life, transforming how people relate to themselves, each other, and the world around them, sometimes surfacing in unexpected spaces and shapes. This is what I refer to as the mutual absorption of the ordinary and the event, a notion this thesis explores in relation to a set of concrete ethnographic "situations" (cf. Berlant 2011; see below). In the remainder of this introduction, I will first outline the broader geographical and theoretical landscape in which this

project takes shape before giving a roadmap for the main ethnographic chapters that lie ahead.

The Ecology of Fear in Everyday Life: California's Convergent Climate Crises

By the time I arrived in California in June 2014, the drought was already being felt across the physical and social landscape in myriad ways: vanishing rivers and lakes, fallowed farmland and rising unemployment rates, a spike in water bills and grocery costs, and suburban lawns turned brown.² Yet the drought was not the only crisis brewing in the Golden State at that time. Adding insult to injury, in 2015 California also struggled through its hottest summer on record, a worrying trend replicated across much of the continent and the planet (see Holthaus 2015; also see Bodenhorn 2013). Spurred on by both the drought and the heat, a bark beetle infestation has now claimed the lives of over 102 million trees throughout California, fuelling an extension and intensification of the wild fire season whilst also contributing to soil erosion and the risk of land slides both big and small. In addition, the state's multibillion dollar-a-year agricultural industry has been forced to turn with ever-increasing intensity to groundwater for survival, taking water from underground aquifers and causing great swathes of Central California to "subside"—sinking at a rate of up to 2 inches per month and destroying millions of dollars worth of infrastructure via the slow violence of gradual collapse.

Clearly, then, this cascade of crises, catastrophes, and other extreme events is significantly reconfiguring both the contours and content of California's physical environment. While some of these events are explosive in nature, others are much more diffuse and less readily located in space or time; together, they form a collage of environmental effects that resists easy classification according to axes of rhythm, duration, or intensity (cf. Erikson 1994; Nixon 2011). In turn, this thesis interrogates the ways in which Southern California's distinctive "ecology of fear" (Davis 1999) seeps into everyday experiences of the local landscape, permeating public space, political life, and the popular imagination whilst also giving distinctive shape to local senses of self and history. As scientists like to remind us, the concrete causal connection between climate change and individual extreme weather events like an unusually severe drought or wild fire remains an open question (see Hulme 2014; Stott et al. 2016).³ While the sciences of extreme weather event attribution articulate

² One report already attributes losses of \$2.2 billion revenue (in 2014 alone) and 17,000 jobs to the drought (see AghaKouchak et al. 2015).

³ Scientists estimate anthropogenic climate change to have accounted for 8-27 percent of the state's drought (Williams et al. 2015). Worryingly, they also warn

such uncertainty in terms of statistical probabilities, however, Californians embody it in terms of a lived experience of perturbation with regards to their immediate physical environment. In turn, a kind of hermeneutics of environmental suspicion is proliferating throughout the state, whereby collective perceptions of the present became filtered through the prospect of further crisis and catastrophe—a sense of heightened apprehension that is felt widely but experienced most fully by those lacking the resources to buffer themselves from the contingencies of the wider world.

During fieldwork, people were therefore forced to not only *reinterpret* but also *reinvent* their everyday lives in the wake of a transformation to an environment they thought they knew but are now not so sure. In some cases, the ground quite literally shifts underfoot—eroding any confidence in a stable spatial and temporal context for one’s actions and producing a sense of things being *out of joint* with one’s expectations. This is what I call “the ecology of fear in everyday life” (cf. Davis 1999; Das 2006:9). Untethered from a stable context, relations between the past, present, and future became underdetermined, generating a sequence of questions about the ongoingness of the ordinary that were simultaneously existential and practical in nature. “It’s the future I’m afraid of,” Anthony says. “What do we do if the drought doesn’t end? If we don’t have any water, we don’t have anything. If it goes for good, then all this will turn into dust.” Rather than a mix of “enforced presentism” and “fantasy futurism,” however, this sense of uncertainty generated a wide variety of responses that set their collective sights upon the “near future” as the key arena of imagination and intervention (cf. Guyer 2007:410). In this way, the ecology of fear in everyday life was also an ecology of hope and resolve. Importantly, these projects did not only gesture towards the future, but also towards an imagined past, as Californians called upon elements of the region’s rich history and the tropes it anchors as part of their attempts to recreate a meaningful context for everyday life. It was amidst this scene of instability and innovation that I first arrived in California; the stories that I present here must be seen in light of this moment.

Arrivals, Locations

Flying into Palm Springs International Airport at day, one would be forgiven for thinking that Californians are living in a time of plentiful water. As the plane begins its descent, a verdant environment of high-density gated communities, golf

that such extreme droughts are likely to become a more frequent aspect of California’s future—unless the tide of global warming is reversed

courses, swimming pools, water fountains, and artificial lakes shifts into focus: “America’s desert oasis” (see Culver 2012:139). Nestled in the shadows of the snow-capped Mount San Jacinto, the city began its life in the early 1900s as a desert refuge for the ill and ailing—its hot, dry air prescribed by physicians across the country to help soothe the symptoms of tuberculosis as well as a range of other respiratory disorders. By the late 1920s, however, these early health seekers had been replaced by those seeking leisure, pleasure, and the good life, including movie stars, musicians, politicians, and the local elite. Today, to simply say the name ‘Palms Springs’ is to conjure a complicated set of connotations ranging from wealth and health to entrenched socioeconomic inequality and spaces of racial exclusion. In the time of California’s historic drought, the water-intensive Palms Springs lifestyle has come under renewed scrutiny, although is unlikely to change any time soon.

Having arrived in Palms Springs in early June 2014, I hired a car at the airport and headed for my new home in the “high desert” town of Joshua Tree. Leaving the city on North Gene Autry Trail, named after the American singer, actor, and early media mogul, one can turn either left or right onto the busy Interstate 10. Turning right will take you southeast towards the Imperial Valley, where irrigation water has turned the parched earth into one of the most productive agricultural areas in the country, owned by absentee landlords and tended to by migrant workers who spend long days under the desert sun picking fruits and vegetables for America’s lunchboxes and dinner tables (see Vollmann 2010). If you turn left, on the other hand, you join the infamous freeways of the Los Angeles Basin heading for the city itself. Rather than turning right or left, however, I head straight, more-or-less due east, winding my way through the city of Desert Hot Springs. As I do, the so-called “low desert” of the Coachella Valley transforms into the “high desert” of the Morongo Basin—my home for the next year. The air thins and cools, and the saguaro cactus of the hotter, drier Sonoran Desert gives way to the distinctive form of the Joshua tree—so named by Mormon explorers for its resemblance to the biblical Joshua, reaching his hands heavenwards in prayer. By the time I enter the Morongo Basin itself, the high-density gated development of “down below” has been replaced by a much less heavily populated social and physical landscape.

Sandwiched between the U.S. Interstates 10 and 40, the Morongo Basin is home to two cities and a number of smaller, unincorporated communities⁴—including Joshua Tree—each bisected by California State Route 62, a busy highway

⁴ In the United States, an “unincorporated community” refers to an area that lacks any official political designation and falls outside of all nearby municipal administrative boundaries.

that clocks in three times as many fatal collisions as the average Californian road (Kelman 2014; see Figure 1). Heading east on the 62, the first community one encounters is Yucca Valley. As of the 2010 census, Yucca Valley had a largely Caucasian and Hispanic population of almost 21,000, with a significant 17% of this population living below the poverty line. Dominated by strip malls, “box stores,” and fast food restaurants like McDonald’s, KFC, Denny’s, Jack in the Box, Subway, Del Taco, and *two* Taco Bell outlets, all within about ten miles of one another, Yucca Valley was once described to me by a friend as a kind of “Anywhere, America”—an archetypal automobile-orientated North American city. Despite this, the Yucca Valley Chamber of Commerce still tries its utmost to conjure (at least rhetorically) a specific sense of place, mobilizing the desert’s spectacular “natural resources” as a draw for potential residents and tourists. “With a hometown atmosphere and an ideal location in Southern California’s high desert,” their website tells us, “residents enjoy a climate and quality of life that is nearly impossible to match. Enjoying sunshine and clear skies more than 320 days a year, locals and visitors find an ideal environment to enjoy open spaces, starry nights, and many outdoor recreation opportunities.”⁵

Continuing east on Route 62, I leave Yucca Valley behind me, and after 15 miles or so enter the small, unincorporated community of Joshua Tree; population 7,500 (see Figure 2). Compared with Yucca Valley, the few storefronts of Joshua Tree communicate a very different social and commercial sensibility: here an independent coffee shop, there a camping store, and finally an art gallery and yoga studio line the highway. As I enter the town, a welcome sign invites me to “Enjoy The View,” announcing what are often quoted to be some of Joshua Tree’s most prized assets: unobstructed vistas of the spectacular desert landscape. Historically, Joshua Tree emerged in the wake of the 1938 “Baby Homestead Act,” which incentivized the private development of 5-acre non-agricultural homesteads across the American West (Stringfellow 2010). In 1941, the population of Joshua Tree was only 49 people occupying 22 buildings. By 1947, it had grown to 500 people occupying 144 buildings.⁶ The social legacy of these homestead days lives on in a variety of social, material, and affective forms, including the abandoned homestead cabins that litter some of the more remote areas of the landscape, a distinctive “frontier” decorative aesthetic popular both to local stores and people’s homes, and a sense “rugged individualism” that still infuses people’s sense of self and place. Jutting up against the northern border of the Joshua Tree National Park, the town itself has grown in size alongside the national and international

⁵ See www.yuccavalley.org. Accessed April 10, 2017.

⁶ See joshuatreechamber.org/about-joshua-tree-california. Accessed April 10, 2017.

popularity of the park, which attracts tourists from all over the world and acts as a major economic engine for the Morongo Basin.

At the easternmost edge of Joshua Tree, a plot of land is currently being used as a makeshift secondhand car lot: a battered Jeep, a Volkswagen Beetle, and a vintage speedboat are each for sale. An elderly couple waits for the hourly bus on two office-style, foldout chairs. Continuing east, I pass a hospital, the Highway Patrol headquarters, and the courthouse before entering the city of Twentynine Palms—the third and final stop on our tour. At 25,000, the city’s population is up almost 70% percent from the 2000 to the 2010 census, making it both the largest and the fastest growing of these three places. Like the city’s overarching social identity, this growth is attached to its most notable feature: the Twentynine Palms U.S. Marine Corps “Air Ground Combat Center,” the largest military training facility in America. While the border between the base and the town is strictly policed, life on the base overflows its boundaries in a variety of ways (cf. Lutz 2002). Heading north on Adobe Road, for example, we encounter a litany of barbershops and tattoo parlors in which the marines cultivate their characteristic appearance, while a cluster of trailer parks and motels offer temporary accommodation for visiting sweethearts and family-members. In addition, the flashes, bangs, and rumbles of live fire air-to-ground combat training are an important dimension of the sensory experience of the entire Morongo Basin, piercing the sky and punctuating the soundscape on a regular basis. Alongside the Joshua Tree National Park, the marine base is a critical source of economic activity in the area, thus entangling the basin’s fate not only with the desert’s environmental health and wellbeing but also with national foreign policy and military strategy.

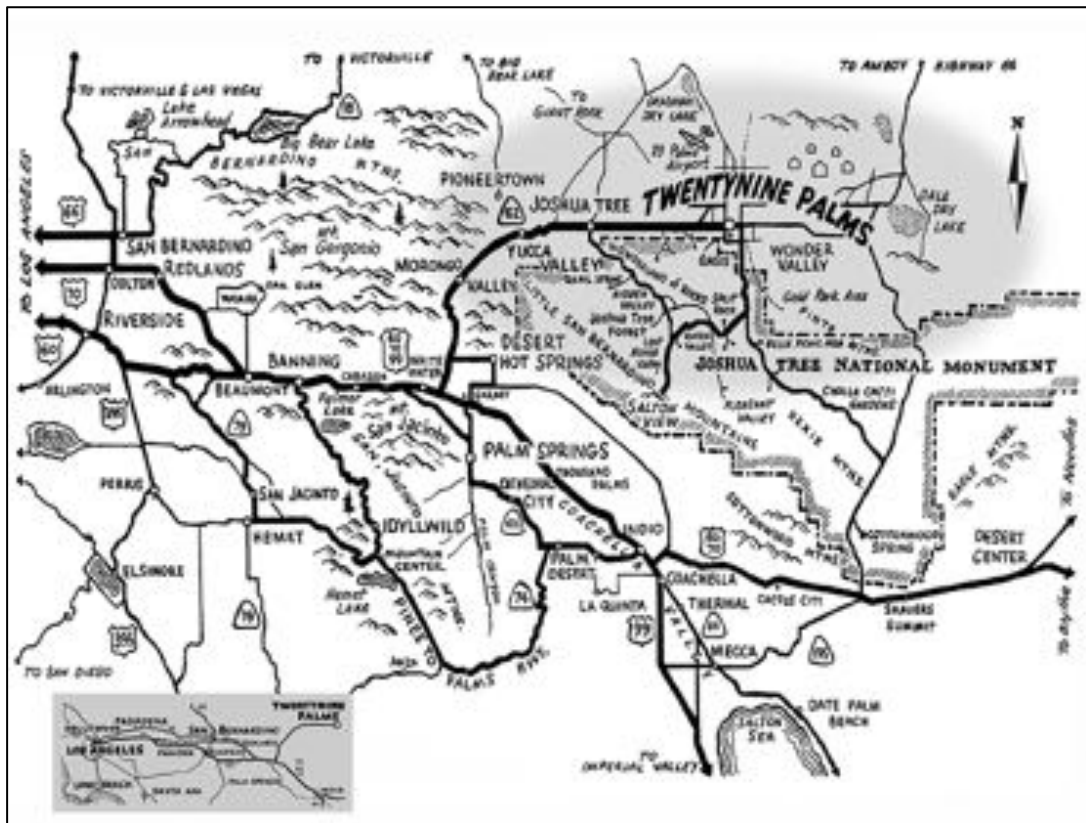


Figure 1. This map of the Morongo Basin still lists the Joshua Tree National Park as a "National Monument," thereby placing it's date of origin before 1994.



Figure 2. Joshua Tree, California. This photographs looks west towards Palm Springs.

The “Situation” as Site, Subject, and Method

From the strip malls of Yucca Valley to the wide, open spaces of Joshua Tree to the Twentynine Palms Marine Base, the Mojave Desert’s Morongo Basin thus offers a privileged vantage point from which to pose questions about the role of space, place, and the environment in contemporary American life and culture. From June 2014 to July 2015, I spent thirteen months living and working alongside the residents of the Morongo Basin as well as the California desert more broadly, paying close attention to the ways in which people actively engaged and were engaged by the places they call home. Very quickly, I realized that people were not all that interested in discussing place, the environment, or the desert in abstract, totalizing terms. Rather, they were very eager to show me and share with me the finely differentiated spaces and places particular to their everyday lives—a desire made all the more urgent in light of the pressing threat posed by climate crises to these places and, in turn, the wide range of affects and intimacies they anchor. Upon mention of my research interests, however, I was just as likely to be invited to lift the lid of a new friend’s composting toilet or sniff the fetid air of a ruined landscape as regaled with stories of threatened species or vanishing wilderness—the usual targets of North American environmental discourse and practice (Nash 1965; Cronon 1996).

Rather than simply a sequence of themes or places, each chapter of this thesis presents a different “situation” in which the ecologies of everyday life have shifted from *ground* to *figure* as an object not only of concern or of contemplation but also of physical renegotiation (cf. F. Hastrup 2011:21). With the term *situation*, I wish to signal a significant debt throughout this thesis to the work of American political theorist Lauren Berlant (2007a, 2007b, 2008, 2011; Berlant & Greenwald 2012). In Berlant’s examination of conditions of “cruel optimism” in post-Fordist America (see, esp., 2011), what she calls “a situation” indicates the inauguration of a perturbation into the ongoingness of everyday life; it is a moment of social flux in which the efficacy of one’s practical, imaginative, and affective habitus becomes diminished. Yet, importantly, a situation is not an event—at least not yet. It leaves open the question of the relationship between the extraordinary episode at hand and the capacity of the ordinary to absorb it. As such, the situation does not carry any conventions in terms of predicting what its ultimate shape or outcome will be. As I show below, it is only when the “enigmatic shape” of the situation cannot be

absorbed within the contours of the ordinary that it emerges as a *bona fide* event (Berlant & Greenwald 2012:272).^{7,8}

Thus, Berlant (2011:5) describes the situation as a “genre of social time and practice in which a relation of person and worlds is sensed to be changing but the rules for habitation and the genres for storytelling about it are unstable, in chaos.” While a situation can expose people to new, intensified, or rearticulated risks, it may also be a time of innovation and experimentation. To some extent, Berlant’s notion of a situation as a moment in which actors experiment with the apparent rules or genres of social life resembles Max Gluckman’s (1940) classic formulation of situations as sites of paradox, process, and potential change (also see Evens & Handelman 2006; Meinert & Kapferer 2015; Zigon 2015:507). While Gluckman’s Manchester School adopted the situation as an analytical alternative to the static social order, however, Berlant offers it as a heuristic to loosen any hard-and-fast distinction between the event and the ordinary so that she might excavate the not always eventful scenes of harm and injury that nonetheless still proliferate across contemporary America.

In this study, I take up the situation as a methodological orientation by focusing on junctures of instability or indeterminacy in the ecologies of everyday life. Importantly, each of the situations I examine here retains a much more than incidental relationship to the places in which they take place (cf. Candea 2007). While environmental catastrophes like drought and climate change are highly diffuse phenomena, their presence in the public imaginary is very far from evenly distributed (cf. Morton 2013; Zigon 2015). As such, certain landscapes might be understood as retaining an especially dense, charismatic, or sometimes archetypal relation to disaster, such as when my interlocutors would actively direct my attention towards particular sites as emblematic of Southern California’s climate crises. By following their direction, my study soon extended its reach beyond the geographic, administrative, and social boundaries of the Morongo Basin to include places as far away as the Ivanpah Valley, the Salton Sea, and the Owens Valley—discussed in Chapters 2, 3, and 4, respectively (see Figure 3). Each of these places has been ravaged by histories of environmental degradation, subjected to new hazards in the historical present, or both. By presenting them alongside one

⁷ Thus, the notion of “the situation” helps sidestep a key analytical weakness of “the event,” namely, “a lurking definition circularity” whereby an event is an event because it is recognized as such—necessarily after the fact (Lazar 2014:82).

⁸ Elsewhere, Berlant (2008:5) writes that a situation “[changes] the ordinary into something [that] can longer be presumed... In this kind of situation a process will eventually appear monumentally as form as episode, event, or epoch. How that happens, though, will be determined processually, by what people do to reshape themselves and it while living in the stretched out ‘now’ that is at once intimate and estranged.”

another, I hope to give a sense both of the singularity of each situation as well as their participation within a wider set of shared conditions. Before giving an overview of the thesis, however, I will first review the literatures with which I wish to engage.



Figure 3. Alongside the Morongo Basin, this study travels as far as the Ivanpah Valley, Salton Sea, and Owens Valley—each situated in the arid and semi-arid lands of California.

Literature 1: Anthropology of Disasters

Environmental catastrophes of many kinds have long constituted a significant object of investigation for anthropologists as well as for scholars in cognate disciplines (for a review, see Oliver-Smith 1996). As Nicole Peterson and Kenneth Broad (2009:74) have noted, for example, an emerging sociocultural anthropology of natural disasters sought in the 1960s to bring together existing ethnographic accounts of floods, fires, volcanoes, earthquakes, and droughts with an explicit focus on “disaster” as the operative analytical category. Situated at the active interface of the natural and social—a central focus for the discipline—natural disasters were thus considered well suited for social anthropologists (see Bankoff

2002, 2004). These early studies set out to document the ways in which both individuals and institutions responded to the arrival and aftermath of disaster, revealing how race, ethnicity, age, class, gender, and other “predisaster” systems of social relations produced in powerful ways the relative distribution of harm and injury as well as the precise patterns of “postdisaster” recovery observed in any single case (see Oliver-Smith 1996:306; for a sociological take on the same topic, see Erikson 1978; Tierney 2006a, 2006b; Bolin & Stanford 2006). In the 1980s, these findings crystallized among disaster anthropologists into a widespread interest in the concepts of *vulnerability*, *resilience*, and *adaptation* (Peterson & Broad ibid.)—each of which continues to be of importance today (for a series of edited volumes, see Oliver-Smith & Hoffman 1999; Hoffman & Oliver-Smith 2002; Sarat & Lezuan 2010).⁹

Taken together, these concepts are used to excavate the social, natural, and technological relations that constitute the conditions of possibility for the onset of ostensibly “natural” disasters (e.g. see Oliver-Smith 1994; Klinenberg 1995; Davis 1999)¹⁰ and call attention to the psychological and behavioral responses that follow in their immediate aftermath (e.g. see Gordon & Maida 1989; Maida et al. 1989). Other studies have also used the aftermath of extreme events to examine the dynamics of social, cultural, and political change over the longer term. The 1970 Peru earthquake is illustrative in this regard, having generated over the years a number of anthropological accounts documenting its transformative effects on religion and politics (for example) as well as changes in local symbolic and ritual systems more broadly (e.g. see Dudasik 1980; Oliver-Smith 1986; Bode 1990; Doughty 1999). More recently, the devastation generated in the wake of Hurricane Katrina in 2005 has likewise generated an array of anthropological studies on the multiple social, political, and economic consequences of the disaster, which have shown how catastrophes have the capacity not only to transform but also to reproduce and indeed reinforce the normal order of things (see Kates et al. 2006; Ethridge 2006; Adams et al. 2011; Johnson 2011; Wright 2011; Adams 2013; Pardee

⁹ There is also a fast-growing anthropological literature that focuses on the local social, cultural, and environmental manifestations of global climate change (e.g. see Crate & Nuttall 2009; Crate 2011; Cassidy 2012; Lazrus 2012; Diemberger et al. 2012; Hastrup & Skrydstrup 2012; Hastrup 2013b; Dove 2014).

¹⁰ As Ashley Carse (2016) notes, droughts are by definition temporary events caused by abnormal climatic conditions, distinguishing them from “normal” dry conditions like aridity (also see Kallis 2008:86). In practice, however, “the droughts that people define as emergencies are not only meteorological events, but also socioeconomic problems” (ibid.)—instances in which water demand exceeds supply. In this way, human geographers and political ecologists theorize droughts as “socio-natural” phenomena that emerge at the crossroads of climatic variability and a variety of historic and social factors (e.g. see Kaika 2005; Bakker 2010; Swyngedouw 2015).

2014). In New Orleans, for example, African-Americans and the elderly both bore the initial brunt of the disaster *and* fared worse during attempts to recover and then rebuild the city (see Adams et al. 2011:247). In a pattern replicated elsewhere, anthropologists have also shown how corporations seized upon this moment of significant social and economic “shock” in order to promote their own market-driven interests that favor fiscal growth over social welfare (see Klein 2008; Adams 2013).

According to one prevalent framing in American public culture, natural disasters “arrive suddenly and come from the outside” (cf. Carse 2016). As we have seen, however, social anthropologists have shown that natural disasters like droughts should not be understood primarily as sudden, disruptive events that impinge on ordinary life from somewhere beyond it. Instead, catastrophes are “embedded”: their effects are shaped by the specificities of the intersecting social, economic, and political contexts in which they take place.¹¹ Thus, while natural disasters may indeed introduce a degree of discontinuity into everyday life, the intensities and the trajectories of their effects depends on the patterned organization of everyday social relations. In turn, these effects may reverberate or linger in the day-to-day lives of survivors long after the catastrophic event has ostensibly ended, in turn reshaping relations, beliefs, practices, and aspirations in ways that are both powerful and intimate (e.g. Das 1995, 2006).

Such insights are crucial. Yet they are haunted by two issues. The first is an undue overemphasis on the “special revelatory powers” of catastrophic events like earthquakes and hurricanes (see Dawdy 2006:724). As the author of one influential review states, for example, disasters act as a “crise revelatrice” or a revealing crisis in which the “fundamental features of society and culture are laid bare in stark relief by the reduction of priorities to basic social, cultural, and material necessities” (Oliver-Smith 1996:304). According to this logic, then, disasters are of analytic value to the anthropologist only insofar as they “undrape customs and practices ... [and] reveal the deeper social grammar of a people that lies behind their day-to-day behaviour” (Hoffman & Oliver-Smith 2002:10), thereby allowing the analyst to penetrate the superficial expressions of everyday life and grasp the otherwise inaccessible deep structures of underlying social relations (but cf. Bode 1990; Bond 2013).

Second, many of these same studies focus in one way or another on practices and processes of postdisaster “recovery,” a term that more often than not

¹¹ As Oliver-Smith & Hoffman (1999:3) put it, “Specific disasters have specific histories... If we are to heed the contention that disasters are socially embedded in the relationship between society and environment rather than bolts from the blue, then discovering which long-term cultural trajectories lead to disaster is essential.”

remains uninterrogated as part of the analysis. In *Markets of Sorrow, Labors of Faith*, for example, anthropologist Vincanne Adams (2013) gives a sensitive and insightful account of the overlapping role of neoliberal state policies and faith-based charitable organizations in post-Katrina recovery, also demonstrating how these produced a “second order” (ibid.:6) effect that intensified the very suffering they were mobilised to ameliorate. Whilst centering her analysis on the notion of recovery, however, Adams at no point within her book explicitly problematizes the concept nor defines it. According to the *Oxford English Dictionary* (OED), “recovery” suggests the return to a normal state of health, mind, or strength; it also carries connotations of regaining the possession of something lost or stolen. In this way, I argue, it smuggles into the analysis an implicit vision of the social order as a more-or-less homeostatic whole—first disturbed by the irruption of the disastrous event only to be resuscitated after the event has ended. Clearly, such notions are problematic (see K. Hastrup 2013:274-276; also see F. Hastrup 2011:5). In the context of Southern California’s ongoing ecological crises, however, the figure of postdisaster “recovery” becomes an unworkable one. At times during fieldwork, the extraordinary event and everyday life became so entangled that the conceptual separation of them proved hard to maintain, begging the question: With what theoretical tools are we to grasp crises like this?

Literature 2: Anthropology of the Ordinary

The etymology of the English word “crisis” originates with the ancient Greek term *krinō* —to decide, to separate, to choose, to cut, to judge—designating a turning point, a moment of decisive change, or a condition of instability (OED). By the fifth and fourth centuries BC, a wide range of usages had come to be replaced by an intimate association with the Hippocratic School of Medicine. As anthropologist Janet Roitman (2013:15-16) notes, a crisis in this context “denoted a turning point of a disease, a critical phase in which life and death was at stake [which] called for an irrevocable decision” (also see Redfield 2005, 2013). Significantly, Roitman continues, a crisis “was not the disease or illness per se; it was the condition that called for decisive judgement between [alternative responses].” As Randolph Starn (1971) has argued, this particular notion of crisis was adopted by the Athenian historian Thucydides as the operative concept for his model of historiographical explanation, whereby events and episodes could be organized into a linear sequence of turning points that added up to a patterned image of historical movement (also see Redfield 2005:335-336, 2013). Thus, crisis became the engine of history as well as its basic constitutive unit.

In many ways the paradigmatic “event,” crises are very often distinguished from the routine, repetition, and order of the normative everyday—a sphere ideally unmarked by surprise. According to anthropologist Marshall Sahlins (1991:45-46), an event is an extraordinary act or incident that disrupts in a radical way the “going order of things.” As such, an event is perceived as such at the precise moment in which social structures stutter, failing to reproduce themselves into the future. Similarly, Veena Das (1995) has identified certain moments in contemporary Indian history as “critical events”—violent episodes after which pre-existing categories of thought become reconfigured and new modes of action become possible. Writing within a French philosophical tradition, Alain Badiou (2011) takes the event to be a confrontation with the unassimilable, the eruption of a brand new truth that was not contained within the contours of the old (also see Robbins 2007, 2010; Humphrey 2008). For each of these authors, then, the analytical category of the event serves to signal a transformation or a rupture in the order of things.

As a foil for the event, a stable baseline against which its arrival can be diagnosed and its vigor measured, this literature thus invests the everyday with a taken-for-granted quality—an idea perhaps most intimately associated with the French sociologist Pierre Bourdieu (1977; also see Zigon 2007, 2008, 2011; but cf. Laidlaw 2013:125). In this way, it makes sense for the anthropologist Caroline Humphrey (2008:357) to claim that “anthropology has mostly privileged the everyday and the repeated rather than ruptures, and although there is a vast literature on the ‘person’ and the ‘self’, it has only more rarely attempted to theorize the subject in situations of innovation or improvisation” (also see Robbins 2007; Stevenson 2014:14).¹² Yet such a formulation would only hold if the everyday was unproblematically equated with repetition whilst also being opposed to innovation, improvisation, and rupture.

In this dissertation, I attempt to chart a different path for “the everyday.” As such, I conceive of the thesis as a contribution to an emergent anthropological literature that attempts to loosen such hard-and-fast distinctions between the event and the everyday by exploring the ways in which extraordinary social, political, and historical episodes can become activated in the intimate lives of individuals

¹² Joel Robbins (2007:9) has argued that a commitment to “continuity thinking” has now entered the “deep structure of anthropological theorizing” in a way that sidelines instances of discontinuity and change. As the anthropologist Lisa Stevenson (2014:14) also remarks, “In anthropology we often think of ourselves as attending to what happens repeatedly. Our version of the empirical thus depends on a conception of the everyday that is stabilized through repetition—of what is repeatedly, even ubiquitously, the case. Repetition, for anthropologists, becomes something of a harbinger of ethnographic truth.”

and communities. In doing so, these anthropologists demonstrate how what counts as “the ordinary” does not always take the form of routine, repetition, and unreflexive action—a stable referent in which one’s trust can be unhesitantly placed. Rather, *the ordinary* is often a provisional achievement as well as a space of deliberation, improvisation, and experimentation. In this regard, the recent writings of Veena Das are exemplary. In *Life and Words*, for example, Das (2006) adopts a different approach to the “critical events” of her earlier work by examining how these events can exert lingering effects long after their apparent resolution. Speaking of the survivors of communal violence during the Indian Partition, for instance, Das describes a “mutual absorption of the violent and the ordinary” such that the “event [is] always attached to the ordinary as if there were tentacles that reach out from the everyday and anchor the event to it in some specific ways” (ibid.:7). In the aftermath of this violent episode, Das (ibid.) argues that the recovery of life takes place “not through some grand gestures in the realm of the transcendent but through a descent into the ordinary” (also see Das 2010, 2012; Lambek 2010; but cf. Robbins 2016 on the role of “transcendence” in ethical life).¹³ Rather than a contrast between the ordinary and the transcendent as competing realms or targets of moral reasoning, however, I am more interested in exploring the active interface of the ordinary and the extraordinary event in daily life.

It would be difficult to overstate the influence of Das on the scholars of the ordinary that followed in her path, many of them her own students. In the years following the publication of *Life and Words*, social anthropologists have interrogated the constitution and reconstitution of the ordinary across a wide range of contexts including: illness, healing, and caring (Mattingly 2014; Stevenson 2014; Das 2015); drug addiction (Garcia 2010); urban poverty (Han 2012); the physical rehabilitation of wounded war veterans (Wool 2015); and “*economies of abandonment*” in late liberal settler colonialism (Povinelli 2011). The notion of the ordinary also tracks beyond anthropology. In another very influential text, *Cruel Optimism*, Berlant (2011) has examined the recalibration of ordinary life in post-Fordist United States as people must adjust to a political-economic reality which no longer provides stable ground for the fantasies and aspirations to which they

¹³ In a recent article, Robbins (2016:769) cautions that the view of ethical life from the vantage point of the ordinary and the everyday “obscures the contribution of religion, or of the transcendent, to ethics.” While Robbins notes that religion is not necessarily the opposite of the ordinary, he argues that the nature of “religion as a phenomenon” (as opposed to “empirical data on religious life”) has not figured prominently in the anthropology of ethics to date (ibid.). In turn, Robbins makes a compelling case for the transcendent—as one special form of “stand[ing] back” from or beyond the flow of everyday life (ibid. 280)—as an important dimension of people’s ethical existence.

nevertheless still cling. Taken together, these studies show how social, political, and historical events do not merely impinge on intimate life from somewhere beyond it, but become actively folded, absorbed, or “layered” (Han 2012:12) by actors into the physical and psychical spaces of their everyday lives.¹⁴

As mentioned above, social anthropologists have been slow to extend these insights to contexts of environmental crisis and disaster. There are two notable exceptions. In her wonderful book *Weathering the World*, Frida Hastrup (2011:5) argues that “recovery” in the aftermath of the 2004 Indian Ocean tsunami in a Tamil fishing village can be understood as a way of learning to “[live] in a world once engulfed by disaster and ... processing the rupture of the tsunami by interlacing it with daily life”—whereby the disastrous event continually shifts between the “figure” and “ground” of social life. Also in the aftermath of the Indian Ocean tsunami, Katharina Thurnheer (2014:23) has examined practices not of recovery but of “coping” in war-torn Eastern Sri Lanka, arguing that coping works to weave together the past, present, and future into a complex mixture such that attempts “to [distinguish] between pre- and post-tsunami time become blurred.” Building on these contributions, this thesis explores the mutual absorption of the event and the ordinary, and the past and the future within the present, not in the aftermath of a single spectacular event but in what Elizabeth Povinelli (2011:4) calls the “durative present” of California’s multiple, convergent climate crises.

Literature 3: Anthropology of Historicities

During fieldwork, these climate crises stimulated a heightened attentiveness to the movement of time itself as people began to ruminate on the nature of duration, change, and the eventfulness or otherwise of global warming and the drought, as well as their relationship to the constitution of the ordinary. These “ruminations” were not simply intellectual exercises but practical acts of engagement with the flow of time that extended both into the future and into the past. This brings me to the third and final body of literature to which this thesis hopes to contribute: the anthropology of historical imaginaries, practices, and affects.

In a recent review article, anthropologist Charles Stewart (2016) has

¹⁴ Throughout this thesis I will use the term “everyday” in its vernacular sense. Because of its intimate association with early twentieth-century modernity and urban space, I have chosen not to explicitly engage other than in passing everyday life theory (e.g. see Lefebvre 2008; de Certeau 2011; Highmore 2001a, 2001b). As Berlant (2011:68) also notes, “In the present moment, our understanding of ordinary life might ... require different parameters than the paradigms offered by everyday life theory.”

distinguished the Western academic paradigm of *historicism* from *historicity* as an object of anthropological investigation (also see Stewart 2003, 2012; Hirsch & Stewart 2005; Palmie & Stewart 2016). Historicism, writes Stewart, sets out to verify the factuality of past events according to the tenets of the professional historiographic imagination: causation, progress, and, perhaps most notably, the linear relationship that simultaneously conjoins and separates the past, present, and future (also see Levi-Straus 1966:259). According to this historical model, the past precedes the present which precedes the future, and what Stewart (2016:83) calls “anachronism”—the eruption of either the past or the future *within* the present—is impermissible. Seeking to isolate, objectivize, fix, and understand the past rather than “obey it,” Stewart (2012:2) elsewhere argues that this form of historical consciousness has emerged as a “signature concept” of Western modernity.

While highly dispersed and deeply entrenched, however, this form of historical consciousness is of course but one way of imagining the shape that time takes and the relation that holds between past, present, and future. Thus, Stewart proposes the notion of *historicity* as an object of ethnographic enquiry and cross-cultural comparison. By “historicity,” Stewart (2016:84) means “the various methods people have for relating to the past and the genres they have for representing it.” Whereas historicism seeks to isolate and objectivize the past, historicity “describes a human situation in flow, where versions of the past and future ... assume present form in relation to events, political needs, available cultural forms, and emotional dispositions” (Hirsch & Stewart 2005:262). Certainly, anthropologists have long studied modes of temporal representation and reckoning other than the linear paradigm described above (e.g. see Durkheim 1995; Evans-Pritchard 1969; Gell 1992; Munn 1992; Greenhouse 1996; Bear 2014, 2016). In addition, they have developed notions not only of “historicity” but also of “historical imagination,” “other histories,” “historical consciousness,” and “regimes of historicity” to capture the multiplicity of ways in which cultural paradigms can differently construct and inflect historical experience and practice (e.g. Sahlins 1987; Hastrup 1992; Comaroff & Comaroff 1992; Trouillot 1996; Hartog 2015). As such, Stewart’s is an attempt to coordinate and synthesize this literature whilst also giving it an orientating label: the anthropology of historicities.

Untethered from the tenets of its Western academic instantiation, what can count as history and the ways in which the past functions in the present becomes an open question available for empirical investigation. Anthropologists have thus offered accounts of phenomena ranging from spirit possession in Madagascar (Lambek 2003), to Melanesian imaginaries of biblical genealogies (Handman 2016),

to dream visions in Greece (Stewart 2012) as examples of historical practice. Further, scholars across the social sciences have shown how the perception of past events in physical landscapes (Basso 1996; Harrison 2004), the built environment (Glass 2016; Hetherington 2013), and material objects and artifacts (Hodges 2013; Bryant 2014) can set in motion one's historical imagination. In each of these cases, the past becomes actively enlivened in the present by means of images, symbols, and sensual engagement—whether working alongside or instead of familiarly “historical” textual or discursive practices. In turn, “affective resonance” (Stewart 2012:2) displaces chronology as the operative dimension that holds together events and determines their social relevance to whatever's at hand. In these accounts, however, the linear, empty, and “resolutely disenchanted” (Wirtz 2016:345) time of Western modernity is often figured as a little more than a counterpoint for the elaboration of other historicities, creating something of a blind spot within the ethnographic record.

Notably, a number of anthropologists in recent years have also adopted the notion of “the chronotope” from the work of Russian literary theorist Mikhail Bakhtin (1982:84) to explore the “the intrinsic connectedness of spatial and temporal relationships” in a range of ethnographic rather than strictly literary contexts (e.g. see Basso 1996; Lipset 2004, 2015; Stasch 2011; Bear 2014; Valverde 2015; Wirtz 2016). As Palmie and Stewart (2016:218) write, “In contrast to the naïvely Newtonian nature of Western temporal common sense, Bakhtin's concept analogically recurs to a post-Einsteinian relativity from which a plurality of senses of space and time become not only thinkable, but also potentially psychologically and socially inhabitable.” It is not merely the conjunction of time and space that is of note, however, but, rather, their active interrelationship in the unfolding of everyday life. In turn, Kristina Wirtz (2016:344) argues that, often, it is “dialogical interactions across multiple chronotopes” that are “constitutive of historicities as regimes of knowledge, affect, and relationality that enable our engagement with the past as an ontological domain” (ibid.:355). As such, the question becomes how, when, and with what effects do people negotiate the discursive and sensorial conditions of the chronotopic multiplicity specific to their social field.¹⁵

In his classic study of Anglo-American homesteaders in New Mexico, anthropologist Evon Vogt (1955:93) argues that, “To look forward to the future, to forget or even reject the past, and to regard the present only as a step along the road to the future, is a cherished value in American culture and a conspicuous feature of life on the frontier.” Drawing on Levi-Strauss's distinction between hot

¹⁵ I give a more detailed explication of the notion of “the chronotope” and its applicability to ethnographic contexts in Chapter 2.

and cold societies, Stewart (2003:486) likewise characterizes the United States as a hot society *par excellence*. “In America,” he writes (*ibid.*), “the very phrase ‘that’s history’ is a means of classifying an event as utterly irrelevant.” By contrast, however, my fieldwork revealed many important moments when California’s past was not rejected nor disregarded but actively conjured in the present in multiple ways which did not track with the linear historical mode supposedly prevalent to “the West” (cf. Handler & Saxton 1988; Handler & Gable 1997; de Groot 2008).¹⁶ Thus, this thesis aims to provide an account of the practices through which Californians engage and negotiate the tensions produced by the co-existence of multiple historicities at a time of crisis when the relation between past, present, and future has been rendered a matter of widespread concern and cannot be taken for granted. In such troubled times, I conceive of the ordinary as an intersecting space where many histories circulate and become “ready to hand” (Berlant 2011:9) for the improvisation and articulation of new forms of everyday life.

The Chapters: A Road Map

Each of the chapters in this thesis explores the ways in which people engage the material, practical, and symbolic elements of their everyday life in response to the uncertainty and unpredictability inaugurated into the scene of the ordinary by Southern California’s convergent climate crises. Drawing on Bakhtin’s notion of the chronotope and its recent adoption into anthropology, it is part of my argument that these unfolding climate crises call attention not only to the flow of time and the production of space but also to their fusion and interaction in everyday life. As such, I assert that there is much to be gained by holding together both temporality and spatiality within the same frame of anthropological analysis, which I seek to do throughout the dissertation.

With this in mind, Chapter 1 introduces the reader to my fieldsite: the California desert broadly conceived. My goal is not only to give a sense of the geography *and* the history of the region, but also to map out the field of associations, affects, and collective memories that it anchors. After exploring the multiple historical phases in which the rugged landscapes of the arid American Southwest have become implicated in formations of national feeling, I then show how these formations of feeling are now being partially reconfigured in light of

¹⁶ Making a similar point in relationship to Europe, Kirsten Hastrup (1992:2) writes, “In Europe as elsewhere there is a multiplicity of histories. If our cultural consciousness has become objectified in a particular historical *genre* ... that is linearized and continuous, analysis reveals the nonsynchronicity and discontinuity of social experience.”

both California's convergent climate crises and a newfound sense of the desert's own physical fragility.

Building on Chapter 1, Chapter 2 explores the ways in which Californians call upon the histories embedded in their physical landscape in order to construct, contest, and respond to a sense of crisis. The point of empirical focus is a series of conflicts over the socioecological costs and benefits of solar energy infrastructural megaprojects in Southern California. Whilst most ostensibly about the fate of space and place, I show how these conflicts can be productively interrogated in terms of a cultural politics of competing chronotopes: disjunctive temporal qualities mapped into the same physical geography. As such, I excavate two of the key chronotopes associated with the California desert, *gold rushing* and *deep time*, which work to give the spatiotemporal politics of Southern California's "solar frontier" its distinctive contours.

Chapter 3 shifts locations from the undeveloped high desert to the so-called Salton Sea, once a popular tourist destination which today sits largely abandoned on the precipice of total social and ecological collapse. Amidst the decay, debris, and pollution, however, a few remaining residents exist in an interstitial state of historical suspension: "the meantime." Whilst continuing with the themes of temporality, materiality, and place, then, this chapter shifts scales of analysis from political and discursive formations of time to the everyday lived experience of crisis, marginality, and abandonment. In particular, it describes a range of everyday activities like playing checkers, collecting abandoned artifacts, and fishing in the sea's polluted waters as techniques of temporal agency that enable the region's remaining residents to reconfigure their relation to the past, present, and future.

With Chapter 4, we travel 300 miles northeast from the Salton Sea to yet another ruined landscape: the Owens Valley. In the very early twentieth century, Los Angeles finished construction on its first aqueduct and began moving massive quantities of water from the valley to the city, desiccating the valley's wetland environment and setting in motion one of the most bitter and intractable resource conflicts of the recent American past. By the 1970s, huge dust storms engulfed the valley and the rural communities that lived there. Chapter 4 inquires into the shifting textures of self, place, and domestic intimacy in the shadows of both the aqueduct and the dust storms it generated, paying close attention to the movement of dust into both homes and human bodies and, in turn, the practices by which one elderly resident attempts to buttress the borders of her house against incursions from the aerosolized and airborne "outside."

Returning to my home in the Morongo Basin, Chapter 5 further examines the ways in which people are improvising with the surfaces, spaces, objects, and infrastructures of their home in this time of escalating climate crises, turning seemingly simple gestures like replacing their turfgrass lawn with a drought-tolerant vegetable garden or changing their conventional flush toilet for “dry” alternatives into moments of not only practical but also ethical experimentation. If Chapter 4 was concerned with what I call practices of “detachment,” this chapter examines how the permeability of the home’s borders may be actively embraced and cultivated. In turn, I show how such experiments can set in motion a range of transformative effects on the self which exceed their immediate impact on the environment. In this way, I theorize the home as an experimental system that can be used in situations of unfolding change to generate moments of excess and meaningful difference from the routine and repetition of everyday life.

In Chapter 6, I conclude the dissertation by gathering together the key findings from the preceding chapters into an argument about “ordinary life in extraordinary times” as a site in which rupture and continuity become woven together in uncanny configurations—neither fully familiar nor fully strange. I then juxtapose this image of the uncanny ordinary with descriptions of the historical present which frame it under the sign of “the Anthropocene” as a moment of grand epochal rupture (e.g. see Hamilton 2016). In this way, one available framing of this thesis is an examination of the notion of “the Anthropocene” that is critically minded and ethnographically informed.

Chapter 1.

Mapping the Terrain

It is a dream. It is what people who have come here from the beginning of time have dreamed. It's a dream landscape. To the Native American, it's full of sacred realities, powerful things. It's a landscape that has to be seen to be believed. And as I say on occasion, it may have to be believed in order to be seen. – *N. Scott Momaday*

I think that the West is the most powerful reality in the history of this country. It has always had a power, a presence, an attraction that differentiated it from the rest of the United States. Whether the West was a place to be conquered, or the West as it is today, a place to be protected and nurtured, it is the regenerative force of America. – *J. S. Holliday*¹⁷

In an already ideologically overdetermined American West, the California desert is especially replete with historic, symbolic, imaginative, and affective associations. Capturing the semiotic elasticity of this desert landscape, anthropologist Joseph Masco (2005:23) has written that: “the contemporary American desert exists as (post)modernist frontier and sacrifice zone, simultaneously a fantasy playground where individuals move to reinvent themselves and a technoscientific wasteland where the most dangerous projects of a militarized society are located.” Or as the journalist Malcolm Jones Jr. puts it, “We’ve mined it, dammed it, irrigated it, developed it, and subjected it to nuclear assault, yet the desert, somehow both fragile and tough, manages to endure, a rugged old touchstone for us to measure ourselves against” (quoted in Lovich & Bainbridge 1999:309). But the California desert is not infinitely malleable, nor infallibly rugged. At each phase in the state’s history, the social and infrastructural projects undertaken in its desert regions—whether in the name of progress or preservation—have left inscribed a series of indelible marks on the physical landscape. They have also left their mark on the imaginative and affective topographies of everyday life in Southern California. As with all emergent phenomena, each new use or rearticulated association did not sweep away or bury entirely what preceded. Rather, the dominant, residual, and emergent aspects of this space exist alongside one another in uneasy tension (see William 1977).

¹⁷ Both epigraph quotes are taken from the 1996 PBS documentary film, *The West*, directed by Stephen Ives and produced by Ken Burns.

This thesis is about everyday life in the California desert amidst a time of unfolding social and environmental change. In it, the desert features as at once an inhabited place, a shifting set of ideas, and a public archive of imaginative and affective elements, which together function as a ‘harvestable’ and ‘usable’ past: available for deployment across a range of social situations (see Kahn 1990; Basso 1996). It is both the site of this study and an important object of ethnographic enquiry in its own right. Throughout fieldwork, a series of anxious and sometimes contradictory images of the state’s desert regions circulated vigorously among my interlocutors—including the desert as a wilderness, wasteland, playground, or biodiversity hotspot, to name only the most prominent. Importantly, these images in turn have profound practical effects on the landscape, channeling prospects for future social and natural change (see Beck 2001; Voyles 2015b). With the risk of stating the obvious, the fact that the climate crises detailed in this thesis occur *here* matters a great deal—the physical place embodies a social history (Ingold 1993:162), which in turn maps out a field of possibilities with regard to collectively conceiving of and responding to the concrete reality of environmental transformation and catastrophe.

In his book *Corsican Fragments*, anthropologist Matei Candea (2010:66) examines the multiple ways in which representations of Corsica as both “a thing and an idea” constitute the ground upon which the dramas of difference and incorporation crucial both to French national self-definition and everyday life on the island are staged. Along the same conceptual lines, this chapter investigates the successive phases by which the California desert—“once thought of as utterly opaque, a region by definition devoid of reliable signification” (Mazel 2000:xxi)—has become absorbed into larger histories and myths of American national identity and cultural memory. My aims are twofold. First, I seek to give a sense of the history and geography of the California desert. Second, the chapter also serves as an introduction to the field of representations, including those to do with place, historical time, and crisis, which my friends, informants, and interlocutors also inhabit and must negotiate. As we shall see, this cluster of themes (in addition to the body, the home, and human-nonhuman intimacies) maps the primary ethnographic and analytical space of the following chapters.

To achieve these goals, the chapter proceeds in three main phases. In the first, I introduce the topic at the heart of the argument: the conflict between competing impulses towards either exploitation or conservation in Southern California’s federal or “public” lands, which in an era of climate change, drought, development, and other anthropogenic influences has once again been thrust into the limelight as a matter of passionate concern. In the second section, following a

brief theoretical interlude, I outline the historical antecedents to this conflict by tracing a genealogy of the American desert as both a thing and an idea. After arguing that the conceptual life of the desert has been for the most part dominated by images of vacancy, the chapter examines ethnographically one attempt to replace this image of emptiness with one of liveliness: the “Bioblitz.” At the Bioblitz, citizen scientists join one another to help measure and monitor regional biodiversity, using their bodies, affects, and everyday technologies like smart phones to render present an object of actual and potential loss. In this way, I argue, the Bioblitz harnesses the transformative efficacy of number, place, and the “collective effervescence” (Durkheim 1995:217) of togetherness to materialize the self and environment in a moment of sensuous encounter, even as it helps generate the anticipation of an absence that simultaneously builds on and inverts prior images of the desert as a vacant space.

Monumental Passions: Land Use Conflicts in the California Desert

On October, 2015, just two months after I left Southern California for Cambridge, the Democratic U.S. Senator for California, Dianne Feinstein, convened a public meeting at Whitewater Canyon, approximately 15 miles southwest of my former home in the high desert town of Joshua Tree. Feinstein’s objective: to receive public comment on her controversial proposal to set aside more than 2 million acres of federal lands in Southern California,¹⁸ much of it desert, in the form of three “national monuments”—a designation that would radically restrict the range of uses to which the land could be subjected. Coming from as far as Sacramento in the hope of having their voice heard, over 500 people braved the unpaved dirt roads and the scorching desert sun to attend the meeting—some reports place attendance as high as 1000 people—spilling out from under the shade of the especially erected tent and into the surrounding desert landscape.

By any measure, such a large turnout clearly attests to the significance of this proposal for local imaginaries of place and belonging. So did the passions on display. “It was a hot day and tempers soon flared,” one friend later reported to me via email. Speakers were lustily booed or cheered. When Senator Feinstein referenced the need for urgent action in order to pass the bill before President Barack Obama left the Whitehouse, a contingent of the crowd clapped wildly.

¹⁸ So-called “public lands” are lands owned by the federal government and held in trust for the American people. These lands include those with and without special designation, like National Parks, National Monuments, and National Forests, for example. Nearly 30% of the U.S. national territory is owned and managed by the federal government; in the American West, this number is closer to 50% (Brugger 2017).

After the two hours allotted for public comment came to an abrupt end, however, those placed at the back of the queue felt hard done by; Senator Feinstein's closing remarks were then interrupted by opponents protesting that they had not been fairly heard. As a reporter for the *Los Angeles Times* described it (Cart 2015), "The sometimes wild meeting illustrated that when it comes to public land management decisions, reaching consensus is no easier in California than it is in Washington, D.C."

At stake in Feinstein's proposal is a vast swathe of federal lands currently nestled among a checkerboard of national parks, national forests, military reserves, and private land, a terrain popular with renewable energy developers and mining firms, as well as amateur rock and mineral enthusiasts, off-roaders, and environmentalists. "When people think of deserts, they usually think of flat, barren, lonely places," declared one member of the public. "But this is a rugged, beautiful place... This really is, I think, one of the most unique and remarkable places in our state." Stretching across mountain peaks, riparian and Joshua tree woodlands, and miles upon miles of desert scrub, the lands in question are indeed spectacular. By most accounts, they are also unique: vital habitat for a multitude of threatened or endangered animal species, including the golden eagle, desert tortoise, and bighorn sheep. Environmentalists say that, together, these monuments would do valuable ecological work by protecting the critical wildlife corridors that enable the movement of plants and animals in response to a changing climate, thereby helping facilitate their survival in a time of environment crises both acute and endemic. In support of Senator Feinstein's proposal, Exequiel Ezcurra, a well-regarded professor of desert ecology at the University of California Riverside, explained how the conservation of desert ecosystems is especially important because of how long these ecologies take to develop—many hundreds if not thousands of years—thus revealing how conflicts over land use may invoke a politics of time and temporality as well as space and place (see Chapter 2). "Damage on desert ecosystems takes a very, very long time to recover," Ezcurra said (quoted in Kim 2015). "Desert vegetation and desert biota is like a non-renewable resource. Its dynamic is so slow that for all practical purposes, once we destroy it, it is gone forever."

In her closing remarks, Senator Feinstein spoke at length about the economic, environmental, and recreational value of the California desert, also appealing to the future as a locus of moral obligation (cf. Scheffler 2013). "The California desert is a magnificent national treasure," she declared in a press release (Feinstein 2015). "I won't rest in my efforts to ensure it stays that way for generations to come. Critical parts of the desert are at risk and need our support."

She then added, “What this desert carries is the tradition of the West that founded California, and we aim to keep that going.” Articulating their support in terms of the desert’s ecological, social, historic, and “traditional” worth, then, the proposal’s proponents argue that the national monument designation would help protect the integrity of the land for future generations to enjoy, an enterprise made all the more important in an era of rampant development, environmental degradation, and species loss.

In August 2015, Senator Feinstein sent a controversial letter to Obama, urging the president to invoke his powers under the 1906 Antiquities Act to designate the three national monuments.¹⁹ As the name implies, the designation of physical space as a *national monument* functions both symbolically and practically to transform the terrain into a repository of pride, desire, and belonging, thus harnessing the heft of the landscape in service of national self-formation (Mazel 2000). Much like the U.S. National Park Service, inaugurated in 1916, the 1906 Antiquities Act has thereby proved a powerful technology of national identity throughout the twentieth century—essentially substituting the so-called “natural wonders” of the New World for a perceived absence (amongst the American elite) of a national cultural identity based on longstanding artistic, architectural, and literary achievements (Runte 1987; Patin 2012). At the meeting in Whitewater, Senator Feinstein made it clear to the public that she strongly prefers a legislative solution to a presidential declaration—raising as this would questions about the contingencies of local sovereignty and the democratic process—but that doing nothing in this time of social and environmental crisis was, at least for her, not an option.

For many of my environmentalist friends, informants, and interlocutors based in Joshua Tree and the surrounding towns and cities, Senator Feinstein’s proposal took on urgent shape as a focal point for their collective labors of ecopolitical activism. In contrast to the often exhausting efforts directed towards individual developments, Senator Feinstein’s proposal promised these environmental activists an invaluable opportunity to help set aside a huge swathe of the California desert for protection “in perpetuity,” as the national monument status confers on land, therefore offering the greatest possible return for their ecopolitical endeavors. As such, it inspired great excitement within the community. In the months proceeding Feinstein’s Whitewater meeting, I had joined local environmental activists in their eager efforts to mobilize support for

¹⁹ Since its inception, presidents such as Theodore Roosevelt, Jimmy Carter, and Bill Clinton have used the 1906 Antiquities Act to protect particular landscapes as what the act calls “objects of historic or scientific interest” (see Dustin et al. 2005).

the proposal: handing out flyers, collecting signatures for a petition, and also organizing a letter-writing workshop. Over pizza, iced tea, and wine provided by a local businessowner sympathetic to the cause, residents joined to share stories and help one another craft what they hoped would be compelling letters to their local politicians—a task many found daunting. During casual conversation, one middle-aged gentleman articulated his involvement in terms of a reciprocal relationship with the desert forged through a history of inhabitation. Having moved to Joshua Tree from Los Angeles to “sober up” after developing a drinking problem in his early twenties, this gentleman had stayed ever since—thanking the clean air, wide, open spaces, and quiet life for his continued recovery. “It’s my way of giving back to a place that has done so much for me,” he told me about his participation in the letter-writing workshop.

Not everyone, however, is quite as enthusiastic about Senator Feinstein’s proposal. Adopting a different historical perspective, opponents argue that it would violate a sacrosanct moral economy regarding public access to federal lands by imposing on them unwanted and unnecessary rules, strangling out longstanding land uses, and thus severing the close ties formed between local communities and the landscapes that comprise their homes (see Figure 4). Notably, these claims also gesture towards a specific sense of history, routed through an affect of “anticipatory nostalgia”—this time gestured not towards particular species or ecosystems but specific ways of life (cf. Choy 2011:26-27). Some critics wish to defend a range of land uses that have been historically integral to their livelihoods, such as mining or grazing cattle. Others simply wish to defend their right to use the public lands of the California desert for a range of recreational purposes which sit uneasily with environmentalist aims, such as off-roading. Both camps protest that the proposal constitutes yet another instance of federal overreach in relation to the highly contested public lands of the American Southwest, a historical flashpoint of controversy and, at times, violence (e.g. see Cawley 1993; Sayre 2006). “We don’t know what’s going to happen,” said one member of the California Off-Road Vehicle Association, a group that has been fighting the proposal for two years (see CORVA 2015). “More and more of the desert is being taken away from the people... Any time you take away the consensus of the local community they are left with something they did not ask for.”

What do Californians want from their desert regions? Clearly, there can be no single or simple answer to this question. As environmental historians Peter Alagona and Clinton Smith (2012:26) note, even posing it requires an understanding of the region’s geography, the key historic struggles and claims that

have shaped the contemporary landscape, and also the distribution of social and political power at work in state and federal decision-making processes. In addition, it also requires a “sense of what is at stake” (ibid.). As this introductory vignette reveals, this includes not only the fate of the local environment in straightforward terms, but also conflicting notions of the public good, history, regional and national identity, and the proper role of the federal government in the intimate lives and everyday spaces of Americans. To further understand the passions at play, then, we need to understand the rugged, dusty landscape of the American Southwest as a mythic as well as merely physical geography.

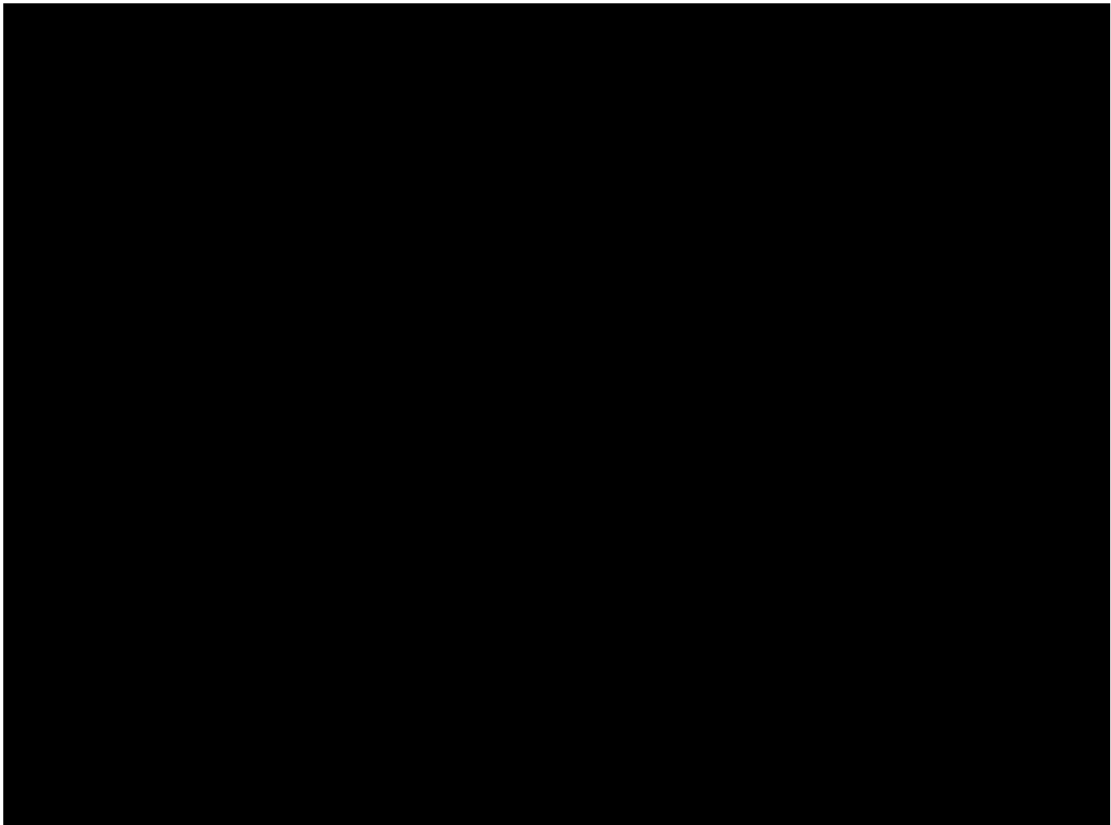


Figure 4. An amateur “gold prospector” protests Senator Feinstein’s monument proposal.

Mythic Landscapes, National Fantasies

In September 1996, over 36 million viewers tuned into PBS for the first installment of *The West*, a documentary film directed by Stephen Ives and produced by Ken Burns. An epic, twelve hour narrative of the American West, from the arrival of European explorers to the late twentieth century, the film was well-received by both popular audiences and critics—riveting the public to their television screens whilst also being awarded the Organization of American Historians’ Erik Barnouw Award in 1997. Weaving together a potent cinematic collage of black and white

still photographs, illustrations, sketches, portraits, paintings, talking head interviews, and multiple off-screen narrators, the audiovisual field of *The West* mobilises all the familiar motifs of modernist documentary filmmaking to offer what Daniel Schowalter (2004) calls a “hallucinatory” take on historical truth grounded in the aura and affective efficacy of the cinematic image.

Today, *The West* remains a vital text for those scholars interested in the visual constitution of the link between land, violence, historical memory, and the mythic dimensions of national identity.²⁰ Taken from the first few moments of the first of eight episodes, the two epigraphs with which I opened this chapter capture from subtly different angles enduring themes within North American historiography. In the first epigraph, the Kiowa novelist N. Scott Momaday calls attention to what Shannon Lee Dawdy (2010:772) terms the “magico-real qualities” of human landscapes, which (as she describes it) are “continually recreated out of a conjunction of imagination and materiality” (also see Lefebvre 1991; Soja 1996). For Momaday, then, the landscape is a product of certain social forces like faith and fantasy as much as any strictly physical forces.

In the second epigraph, the esteemed Anglo-American historian J. S. Holliday offers up a snapshot portrait of the rugged American West as the primal scene of national self-definition. Simply put, this idea argues that a uniquely American character was forged at “the frontier” through the ongoing conquest of wilderness—an idea most closely related with the late nineteenth century historian Frederick Jackson Turner (1996[1893]; also see Cronon 1987). Today, even as a more recent generation of historians and cultural theorists contend its accuracy, the notion that the wide, open, rugged spaces of the American West serve as the ultimate crucible of national historic and cultural identity has through repetition become hardened in American public culture as a comfortably familiar and commonsensical set of core symbols, scenes, metaphors, and narratives.²¹ As the historian Ann Fabian contends, then, there can therefore be no “real history” of the West—if by *real history* one means a transparent description of past events neatly disentangled from their popular representations (quoted in Gendzel 2001:55). Among others, such representations include the Western cinema of John Ford, the

²⁰ Writing on the difference between myth and reality, anthropologist Charles Stewart (2017:132) argues that history emphasizes “objective verification” over the “affective assertion” of myth. Yet, he continues, “a history can [over time] escalate into a myth, and a myth can contract back to history and be largely forgotten” (ibid.:133). In the case of the inextricably entangled myths and histories of the American Southwest, affect is a powerful way of relating to the past and, through it, the nation.

²¹ For example, see Smith 1950, Nash 1965, Limerick 1988, Slotkin 1992, and Worster 1992.

landscape photography of Ansel Adams, and the post-9/11 political rhetoric of George W. Bush.²²

What does anthropology have to say about such a conjunction of myth and landscape? In *Argonauts of the Western Pacific*, Bronislaw Malinowski (2014:309) writes of the “enlivening” influence of myth upon the landscape in a very different context:

Here we must try to reconstruct the influence of myth upon this vast landscape, as it colours it, gives it meaning, and transforms it into something live and familiar. What was a mere rock, now becomes a personality; what was a speck on the horizon becomes a beacon, hallowed by romantic associations with heroes; a meaningless configuration of landscape acquires a significance, obscure no doubt, but full of intense emotion... all this makes the landscape represent a continuous story or else the culminating dramatic incident of a familiar legend. This power of transforming the landscape, the visible environment, is only one of the many influences which myth exercises upon the general outlook of the natives.

Thus, Malinowski describes here one of the many ways in which the physical landscape may become folded into social life as an active and meaningful participant: through mythic associations. Building on Malinowski’s insight, anthropologist Miriam Kahn (1990:51) has also examined what she calls “the spatial anchoring of myth” in Papua New Guinea. For her rural Melanesian interlocutors, Kahn argues, various dimensions of the past are “perceived, recorded, and experienced spatially in terms of geographical features,” such as hills, mountains, rivers, lakes, or the stones with which she is primarily concerned. In turn, Kahn writes, these features are “instrumental sources of living tradition that inform, modify, and are modified by ongoing relations” (ibid.:51-52). In this way, through an interactive immersion in place, people are able to “reap the harvest of the historical landscape in their contemporary lives.” Similarly, for the Western Apache of New Mexico, Keith Basso (1996) has also described how places anchor the stories that in turn function as a harvestable archive of moral wisdom. Each in their own way, these scholars emphasise the manner in which the physical

²² In the early days of his global “war on terror,” for example, Bush attempted to cultivate national support for military action by appealing repeatedly to an imagined moral geography of the Wild West as place in which legitimate force may be invoked in the name of justice, freedom, and civilization (see Campbell 2011:3).

landscape can transform history from a fixed and distant set of happenings into an intimate, vital pulse which surges through people's everyday lives (also see Rosaldo 1980; Stewart 1996; Bonilla 2012).

Clearly, while most North Americans do not conceive of the landscape as the petrified personalities or paraphernalia of their ancestral heroes and heroines, the physical spaces of urban, suburban, and rural Southern California are still laden with affect and invested with near-mythic status as "sites of memory" (Nora 1999). Like the wide, open, rugged spaces of the American West more broadly, these landscapes have enormous symbolic salience. As the anthropologist John Bennett (1971:172) notes in his now classic *Northern Plainsman*, for example, "Relatively few civilizations have drawn so heavily upon their pioneer past for a sense of value and direction" (but cf. Vogt 1955:93). For Kahn (1990:52), as well as for Basso (1996), "the facticity of the landscape" bears testament to the truth of the myths or stories anchored there, placing them at least in part beyond the reach of contestation. However, as we shall see, the California desert offers no such illusion of transcendence or facticity. In reality, it is always open to physical transformation, symbolic reconfiguration, and affective reconstitution (see Rodman 1992; Moore 2005). Further, through their very materiality, places can activate a "heterochronicity" (Stewart, unpublished manuscript) or "heterotemporality" (Dawdy 2016:8) which jumbles together many different temporal experiences in a way that precludes any form of straightforward reconciliation with a dominant historical or mythic mode.

In what follows, I will argue that the case of the California desert provides an especially clear example of how "wilderness" became enlisted as a mythic component of what political theorist Lauren Berlant (1991) calls the *National Symbolic*. As part of the "fantasy-work of national identity" (ibid.:2), Berlant explains, the National Symbolic functions to create a sense of shared heritage that, whilst perhaps fictional, is nonetheless experienced as emotionally compelling. Infusing desire into the intimate life of political formations, subtly articulating seemingly private experience with broader public culture, the traditional icons, metaphors, heroes, rituals, and narratives of the National Symbolic provide an "alphabet for a collective consciousness or national subjectivity that attains the status of natural law" (ibid.:20). The example to which Berlant continually returns is the Statue of Liberty—a human-made monument. By contrast, this chapter concerns itself with the monumental landscapes of the American West as a privileged scene of American self-definition. Through the "double articulation of subjectivity and landscape" (ibid.:35), the Californian desertscapes of the American West enable otherwise divided individuals to "share not just a history, or a

political allegiance, but a set of forms and the affect that makes those forms meaningful" (ibid.:4). In this case, these are forms and the affects of the landscape itself.

As Berlant observes, then, the National Symbolic works to "harness a fantasy of national integration" (ibid.:22) from the inescapably discontinuous, contradictory, ambiguous, or otherwise "simply confusing" aspects of civil life. Yet it is never perfect or absolute in its operation, nor situated beyond cultural debate and historical transformation. Thus, as we shall see, the arid American Southwest does not provide a fixed, timeless, or undisputed anchor of national identity or moral belonging. Rather, it is today a deeply conflicted terrain, both socially and ecologically, the physical, symbolic, and affective contours of which are being continually reformatted by development, drought, climate change, and a range of other anthropogenic influences. In turn, these convulsions invoke a kind of turbulence within the realm of the local National Symbolic and, as such, generate a sensation of almost physical vulnerability among the desert residents of Southern California, thereby actively shaping their intimate experience of the convergent climate crises in which they find themselves swept along.

The American Desert: Towards an Archaeology of Affect

The historian Gary Reger (2013:165) observes how, "In their encounter with the New World, Europeans passed through a dizzying series of sometimes contradictory reactions to the land before them." To the temperate, fecund Atlantic coast of what would later become the United States, these newcomers applied metaphors of a gendered landscape: "a female land ripe and ready, needing only men to bring it to its natural fertility" (ibid.). Yet as the settlers pushed further and further west, Reger continues, they finally encountered the Chihuahuan, Sonoran, Great Basin, and Mojave deserts of the American Southwest. In doing so, the metaphors that helped shape much of their practical and affective interactions with the landscape began to fail—in a spectacular fashion. What they encountered there was "a landscape at odds with the America they had left" (ibid.:166): a harsh, inhospitable landscape of danger, travail, and death.

While the overland trail was seen by many pioneers as, properly, a challenge and an adventure, the desert went too far. Hardship exceeded adventure and transformed travel into a trial of survival. Thus, historian Patricia Limerick (1985:167) describes how such hardship incited travellers to feel betrayed by the desert's elemental and intractable reality: "Routes that looked clear and direct on maps turned out to be ordeals; so-called rivers were small, bitter, and given to

sudden disappearances. The desert passage was an interlude of shaken confidence; the visual distortion of mirages was only one of the ways in which nature, in the desert, seemed to cheat." When measured against the fecund, feminized landscapes of the Atlantic coast, the desert spaces of the American Southwest were seen as not only fierce and menacing but also morally corrupt. Yet such a view indexed cultural prejudices as much as the climatic reality of the landscapes in question. As geographer Yi-Fu Tuan (1974:66-67) has noted, for example, Spanish explorers in New Mexico made little mention of aridity in their reports. In fact, they often commented on the *presence* of water. By contrast, Anglo-Americans seemed from the start to have been obsessed with what they perceived to be the "universal barrenness" and "general nakedness" of these deserts, which for them were "sickening-colored" and "loathsome" to look at (ibid.). Thus, the desert was implicated from the outset in European structures of perceiving, thinking, and feeling.

For a nation concerned with agriculture as the primary force of civilization, encountering the hard fact of arid lands meant that "the project of mastering the continent seemed to have reached a nonnegotiable limit" (Limerick ibid.). When faced with the failure of the gendered metaphors that served them so well on the Atlantic coast, Reger explains (ibid.:165), the Anglo-American travellers grasped for new ways to understand this new landscape. Perhaps unsurprisingly, many reached for their Bibles, which offered a rich series of tropes to account for a decidedly unfeminine landscape—"neither mother nor lover" (ibid.:169). Perhaps the most ready to hand was the deep-rooted Judeo-Christian notion of the desert as a vacant wilderness: a space of emptiness, desolation, formlessness, but also a fearful potentiality (Beck 2001:63; also see Nash 1965; Cronon 1996). Through their nineteenth century concepts of Christian religion, science and technology, capitalism, and national culture, the Anglo-Americans thus began to view the arid spaces of the American West as *postlapsarian*—a wasteland formed when Adam took Eve's advice in the Garden of Eden (Merchant 1995:132). In what William deBuys (2001:11) calls the "evangelical" view of the landscape, the nation's job was to take back control of nature and recover what had been lost—a notion of the natural world that was institutionalized in 1902 with the inauguration of the U.S. Bureau of Reclamation (also see Pisani 2003).

Because they were some of the harshest, most rugged landscapes on the new continent, however, the deserts of the American Southwest were seen not only as landscapes in need of redemption but also as the ultimate place to pursue the "strenuous life" necessary to fending off the moral, racial, and national decay that the early twentieth century American elite, led in particular by Theodore

Roosevelt, had begun to feel followed in the wake of (urban) civilization. According to Frederick Jackson Turner's (1996[1893]) influential "frontier thesis" of national identity, hinted at in the second epigraph to this chapter, the significance of westward expansion thus lay in what J. S. Holliday calls its "rejuvenating" effects on the American character. Even as the ordeal of everyday life in these arid lands seemed to contradict Anglo-American notions of the United States as "nature's nation" (Miller 1990), then, the perceived vacancy, inhospitability, and fearful potentiality of the deserts did "serve to confirm other aspects of Protestant America's discourse of settlement as a spiritual mission" (Beck 2009:22)—in turn allowing these terrible, ecstatic spaces to become absorbed into larger myths of national progress and manifest destiny.

Up until the mid nineteenth century, the American deserts were comprehensible to the collective Anglo-American imagination first and foremost as places where the familiar rules of geography, agriculture, industry, and commerce did not to apply. In California, all this changed with the discovery of gold: "the fateful bolt of lightening" (McWilliams 1999:37) which ignited the forest fire of California's subsequent cultural, political, and economic development—from oil, land, and agriculture, to Hollywood, the defense industry, aeronautics, and (more recently) software engineering (see Chapter 2). During the 1849 Gold Rush, the deserts of California, and especially the Mojave, underwent two crucial transformations. The first was material: By the 1880s, hundreds of gold mines punctured the landscape. Although bustling towns did emerge around many of these mines, however, "there were no great bonanzas and the settlements rarely lasted more than a few years before the deposits diminished, the residents fled, and structures burned to the ground" (Alagona & Smith 2012:28; also see Holliday 1999, 2002). Although brief, these operations nonetheless altered, eroded, and polluted the landscape in ways that still persist to this day. The second transformation was conceptual as well as affective: the discovery of precious metals in Southern California's desert country helped reconfigure (at least partially) the landscape in the eyes, mind, and heart of America from a threat to survival or a godless wasteland into, at least potentially, a land of opportunity and good fortune.

Importantly, the early twentieth century was also the inaugural moment of the grand, monumental waterworks of North American modernity. In Southern California, these waterworks include among them the initially ill-fated Imperial Valley irrigation system, which helped transform the "parched ash-colored earth" (Round 2008:24) of the Imperial Valley into one of the most productive agricultural regions in the United States (see Chapter 3). They also include the first Los Angeles

Aqueduct, completed in 1913 and still active today, which helped the then-bustling market town blossom into a major global metropolis, even as it also set in motion one of the most bitter and intractable resource conflicts of the recent North American past (see Chapter 4). As historians of science, technology, and the environment have shown, these waterworks were situated squarely within an epic narrative of national progress, embodying a Lockean logic of value and wastefulness within the affective space of the National Symbolic (e.g. see Worster 1992; Nye 1996; Wehr 2004; Round 2008).

With the meteoric rise of large-scale solar energy developments in the desert spaces of Southern California, spurred on by state and federal policy, this mode of infrastructural monumentalism is once again undergoing a resurgence—as I explore further in Chapter 2. According to their proponents, these developments perform a herculean act of “climatological care” (Howe & Boyer 2015:2) whilst also enabling the reconciliation of two competing Anglo-American “chronotopes” (Bakhtin 1982)—the desert as a primordial “wasteland,” on the one hand, and California as the future’s cutting edge, on the other. Yet these megaprojects are also hugely destructive to the local desert ecosystem. Thus, many residents protest that their homes and communities have been unfairly singled out as acceptable losses in a world struggling to adapt to a changing climate—zones of national if not global sacrifice—a trope that reaches into a much more recent chapter in the California desert’s past (the Cold War) while once again harnessing the landscape in service of national fantasy (Kuletz 1998; Masco 2005).

The Twentieth Century: Spaces of Salvation and Sacrifice

As with the rest of the American West, California’s arid spaces were understood by the the turn of the twentieth century as places where the raw materials of land, minerals, forest, and animals could—and indeed should—be transformed into great wealth and prosperity through the application of grit, reason, and hard graft. Yet the early twentieth century was a time of profound social, political, economic, and spatial upheaval in the United States, the repercussions of which are still being felt today. It was also the beginning of a transition from an older American West to a newer one.

Even as the “evangelical” engineers and entrepreneurs of the Progressive Era became increasingly confident that the desert could be “saved from itself” (Round 2008:84), for example, a growing dissatisfaction with American capitalist culture among the affluent, educated, urban middle classes also made the deserts alluring as “a purgative space of Romantic sublimity and aesthetic purity” (Beck

2009:23). As early as 1901, the Rutgers art historian John C. Van Dyke was extolling the aesthetic joys and virtues of a landscape that should remain untouched by development in an influential book that would later become a bestseller. “To the degree that one found civilization unattractive,” observes Limerick (1985:168), “one could admit the most intractable of environments for its purity. The convention of the desert as ‘the most real’ of landscapes carried through.” But the desert did not lend itself to immediate aesthetic appreciation; this took an investment of time, effort, and cultivation and, in turn, was lauded a mark of cultural refinement. As such, the desert landscape became a challenge not only to physical grit and practical wherewithal of the Americans who encountered it; it also challenged their everyday aesthetic conventions and sensibilities (Teague 1997:99).

Armed with their copy of Van Dyke’s *The Desert: Further Studies in Natural Appearances* (1999[1901]) or else a handful of issues of *Harper’s*, *Scribner’s*, *Atlantic*, or *Century Illustrated*—each of which had featured glossy articles on the deserts of the American Southwest in the early 1900s (Teague *ibid.*)—by the 1930s thousands of tourists had set out in search of what historian Lawrence Culver (2012) has called the “frontier of leisure.” It was also around this time that the spectacular landscapes of the American West, especially places like Yosemite, Yellowstone, and the Grand Canyon, become sedimented in U.S. popular culture as sites of reverence, objects of pride, and vectors of national redemption. By the time that construction crews had finished paving the famous cross-continental Route 66, in 1938, environmental activists in California had completed successful campaigns to establish the state’s three original desert parks: Death Valley, Joshua Tree, and Anza Borrego.

In the 1940s, yet another chapter in the history of the California desert began. During World War II, the California desert became a major staging ground for military training operations in preparation for General George S. Patton’s North African Campaign. Throughout the Cold War, the desert was then transformed into the ground zero of the nation’s military-industrial project: “a technoscientific wasteland where the most dangerous projects of a militarized society are located” (Masco 2005:23). Later, the U.S. Department of Defense (DOD) would again single out the California desert for strategic importance due to its likeness to Middle Eastern countries such as Iraq and Afghanistan. As such, the federal government now operates nine bases in the Mojave, including the Morongo Basin’s Twentynine Palms Marine Base, which it uses for training exercises and live-fire target practice. Each is part of a larger, transregional network of what sociologist Valerie Kuletz (1998) calls “sacrifice zones,” which stretches from New

Mexico to California and includes not only bombing and artillery ranges but also the “imperial debris” (Stoler 2013) of America’s atomic economy. As Kuletz (ibid.:7) argues, these zones of national sacrifice in fact carry a double physical and symbolic burden. Not only do they suffer the overlapping and accumulative social and environmental ill effects of such toxic uses. Hidden behind a screen of national security, they are also rendered invisible in the wider public imaginary. In turn, an absence of public scrutiny joins associations of ruination to create the conditions for further environmental injury.

As Carl Abbott (1995) has argued, then, the West up until World War II was effectively a colony of the Northeast—good for raw materials or recreation but with little industrial investment or output of its own (see Cronon 1992). During and after the war, however, the landscapes of the American West have been targeted for unprecedented federal and military intervention, including reclamation projects, agricultural subsidies, interstate construction, and the environmental management of public lands (Beck 2009:25). In turn, in the wake of wartime western migration, the so-called “sunbelt cities” like San Diego, Phoenix, and Albuquerque each doubled their populations within just a few short years. After this time, postwar housing policy, the development of new transport infrastructure like highways and airports, and even the invention and widespread adoption of air-conditioning also contributed to the acceleration of urban and suburban development in the American West, together working to sediment the social, political, and physical transformation of a region that saw its population skyrocket from 32 to 45 million in the fifteen years following 1945 (Beck ibid.).²³

In sum, the American West has been transformed both during World War II and especially after “from an overwhelmingly rural [political ecology] dominated by extractive industries such as mining, grazing, logging, and agriculture to an overwhelmingly urban one characterized by explosive growth” (Sheridan 2007:122). What is true of the American West more broadly is also true of the California desert. As California’s desert cities and their suburbs explode outwards, they also obliterate wildlife habitat, fragment the state’s famed open spaces, and subdivide what was previously farmland into miles upon miles of tract homes and gated developments. In turn, such rapid sub/urbanization works to produce powerful political constituencies who often oppose the old “extractive order” (Sheridan ibid.) in favor of their own interests and aspirations, whether

²³ But as Limerick (1992) suggests, we should focus not only on the successes of urbanization in the American West, but also on the “landscapes of failure”—the everyday zones disinvestment and abandonment that are left behind when the boom finally goes bust (also see Huber & Stern 2008, 2009). Following Limerick’s lead, I examine two such “landscapes of failure” in Chapters 3 and 4 of this thesis.

these be framed in terms of property values, recreation, or environmental conservation (see Rome 2001). Further, these sometimes competing interests can also work to generate faultlines of sociopolitical conflict not only between the sub/urban and the rural but also *within* sub/urban communities.

Take off-roading, for example. In the early twentieth century, scenic highway tourism flourished as the preferred mode of recreational activity, which focused primarily on the visual consumption of the state's spectacular landscapes from designated roadside spaces—a practice that could very easily be reconciled with the conservationist ethos and aims of the time (see Louter 2010). Since the mid-1970s, however, all-terrain vehicles (ATVs) such as demilitarized jeeps, dune buggies, and dirt bikes have all exploded in popularity as the preferred vehicle of desert-based recreation. In California alone, for example, the number of *registered* ATVs increased statewide by 108% from 1976 to 2002 (Zielinski et al. 2007), spurred on at least in part by advertising campaigns from the manufacturers of ATVs and associated equipment. It is clear from the corporate iconography as well as the everyday discourses of off-roading that these channel many of the mythic tropes of the arid American West described above, including the “conquest” of wilderness at the hands of the rugged, self-reliant, male white subject (see Figure 5).

Notably, these ATVs are often used in precisely the sorts of so-called *pristine* landscapes or *fragile* ecosystems singled out by environmental advocates and activists for conservation—including the California desert. In 1976, for example, the popular science publication *Science News* raised the alarm about the ill effects of the annual 150-mile Barstow–Las Vegas off-road motorbike race (across the Mojave) on the “fragile” desert (also see Huber & Stern 2008, 2009). According to this report, the race had destroyed more than 9,000 acres of desert, decimating plant and animal life as well as sites of historic, cultural, and archaeological interest. In December 1989, the race was denied the necessary operating permits by the U.S. Bureau of Land Management. The following November, more than one hundred angry dirt bikers protested the cancellation of the event on a wind-swept patch of desert brush about 25 miles northeast of Barstow, declaring themselves “defenders of Americans’ rights to use the nation’s public lands” (Warren 1990). After speeding around a barricade of federal officials onto land the BLM had temporarily closed in hope of discouraging the protestors, four of these bikers were arrested—but not before three of them were chased for forty miles across the desert by a San Bernardino County Sheriff’s helicopter. Even as the race was discontinued, then, its controversial legacy lived on, culminating eventually in the introduction of the landmark 1994 California Desert Protection Act (Wheat 1999).

During fieldwork in and around Joshua Tree, the social and ecological costs of off-roading emerged as a major flashpoint of conflict. California's distinctive checkerboard pattern of public and private land holdings means that designated off-road areas would sometimes jut up against private property. Frequently, I was told, the off-roaders were unaware of the borders between private and public land or else intentionally disregarded them, thereby straying onto private property. On occasion, this practice could result in heated disputes and even violence. In casual conversations about the controversy, for example, I was more than once regaled with stories of defiant homeowners camped out on their front porches with shotguns awaiting off-roaders to rattle by on bikes or quads. Some such stories became elevated to the status of local legend. After one elderly gentleman's guard dog had died "a suspicious death," for example, he blamed a gang of local off-roaders of poisoning the beast and swore his revenge. Bracketing for now the question of the veracity of these accusations, they nonetheless clearly index an atmosphere of heightened apprehension and collective sense of bodily vulnerability among both the Morongo Basin residents and the off-roaders.

Political scientists McGreggor Cawley and John C. Freemuth (1997) argue that the federal policy of multiple use on public lands leads to an entrenched political impasse as single-interest groups (like the California Off-Road Vehicle Association) engage in a zero-sum battle. As the geographer Paul Starrs (2000:4) puts it, "The debate, Manichean in philosophical terms, is polarized black vs. white and lodged against the detents of reason. The splits are extreme: full use or none, wild or domestic, city slickers or rural rubes, federal or private, small or big, endangered species or livestock." Clearly, this logic is at work in the public meeting described above. But, as I hope to have shown here, the battle over public lands in the American West and California desert long preceded the federal government's "multiple use mandate."²⁴ Indeed, the conflict between competing impulses towards either exploitation or conservation has been present from more-or-less the beginning of Anglo-American presence in the desert. Whilst pitched passionately against each other, however, "both positions derive at least part of their authority from the imposition of ideas of vacancy onto the terrain" (Beck 2009:23). Put differently, both perceive the space as empty and locate this emptiness at the root of its value, whether to blow up, build upon, or contemplate as "a purgative space of Romantic sublimity" (ibid.). In the next section, I examine ethnographically one contemporary effort to replace this image of vacancy with one of exuberant life and inherent worth as well as a newfound fragility.

²⁴ The "multiple use mandate" for BLM lands was first enshrined in law as part of the 1976 Federal Land Policy and Management Act.



Figure 5. A contestant and spectators at The King of Hammers, a popular annual all-terrain vehicle competition held near Joshua Tree.

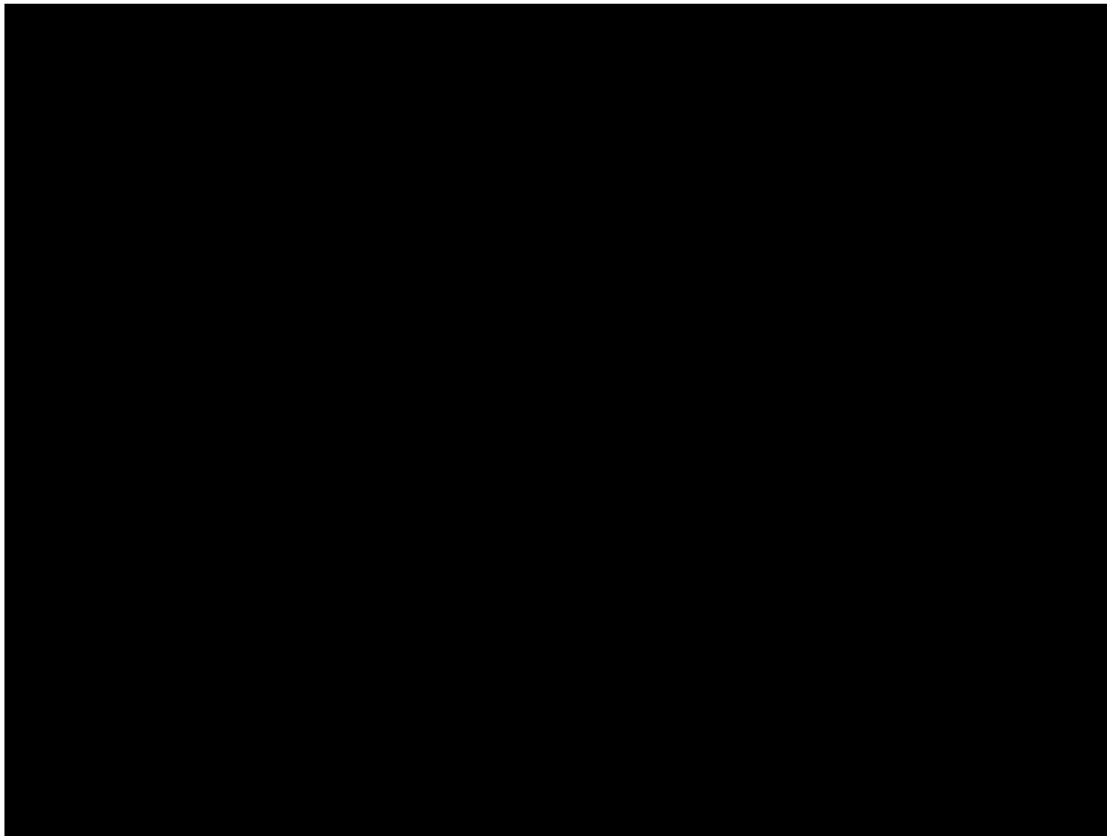


Figure 6. Bioblitz volunteers posing in the Joshua Tree National Park. This photograph was emailed to me by one interlocutor after I left California with the subject title "new friends!"

“Rainforests Upside Down and Inside Out”: Materializing Life and Loss in the Mojave Desert

In March 2013, a group of sixty or so volunteer scientists, students, teachers, families, and other community members met in the “Rattlesnake Room” at the Joshua Tree National Park’s headquarters in Twentynine Palms. They had gathered there for the park’s third annual *BioBlitz*, a weekend event in which volunteers work together to find, document, and identify as many species of plants, animals, fungi, and other organisms as possible (see Figure 6). Following a short orientation talk led by JTNP’s Vegetation Branch Chief Neil Frakes, the volunteers set out among the slopes and washes of Cottonwoods Springs and Lost Palms Oasis to identify the dominant flora and fauna, as well as to hunt for niches where rarer species might be found. It was a warm day and the volunteers stayed mostly within the shade of the palms and cottonwoods as they moved along the edges of the oases. They carried backpacks containing bottles of sunscreen and field guides to the California desert as well as packed lunches of sandwiches, potato chips, and fruit. Collectively, they hoped to produce a biodiversity snapshot of the desert environment, National Park Service employee Jason later told me during fieldwork. In turn, he explained, these snapshots could be used by scientists to track changes in the biodiversity profile of the Joshua Tree National Park across space and over time—a task rendered all the more important in an era of global climate change, development, species loss, and many other anthropogenic impacts.

Imagine the scene. A fourteen year-old girl moves, slowly, carefully, and yet excitedly through the spectacular spaces of the Joshua Tree National Park. She holds in her outstretched arms a smart phone. The world whizzes by within the 5 inch screen. But she is not hunting for “rare” Pokémon. Instead, she is hunting for “rare” animal and plant species. *Wait!* She spots a lizard nestled between two boulders, taking shelter from the midday desert sun. Tentatively, she approaches the lizard and, *click*, takes a photograph. Could it be the Long-nosed Leopard Lizard, or else the Common Chuckwalla? Though the girl is not sure, it doesn’t really matter. She types into her smart phone a description of lizard—its shape, color, and markings—as well as a description of its location. She’s careful to give as much information as possible. She then hits send: the photograph, description, and location are all sent to a special webpage. She is not the only one. As her schoolmates, friends, and family move through the park, they do the same; their data is compiled, collated, visualized, and made available to be viewed, downloaded, and commented upon by scientists and the public alike. Later that evening, the girl visits the webpage on her laptop to view her photograph and

learn more about the lizard in question; a herpetologist has by now helped her identify it as the Common Side Botched Lizard (*Uta stansburiana*). From there, she follows links within the website to learn more about other species, ecosystems, and places.

In this way, the descriptions, locations, and photographs of the species that were collected during the Bioblitz were collated in real time using the iNaturalist smart phone application, first developed by students at UC Berkeley's School of Information as part of their Masters project and now run by the California Academy of Sciences (see www.inaturalist.org). By the end of the weekend, the collected efforts of these citizen scientists had identified over 550 species, including more than 200 species of plants and 300 species of insects as well as 32 bird species, 12 reptile species, seven mammal species, and one amphibian species.²⁵ Among these were multiple plant species not yet documented in this particular location and at least one species that was altogether new to the national park's official list of plants. "Our mission is to protect the park so future generations can enjoy it," said Jason. "But we have to understand what's here before we can preserve it." Having attended the Bioblitz with some of her students, Eva, a high school science teacher from the high desert town of Joshua Tree, told me how it was a valuable way to help her teenage students understand and appreciate what she called their *own backyard*. She added:

From an ecosystem point of view, the desert is still misunderstood. Even for many of the people that live nearby, it's seen a barren or boring place. But it's not. It's actually an incredibly lively and diverse environment, even if it's not the same kind of life you find on the coasts or in the redwood forest. But if we train ourselves properly, then we can begin to see it... And I think that if we see it, then we will protect it.

Recreated after the fact from interviews, the Bioblitz I describe here constitutes but one in a series of such events both in California and beyond. In 2016, for example, staff at the Joshua Tree National Park organized yet another Bioblitz as part of a larger cross-country effort to celebrate the U.S. National Park Service Centennial, which included over 250 Bioblitzes throughout the year. During fieldwork, I also learnt of a so-called "guerilla" Bioblitz orchestrated by the local environmental organization *Save Our Desert* in their attempts to protest the construction of a 4,000 acre wind farm near Joshua Tree—an example of a grassroots movement in which

²⁵ See <http://blog.rsabg.org/2013/05/hunting-for-botanical-biodiversity.html>. Accessed April 10, 2017.

communities and activist organisations “seize the means of perception” (Weston 2017:21) and equip themselves with the technological and scientific knowhow necessary to produce the kinds of ecological knowledge that are legible within the institutional settings that these groups must now make their claims and protests heard.

Clearly, these events are gestured towards different aims. While the first two enlist the collective agency of “citizen scientists” in the service of a state-sanctioned project to survey the biodiversity of its territory, the second takes place in the wake of state policies that promote the construction of renewable energy megaprojects in the desert. By transforming everyday environments into surveyed sites of threatened biodiversity, however, each event takes part in what anthropologist Jane Guyer has identified as a broader social and cultural trend in which numbers “are insurgently prominent in people’s descriptions, imaginations, and efforts to influence their social worlds in the 21st century” (see Guyer et al. 2010:36). Such practices, technologies, infrastructures, and imaginaries of enumeration are integral to the social constitution of a sense of acute environmental crisis in at least two crucial ways. First, they are integral to the act of making the planet’s biological diversity present as an object of actual and potential loss, which without long-term statistical surveillance would not be available to collective perception or moral projects in the same way (see Edwards 2013; Morton 2013). Along these lines, for example, Shaylih Muehlmann (2012) has demonstrated how the performative genre of “the countdown” is foundational to both technical *and* popular notions of endangerment and extinction, as well as to the affect of “anticipatory nostalgia” (Choy 2011:26-27) that compels people, at least in some cases, to take (sometimes costly) action in the present on behalf of a potential future.

However, as multiple scholars across a wide range of disciplines have argued (e.g. Harvey 1997; Bowker 2000; West et al. 2006), such practices and technologies of enumeration are also integral to the social constitution of environmental crisis on an altogether other register. According to such arguments, the quantification of nature as a standing reserve of so many natural resources, species, or (more recently) so-called “ecosystem services” has participated powerfully in the transformation of the environment from a place in which people “live, work, play, and worship” (Adamson et al. 2002:4; Loftus 2012) into a set of standardized, fungible units of this or that value: socially disembedded and ecologically decontextualized (see McAfee & Shapiro 2010). In turn, the alienation of people from the natural world they inhabit paves the way for its overuse, abuse, and degradation. Rather than *challenging* the destructive premises of modern,

market-driven industrial society, then, anthropologists have argued that campaigns to conserve biodiversity founded on its quantification often, in practice, actually represent an *intensification* of capitalist or neoliberal logics and therefore constitute the conditions for further exploitation and degradation of the environment (see Muehlmann 2012:344; Escobar 1996; Bamford 2002; Brosius 2006).

By contrast, however, the Bioblitz harnesses the pleasures of counting and listing as the catalyst for a sensuous engagement with the natural world (cf. Tsing 2004:168). In this instance, ecological knowledge is not only transmitted through a textual or discursive engagement, as within the classroom, but is also experienced in terms of an embodied encounter with a material landscape. In turn, the use of smart phones cultivated rather than curtailed a haptic engagement with the wider world, as bodies turned, twisted, and bent in order to find and photograph species. Further, by working together in close proximity and contributing to a task that is beyond the reach of any single individual, many of the volunteers I spoke with reported a sense of “collective effervescence” (Durkheim 1995:217). When I asked my friend Robert, a retired social worker, what his favorite part of the National Park Service Centennial Bioblitz in 2016 was during a Skype interview, he replied: “Working together! Working alone, nobody could’ve counted all those species in a single day. It would’ve taken a lifetime. It was so nice to get a sense of how many different people care about the desert... I love this place and this is a wonderful way to become part of its history. The data we collected will be part of the park’s record forever.” As an ecopolitical act, then, the Bioblitz sutures together the power of spectacular landscapes, the pleasures of counting, and the transformative efficacy of embodied action to facilitate the creation of a shared sense of purpose—to save the desert’s biodiversity. As such, it forces us to rethink the “Western folk theory” that presumes that whenever we see numbers “we see something that counts, calculates, equates, desacralizes, and rationalizes” (Maurer 2006:24).²⁶

Coming already after several decades of heightened attention towards the imperiled state of the planetary biosphere, the notion of “biodiversity” has here begun to reorganize the earlier ideas of natural history, wilderness, and ecology that previously configured perceptions of the California desert and the American

²⁶ Rather than inert instruments of transparent description, anthropological studies have pointed to the powerful performative efficacies of numeric forms and enumerative practices. As Penny Harvey and Hannah Knox (2015:82) have recently noted, for example, “In these approaches, a contrast is drawn between approaches to numbers as passive forms, used to construct objective accounts of external realities, and approaches that are interested in what numbers do, in the relationships they entail and the worlds they create” (also see Lave 1988; Rotman 2000; Verran 2001).

West (e.g. see Nash 1965; Cronon 1996). As anthropologist Celia Lowe (2013:4) argues, “Biodiversity was not so much a solution to the problem of environmental risk ... as its [novel] problematization.” This problematization stands out among the natural sciences insofar as both its values and its mission are rendered explicit (see Soule 1985). Thus, for example, the sciences of biodiversity see their object of study as caught in a perpetual crisis of endangerment. Having today identified global climate change, development, the introduction of non-native species, and overharvesting as the “metacauses of a new rate of extinction,” conservation scientists call upon the affect-laden and morally charged language of “apocalypse” and “holocaust” to describe such a precipitous decline in the overall number and variety of life forms (Lowe *ibid.*:5). In this way, the sciences of biodiversity are self-consciously directed towards both an epistemology and a politics of urgency—a kind of salvage biology. As a particular articulation of the problem of environmental knowledge, practice, and crisis, biodiversity therefore traffics with it a powerful assemblage of assumptions and narratives: “a worldwide catastrophe of endangerment, the threat to global well-being this endangerment implies, and the consequent obligation ... to take drastic measures to intervene in the world’s biodiversity hotspots” (Hayden 2003:52).

As my environmentalist interlocutors protest, however, it is a grave mistake to think that such critical pools of biodiversity “exist only in the gaudy show of the coral reefs or the cacophony of the rainforest” (Whitty 2007). Capturing in a richly descriptive language a widespread sentiment that I heard a great many times during fieldwork, one writer (*ibid.*) describes the desert ecosystem in the following terms:

Although a hallmark of the desert is the sparseness of its garden ... this is only an illusion. Turn the desert inside out and upside down and you’ll discover its true nature. Escaping drought and heat, life goes underground in a tangled overexuberance of roots and burrows reminiscent of a rainforest canopy, competing for moisture, not light. Animal trails crisscross this subterranean realm in private burrows engineered, inhabited, stolen, shared, and fought over by ants, beetles, wasps, cicadas, tarantulas, spiders, lizards, snakes, mice, squirrels, rats, foxes, tortoises, badgers, and coyotes.

Thus, this journalist hopes to do with words what the Bioblitz does through practice: upend the image of the desert as a barren, inhospitable environment or vacant space and fill it with abundant life and activity. Because the desert’s

biodiversity has for the most part remained invisible both to immediate sensual perception *and* to dominant cultural regimes of perceptibility, the logic goes, it has also remained on the whole undiscovered and undescribed by modern science—thus making it an important albeit currently uncharted territory of biodiversity potential. As Eva put it to me, for example, “The way I see it, the California desert is the rose that nobody can see [...] The value of protecting this place is not just based in protecting what we know and love, but understanding that the California desert literally represents the unknown... And that there’s so much left to learn and to discover.” Whilst upending the image of the desert as vacant space, however, Eva’s comments clearly situate the desert, once again, within a familiar narrative framing of adventure, discovery, and (by implication) dominion. In the California desert alone, she tells me, 25-30 new plant species are discovered on average every decade, while another 150-200 discoveries are expected in the next century. “It’s floristic frontier out there,” she says excitedly.

“As Lévi-Strauss intuited long ago in the final chapter of *The Savage Mind*,” notes anthropologist Charles Stewart (unpublished manuscript), “history would seem to be structured by chronology, but in fact it is, like myth, structured by affect.” In this case, we can “discern affect emerging not only in the identification and narration of a historical event,” here the biodiversity crisis, but also “in the cultural production of analogies that serve to isolate and transfer affect” between different moments in historical time (ibid.). What emerges from this specific historical analogy (“the floristic *frontier*”) is an impassioned understanding of the present in terms of a national genealogy of the American West as a landscape of catastrophe, loss, and anticipatory nostalgia. Like the cultural figures of both the *frontier* and *wilderness*, in other words, the notion of the biodiverse desert partakes in a deep-rooted “discourse of the vanishing” (cf. Ivy 1995) which hitches its value to its imminent disappearance (Cronon 1987, 1996:13). In this way, the cultural object of the biodiverse desert exists only insofar as it is fragile, under threat, and caught in state of perpetual crisis. Such a crisis of loss, however, does not simply imply a self-contained threshold or turning point in time, but also signals a historic “structure of feeling” (Williams 1977) within which everyday labors of love, care, and other socioecological intimacies (including the Bioblitz) may take root and flourish.

Conclusion

From godless wasteland to national wilderness to biodiversity hotspot: the relationship between humans and the desert has here completed its inversion. If

prior to the mid-nineteenth century, the harsh, inhospitable desert was seen first and foremost as a threat to human survival, today it is the multiple, overlapping impacts of human activity both direct (like development) and indirect (like climate change) that are seen as threatening to the future survival of this dynamic yet fragile ecology. Indeed, in an era of acute environmental crisis and a growing consensus over the finite nature of planetary resources, the desert biome has once again shifted from the margins to the center of U.S. national fantasy. Of interest is not just what the desert was or is—but what it should be, what it could be, and what it may become. In tracking this inversion, I have shown how the California desert as both “a thing and an idea” (cf. Candea 2010:66) has become absorbed via multiple phases of history into the larger structure of what Berlant (1991) calls the “National Symbolic,” having been transformed from a place that was by definition void of human signification into a canonical (albeit highly contested) North American landscape. The so-called “Bioblitz” described here is both a consequence of as well as an active vector in the conceptual realignment of the desert landscape, a realignment that will no doubt have a profound practical influence on Southern California’s physical geography.

My main aim for this chapter has been to demonstrate the fact that the convergent climate crises detailed in this thesis occur *here* matters a great deal—the physical place embodies a social history (Ingold 1993:162), which in turn maps out a field of possibilities with regard to collectively conceiving of and responding to the concrete reality of environmental transformation. In his book *Landscape and Memory*, Simon Schama (1995:7) argues that landscapes “are built up as much from strata of memory as from layers of rock.” In the elemental geography of the American desert, a space so clearly stained by time and history, this image proves especially alluring. Yet, I argue, the geological metaphor is not quite appropriate. Summoning all at once the past, the present, and the future, landscapes have the power to bridge different times and different spaces. In this way, the successive stages of history I have described here are not deposited upon the landscape in neat, parallel bands—like layers of rock—each strata covering what came before. Rather, they are tumbled messily each into the other. Although they may lay dormant for many years, past associations always remain within the reach of the present; they may erupt or become reactivated at any moment. Together, these associations and the places that anchor them constitute a repository of history, memory, myth, and affect: a ‘harvestable’ and ‘usable’ past available for deployment across a range of socioecological situations. In the next chapter, I zoom in on this process with reference to conflicts over the development of renewable energy megaprojects in the wide, open spaces of the Southern Californian desert.

Chapter 2.

Temporal Formations at the Solar Frontier: Discursive, Affective, Political

On a sunny summer day in June 2011, a group of about forty environmental activists, indigenous activists, and concerned citizens assembled at an unassuming patch of desert a few miles outside of Blythe, California. At first glance, there was not much to distinguish this patch from any other—the same sagebrush-dotted, rocky, rust-colored landscape unfurled for miles in every direction. Yet here was the proposed site for the so-called “Blythe Millenium Solar Project,” which at over 7,000 acres was set to become by far the world’s largest solar thermal power plant.²⁷ For its backers, the project conjured alluring visions of a clean energy future in which technological and economic progress could be harmoniously reconciled with the future health and wellbeing of the planetary environment. To the protesters, however, it was a development like any other—a threat to the wellbeing of the local landscape, a space of great natural and cultural significance. As such, this specific spot had in recent months become implicated in a controversy over the past, present, and future of the California desert, as well as wider conflicts about competing modes and scales of reckoning value in an era of global climate change.

Braving the searing summer heat of the Colorado Desert, the protesters gathered to share their concerns over the project with each other and with reporters. They waved placards reading “Say No To Big Solar” and “Save The Desert.” One protester arrived dressed in convincing costume as the Grim Reaper. “It takes the desert a tremendously long time to heal,” said Jamie, a biologist from the nearby Coachella Valley. “If you develop a piece of land in the desert it may not return to its full health for hundreds of years or longer.” Another activist adds, “The desert is a diverse ecology—over half of the state’s new species have been found here. There are many more to be discovered, but not if they’re destroyed before we get the chance.”

Standing in solidarity with those protesters centering their claims upon the natural history and future environmental wellbeing of the California desert, a small but determined group of indigenous activists calling themselves *La Cuna de Aztlán Sacred Sites Protection Circle* had come to protest the solar energy site’s proximity to the Blythe Geoglyphs—a cluster of sacred images created by

²⁷ In contrast to photovoltaic solar energy power plants, which transform sunlight directly into electricity, so-called “solar thermal” power plants deploy mirrors or lenses to concentrate the sun’s light onto a receiver, which in turn uses the resulting heat to drive steam turbines or other devices in order to generate electricity.

removing rocks and soil to reveal the unpatinated ground below. Visible from the air, this set of geoglyphs comprise a number of anthropomorphic and zoomorphic figures, including the well-known image of the hunch-backed flute player Kokopelli—a mythic figure common to many indigenous cosmologies across the arid American Southwest (Malotki 2004; Slifer 2007). As part of the controversy, the age of these geoglyphs had emerged as a matter of contention.²⁸ “These images are part of our tradition of scientific inquiry that predates Galileo, Copernicus, and early European astronomers,” declared *La Cuna* chairperson Patricia Pinon. “There is still much to learn. But future generations may not have that opportunity” (Lundahl 2011). According to Pinon, a federal fast track permitting process had paved the way for inadequate archaeological reviews and unsatisfactory government-to-government consultation with tribes—thereby threatening the sacred sites. Also protesting that day, Chemehuevi elder Alfredo Figueroa wants protective fences to be built around the most vulnerable of the sites, but says that protecting the images is not enough; their meaning is inextricably tied to the integrity of the land they inhabit. “Climate change is a serious issue,” he says. “We need to do something. But this is not it... Put solar panels on rooftops. Put the panels on disturbed sites in and around cities. But don’t put them out here. If we destroy these sites, they’re gone forever” (Miller 2014).

Recent years have witnessed a wild profusion of proposals for renewable energy megaprojects in and around California’s desert spaces, which by any measure stands to dramatically and irreversibly reconfigure the state’s social and physical landscape. In turn, these proposals have unleashed an unexpectedly fierce backlash of political opposition that takes many forms but erupts most visibly as the kind of place-based protest described here. At these protests, different cultures of political claim-making converge. Yet, notably, each group couches its claims in explicitly temporal terms. In this way, we are presented repeatedly with an image of the desert as a “slow” and historically deep ecosystem, for example, as well as an untapped repository for future cultural and scientific knowledge. All this, the protesters say, stands to be lost under the temporal bulldozer of large-scale

²⁸ As William deBuys (2001:28) notes, “intaglios and other forms of ‘earth art’ lie scattered far and wide across the deserts of the lower Colorado... Many of the desert earth figures—‘geoglyphs’ in the parlance of archaeologists—depict abstract shapes or stylized humans... Although dating is difficult, most geoglyphs substantially predate European contact, some reaching back thousands of years.” The estimated age of these particular geoglyphs ranges from 450 years to 2,000 years old (see Welsh & Welsh 2010:121).

renewable energy developments, which are also framed by their backers in terms of a specific orientation towards the present and future. As such, this chapter is about the complex tangle of temporalities that animates such conflicts over Southern California's "utility-scale" renewable energy economy.²⁹ But more than this: it is also about how, through their practical acts of engagements with landscapes and objects, people cultivate and experience time as a terrain of cultural critique and political praxis. If the last chapter presented an image of the California desert as an intersecting space where many associations, myths, and historical memories converge and circulate, this chapter examines the ways in which people draw upon and activate elements of this 'harvestable' or 'usable' past in order to construct, contest, and respond to a sense of actual or possible crisis in the present.

Noting how landscapes and artifacts can bring time to life, and life to time, anthropologists Daniel Knight and Charles Stewart (2016:8) describe how people "articulate their relationship to the past, present, and future through objects and landscapes that transport them on multiple temporal trajectories." Thus, physical things might traffic one's perspective into the past or future, intensify experiences of the present, or else mediate the intertwining rhythms of everyday life. Indeed, certain objects or landscapes may do more than one of these at once, thereby acting in a manner that Shannon Lee Dawdy (2016:8) calls *heterotemporal*. Writing against what Walter Benjamin (2007:261) has described as the "empty, homogenous" time of the modern historian, Dawdy explores the ways in which the ramshackle buildings and patinated artifacts of post-Katrina New Orleans have a special capacity for inducing "heterogeneous temporal and critical states" in the city's tourists and residents. Such things don't spontaneously exude temporal affects, however. Rather, they must be made to do so through practical acts of encounter and engagement which take place within specific social and historical fields of intelligibility (see Navaro-Yashin 2009, 2012). As such, anthropologists have shown how time is a sociocultural construct fashioned not only from cultural categories, representations, and practices but also from systems of human sensation working in synergy with physical objects and artifacts (e.g. see Durkheim 1995; Thompson 1964; Evans-Pritchard 1969; Gell 1992; Munn 1992; Greenhouse 1996; Bear 2014, 2016).

It is important to note, however, that the problem of time is not only a classic anthropological question; it is also a predicament in the contemporary world of events. In this way, for example, the cultural theorist Sarah Sharma notes (2014:132) how "the economic slowdown and the energy crisis are crises in pace,

²⁹ The phrase "utility scale" denotes large-scale renewable energy developments that feed large quantities of energy directly into the grid, as opposed to smaller-scale, "distributed" developments which supply their energy directly to users.

energy flow, and time.” The same could also be said of climate change and California’s drought. As such, conditions and crises of temporal imbalance have in recent years emerged as preeminent categories of collective experience and a significant terrain of political practice. Yet despite this, anthropologists still tend to “privilege the topographical over the temporal” in their examination of social movements and political practice (Lazar 2014:92). Alternatively, they might approach time as nothing more than “a neutral dimension in which politics unfolds as a process or conjuncture” (Bear 2014:25). Thus, anthropologist Erik Harms (2013:347) concludes that “the play of time is inherently political yet rarely framed in overt political idioms of domination and resistance.’

Following my interlocutors’ lead, then, this chapter inquires into what dramas of domination and resistance might reside in the realm of time. It proceeds in four main phases. First, I examine some of the practical and discursive labours through which environmental activists are responding to these and other developments, which work to fold a state of near-constant crisis into the intimate spheres of everyday life. In the second section, I introduce the broader historical and political moment in which these particular projects are being proposed and constructed. Turning more squarely to the modes of temporality at work in these conflicts, the third section presents the notion of the solar gold rush: an image of time and temporal affect which contains at its heart a profound historical ambivalence that renders it open to multiple interpretations and articulations. Finally, I examine how my environmentalist interlocutors appeal to alternative images of time grounded in the materiality of the Californian landscape. With a nod to the *Occupy Movement*, I describe this as a form of *temporal occupation*. While the conflicts described here are perhaps most ostensibly about the fate of space, place, and the environment, then, this chapter will argue that they can also be productively interrogated in terms of a cultural politics of competing “chronotopes” (Bakhtin 1982)—disjunctive temporal qualities mapped into the same geography.

Ground Zero: Eloquent Affects

“We’re at the ground zero of desert development here... Under constant attack. It seems like every day, there’s a new proposal. It’s a game of whack-a-mole! A lot of the local community is deprived, which means it can be taken advantage off. The desert is a fragile and unloved ecology and it desperately needs our protection.” Carrie slams her fist on the table for emphasis. We are sat in the kitchen of her Morongo Basin home, drinking coffee and eating Carrie’s homemade apple pie.

Carrie describes to me her “nightmare scenario”: that the landscape of the Mojave Desert will be slowly and yet irreversibly dismantled, one development at a time. Through the kitchen’s open windows, the rugged, rust-colored terrain stretches off for as far as the eye can see. As she speaks, Carrie points out the desert’s wide open spaces and its big, clear skies that she has spent more-or-less her whole life fighting for.

Now 63, Carrie has lived in the Morongo Basin for her entire life. During that time, she has acted as a member of a local volunteer fire department, the president of an influential property owners’ association, and a key contributor to her community’s “development plan.” Nowadays, Carrie acts as head treasurer for the Morongo Basin Conservation Association—a local conservation organisation that functions as an important hub of grassroots environmental activism in the Southern Californian high desert. As well as keeping the books for the MBCA, Carrie also spends her days writing letters to local politicians, collecting signatures for petitions from visitors to the Joshua Tree National Park, and also baking cakes and pies for the association meetings—the everyday labors of ecopolitical activism. David, Carrie’s husband, is also an active member of the MBCA. So is their daughter Jennifer and Jennifer’s husband, Frazier—both in their thirties. Jennifer has a master’s degree in biology and works as the assistant manager of a nearby wildlife preserve. “We like to think we had something to do with that,” Carrie tells me, pride sparkling in her clear green eyes.

Like many other organizations of its kind, the MBCA was formed as part of local opposition to a specific development. Here is its origin story as recounted to me one afternoon by Carrie. In 1969, the Morongo Basin resident Susan Moore learnt that Southern California Edison were buying up land throughout the area in order to build an electrical transmission corridor through its center. In response, she called up her neighbors along the corridor’s proposed route, and they gathered to resist, calling themselves the Morongo Basin Scenic Committee—a name the group later changed to the MBCA. Susan set up information depots in all the Morongo Basin towns: shops and offices where people could pick up the latest news on the issues and sign petitions. Letters were sent to local newspapers; meetings were organised and attended. As word spread, other residents joined and the movement gathered momentum. After an 11-year legal battle with Southern California Edison, the MBCA finally forced the powerful utility company to redirect its proposed transmission corridor south of the Joshua Tree Monument (now the Joshua Tree National Park).

With this transmission corridor proposal *defeated*, in the suggestive words of Carrie, MBCA members then turned their collective attention to other *threats*.

Over the years, these threats have included proposed landfills, nuclear waste dumps, commercial mining, and suburban sprawl, as well as illegal off-roading in and around the Morongo Basin. Ironically, what attracts many of my interlocutors to the desert also draws the unwanted attention of developers: an abundance of relatively cheap, open space. The same story is also true across the American West more broadly, which is currently being developed at a considerable rate.³⁰ Today, active *campaigns* exist in the Morongo Basin against solar energy developments like the ones described above, a suburban-style gated housing development, and a Dollar General chain store—which Joshua Tree residents say will harm both the economy and the character of their town. In this way, MBCA members would articulate the organization's history and purpose to me in terms of a war of attrition, thus transforming the "crisis" of development from a succession of singular events into an ongoing condition of everyday life in which threats to the survival of place and community emerge on multiple fronts at once: a matter of near-constant concern. This is what Carrie likens to a game of "whack-a-mole."

It has become commonplace in the United States and elsewhere to label the local opponents to unwanted developments as NIMBYs,³¹ especially when they are white, middle class, and relatively well off. While not unfounded, such criticisms on the whole fail to interrogate the passionate and deep-rooted attachments to place that undergird and animate conflicts over developments like these, often forged through many years if not an entire lifetime of inhabitation. In addition to attachments to place, attachments to one another are also of great significance. Indeed, many of the current MBCA members I interviewed were only too happy to trace for me their own personal connection to the organization's founding committee, whether through kinship, friendship, or some combination of the two. Others MBCA members might be relative newcomers to the area, seeking out like-minded individuals or having become newly sensitized to the plight of the California desert and wanting to dig in and help out.

As well as one important platform from which the political labours of environmental activism are organised and carried out, then, the MBCA and other organisations like it therefore also serve a range of other purposes, such as providing people with valuable opportunities to make and maintain friendships; to demonstrate or reaffirm their commitment to the desert and to each other; and

³⁰ One report estimates that, from 2001 to 2011, an area of land totaling 4,321 square miles—or 15 times the size of San Jose, Oakland, and San Francisco combined—was modified by development across the American West (www.disappearingwest.org).

³¹ After "Not In My Backyard." The term NIMBY is often used as a pejorative label to discredit this kind of oppositional claim as provincial and motivated by self-interest.

to feel that they are engaged in an important and worthwhile endeavor. While many of the activists I knew foregrounded the often frustrating and sometimes exhausting nature of their work, others seemed to have grown quite comfortable with its “attritional” format (Lazar 2014:101), perhaps even finding a degree of contentment or enjoyment in the repetition. By highlighting the sometimes familiar, comfortable, or even enjoyable aspects of environmental activism, however, I do not wish to discount the very real feelings of distress and outrage that energize local people to protest or otherwise oppose these developments, often at significant personal cost as well as potential gain. For Carrie, for example, the fate of the Southern Californian desert hangs in the balance—a thought, she tells me, that keeps her “up at night.” “It’s true,” announces her husband David, confirming to me that his wife has been tossing and turning at night, or, giving up on the prospect of sleep entirely, composing letters to local politicians and bureaucrats until the break of dawn. Certainly, if approved, the cumulative impact of these various developments would constitute a significant and ultimately irreversible assault on the scenic and ecological constitution of the desert—especially when combined with the localized manifestations of global climate change (e.g. see Sheridan 20007; Sayre 2012).

My point here is that local environmental organisations like the MBCA as well as other, more informal networks of environmental activism work in multiple ways to enfold a near-constant sense of environmental crisis into the spaces and rhythms of ordinary life, everyday social relations, and modes of individual and collective self-cultivation. As part of this layering effect, I also hope to have shown how anxious vocabularies of urgency, insecurity, and conflict have now infiltrated the everyday discourses and practices of environmental activism in the Morongo Basin.³²

As an example, let’s focus in on Carrie’s use of the phrase “ground zero.” While the history of the phrase ground zero is inescapably linked to the destructive power of the nuclear bomb and the U.S. ideological project of the Cold War, the 9/11 terrorist attacks on New York’s World Trade Center updated and re-energized the phrase—unanchoring it from its atomic origins and infusing it with a whole new set of contemporary associations (Sturken 2004:311). As a spatial figure,

³² Indeed, this is part of a broader shift in U.S. public culture in which the political, moral, and temporal horizons of environmental crisis are increasingly framed in terms of not only emergency but also conflict—a “war on weather” (Munslow & O’Dempsey 2010)—spearheaded not least of all by the rhetorical efforts of U.S. President Barack Obama to give what the literary theorist Rob Nixon (2011:10) calls “figurative shape” to the formless threat of rising CO₂ levels. In turn, such a rhetoric of emergency and conflict has been sutured by Obama to a range of concrete federal policies and programs, paving the way for the kinds of utility-scale renewable energy developments that I discuss throughout this chapter.

the phrase “ground zero” was meant to mark the zone of maximal destruction. But in recent years it has also come to denote a deep rupture or turning point in historical time: a threshold which separates two discontinuous and qualitatively distinct periods or epochs. In addition, it has also become tied to notions of crisis and emergency, a sudden acceleration in social time that demands a response. By referring to her home as the ground zero of desert development, Carrie is attempting to activate a very specific “structure of feeling” (Williams 1977)—built on images of Manichean struggle and sacrificial love—and re-direct it towards the collective care of the local environment.

While language and “affect” are often theorized in contradistinction to one another (Martin 2013:s155), the case at hand therefore calls attention to the affective resonances of specific terms, phrases, and linguistic forms (Besnier 1990). Much more than a simple act of translation, then, the use of this kind of language traffics with it a potent set of affective associations which functions to shape the field of political perception and action in certain ways: rendering some responses more likely than others. Whether ordinary or otherwise, I argue that the sociocultural construction of crisis is dependent simultaneously on the persuasive use of scenes, symbols, and stories—often harvested from other times or places and implanted into new contexts (see Argenti & Knight 2015)—as well as on the cultivation of an active visceral disposition towards dangers both real and perceived. Put differently, “crisis” is an affective state cultivated by critical practices which are inescapably grounded in everyday life.

When asked what is today’s single greatest threat to the California desert, Carrie and other MBCA members answer with a more-or-less unified voice. So while some may cite the “slow violence” (cf. Nixon 2011) of global climate change or urban sprawl, for example, the great majority referred me to the so-called *Desert Renewable Energy and Conservation Plan*—a controversial 12,000-page planning document authored by state and federal agencies to help guide the development of renewable energy infrastructure on 22.5 million acres of public and private land in Southern and Central California.³³ Whilst situated by my interlocutors within a deeper narrative of near-constant crisis, the sheer scale of this plan nevertheless suggests to these environmentalists a precipitous moment of unprecedented proportions for the California desert: a point after which it may remain forever changed. As such, this plan has transformed the “attritional time” of quotidian ecopolitical struggle into “historical time,” infusing the present instant with the status of (at least potentially) a threshold or turning point (see Lazar 2014). Coming from committed environmental advocates and activists, such vehement opposition

³³ Available at www.drecp.org. Accessed April 10, 2017.

to a renewable energy and conservation planning document and the ecological futures it prescribes is in need of some explanation. But before interrogating the temporal politics of place at work in this conflict—the central purpose of the present chapter—it is also useful to reflect more closely on the Desert Renewable Energy and Conservation Plan itself as well as the broader historical and political moment in which it has been proposed.

Power Struggles: Towards a Cultural Politics of Competing Chronotopes

In the last decade or so, the deserts of Southern California have been caught in what Carrie describes as a “flash flood” of utility-scale renewable energy development. From 2001 to 2011, for example, a modest 48 such projects had been completed in California—many of them in or near the state’s desert regions. Beginning in 2008, however, a “perfect storm” of social, political, and economic factors converged to generate a significant surge in the rate of new proposals. Among others, these factors included escalating concerns over climate change and questions about the insecurity of America’s energy future, as well as the introduction by President Barack Obama of multibillion dollar tax incentive *and* loan guarantee programs to support corporate investment in utility-scale renewable energy development. As such, the U.S. federal government was by November 2011 reviewing a massive 150 applications for new utility-scale projects on more than 1.3 million acres of California’s public lands, while a further 26 proposals had been given the green light (see Alagona & Smith 2012:39). By describing this surge in terms of a natural disaster—a flash flood no less—Carrie was emphasizing its apparently convulsive and uncontrollable nature, which by any measure stands to spectacularly and irrevocably transform the Southern California desertscape.

In order to win approval, each new application has to surmount significant legislative and regulatory hurdles at both the state and federal level. As such, new proposals were rapidly backing up at the Bureau of Land Management (BLM), the federal agency in charge of managing much of this land. In 2008, California State Governor Arnold Schwarzenegger signed an executive order committing the state to obtaining 33% of its energy needs through renewable sources by 2020.³⁴ As part of the order, Schwarzenegger guaranteed a “streamlined” permitting process for utility-scale solar, wind, and geothermal energy developments in the desert, whilst also promising protection for the local environment. Admitting a tension between these two aims, however, he called for a plan outlining how they should be

³⁴ In 2015, Governor Jerry Brown expanded this goal to 50% by 2030.

balanced in practice. The first draft was due to be released for public comment in 2010; the final plan was due in July 2012.

On Tuesday September 23, 2014—four years behind schedule—a consortium of federal and state agencies finally released the draft Desert Renewable Energy and Conservation Plan (DRECP) for public comment. Speaking at a wind farm in Palm Springs, U.S. Secretary of the Interior Sally Jewell told reporters: “The President's Climate Action Plan calls for expanding clean, domestic energy on public lands to create jobs and cut carbon pollution. The draft plan released today will help provide effective protection and conservation of the California desert while encouraging streamlined renewable energy development in the right places” (see Department of the Interior 2014). Following Jewell, John Laird, Secretary for the California Natural Resources Agency, took the stand. “Although the release of this draft plan is a milestone reached after years of collaboration and stakeholder input,” he told the press and the public, “we expect the draft plan to benefit from robust public participation. Public input is a critical part of the process [that] will help us develop the best possible final plan” (ibid.).

According to the plan's authors, the overarching objective of the DRECP is to establish a “landscape-level framework” for balancing development, conservation, and other land uses like recreation, which—as described in the last chapter—constitutes a deep-seated source of tension and conflict in the arid landscapes of the American Southwest. To do so, it designates different zones for development and conservation across more than 22.5 million acres of public and private land in California's Mojave and Colorado deserts—an area six times the size of Los Angeles. In the “development focus areas,” applications for solar, wind, and geothermal developments would benefit from a “fast tracked” permitting process as well as simplified mitigation measures. In those areas set aside for conservation and protection, however, such development would not be allowed. The DRECP includes five alternative plans for public comment: different proposals for achieving the delicate balance of development and conservation that it aspires to. The “preferred alternative” identifies more than 2 million acres of desert landscape for renewable energy development in an effort to provide space for up to 20,000 megawatts of new generation by as soon as the year 2040 (see Figure 7).

Perhaps unsurprisingly given the unprecedented scope of the task at hand, the draft DRECP is a massive and mind-bendingly complex document. As downloaded from its website, the plan's six volumes comprise of 6,030 pages divided up into 92 separate PDF documents, not including the 106-page table of contents, the 24 appendices, and an accompanying series of data-intensive map files. The document is so unwieldy and written in such inaccessible language that

one pundit has called it “bad for democracy” (Clarke 2014). Certainly, the precise format of the plan is hard to reconcile with the ideal of “public participation” espoused by its authors; some locals have even accused these agencies of making the plan as impenetrable as possible in order to impede public input and thus pave the way for its acceptance.

Take Joseph, for example. Joseph is a retired electrician and long-time Morongo Basin resident. We first met in the public library in Twentynine Palms shortly after the draft DRECP had been released for public comment. Joseph was trying to get to grips with the plan and prepare his response; he was most worried about the negative impacts of utility-scale renewable energy development on the local environment, property values, the scenic constitution of the desert, and tourism in the Morongo Basin—a major source of jobs and income in the region. By chance, we were both struggling to navigate the document on the library’s outdated public computers. Each time I tried to download and open the accompanying map files, the computer crashed. I had to boot it up and begin all over again. By now visibly frustrated, Joseph declares he’s having the same trouble. Worse still, Joseph tells me, the document’s authors at first allocated only ninety days for public comment. Given the plan’s considerable length, this meant that anyone interested in commenting on it would have to read almost 100 pages per day of more-or-less impenetrable jargon just to complete the document in the allotted window, never mind formulating a comment in response. Soon after the draft plan had been released, however, the public complained so vociferously about this that the comment period was extended by two months until February 2015.

By the time *that* deadline had come and gone, over 12,000 comments had been submitted by email, post, and in person, not only from local residents but also from environmentalists, indigenous activists, federal agencies, local government, and the renewable energy industry itself. Whilst the comments were wide ranging, the overwhelming majority were critical, focusing on what are perceived to be the negative impacts of these developments for local communities and environments. Further, these megaprojects require massive quantities of water both during construction and throughout their lifetime, bringing them into direct conflict with the state’s historic drought. In addition, many comments also questioned the underlying assumptions of the DRECP, which privileges the development of massive “utility scale” renewable energy facilities feeding vast quantities of power directly into the national power grid. In the six years since the plan was ordered, critics say, renewable energy technology has advanced significantly to now favor the so-called “distributed generation” of solar energy across commercial and

domestic rooftops. Capturing this sentiment, common refrains seen and heard at the kinds of protest described above include “Say No to Big Solar” and “Save Our Deserts, Solar On Rooftops” (see Figure 8). Notably, both refrains frame their concern in terms of space and place. In the first, it is the scale of the project that is the problem. In the second, it is the project’s precise location.³⁵

Clearly, then, the DRECP partakes in a complicated politics of space and scale. As I hope to have already indicated, however, the DRECP can also be approached as an especially dense slither of what anthropologist Laura Bear (2014) has called “modern time”: a heterogeneous field of temporal representations, disciplines, technologies, practices, and mediations. Thus, already in this short account of the DRECP, we have encountered instances of development, conservation, bureaucracy, infrastructure, emergency, political participation, and of course planning itself (e.g. see Abram & Weszkalnys 2013; Abram 2014)—each of which suggests a different orientation not only towards space and place but also towards time and temporality. Rather than abandoning a spatial analytic in favor of a temporal one in examining the stakes at play here, however, I am much more interested in those specific moments when the interpenetration of time and space becomes foregrounded by my interlocutors. I take these moments to be ethnographic instances of what the Russian literary theorist Mikhail Bakhtin (1982:7) calls *chronotopes*. As Bakhtin defines them, chronotopes are:

points in the geography of a community where time and space intersect and fuse. Time takes on flesh and becomes visible for human contemplation; likewise, space becomes charged and responsive to the movement of time and history... Chronotopes thus stand as monument to the community itself, as symbols of it, as forces operating to shape its member’s images of themselves.

Put differently, chronotopes for Bakhtin are representative devices that function to “thicken” (Bear 2014:7) or materialize time as a site of social action; they achieve this thickening function through an accretion of the effects of certain images, symbols, and narrative structures. For Bakhtin, literary texts and genres tend to be dominated by a specific construction of the interrelation between space and time—

³⁵ In a letter to his company’s shareholders, the former CEO of NRG Energy David Crane declared that the “expensive and pointless white elephant” of centralized renewable energy infrastructure is now giving way to “a distributed generation-centric, clean energy future.” NRG Energy are among the principal investors in the so-called “Ivanpah Solar Electricity Generating Station,” current contender for the world’s largest solar thermal power station; Crane’s letter therefore caused a significant stir by essentially reversing his company’s own corporate strategy.

a particular chronotope—that forms a dense center around which the plot orbits. This he says is the “essence” of each genre. While powerful, however, such chronotopes are never monolithic in their construction or their consequences; their meanings are rarely stable or socially uncontested. Thus, as the legal scholar Marianna Valverde (2015) has argued, the co-existence of competing chronotopes in any one social field leaves room both for their conflict *and* for the encompassment of one by another at various scales of social life (also see Palmie & Stewart 2016:218). In turn, I argue that the faultlines and tensions contained both within and between competing chronotopes establish a discursive space for the articulation of political struggles over time, historical imagination, and memory.

Further, when unleashed from the strictly representational world of the novel or other literary text, these chronotopes also entail moments of affective encounter with the *materiality* or *physicality* of the temporal dimension (cf. Dalsgard et al. 2014). With this in mind, what follows is an excavation of two of the key chronotopes at stake in the land use conflicts introduced above—*gold rushing* and *deep time*—the conjuncture of which lends the temporal politics of these developments its distinctive shape. Gold rushing and deep time are each chronotopes in the specific sense “of being temporal [...] qualities mapped into geography, and geographic locations mapped into time” (see Stasch 2011:7). More concretely, I will explore the ways in which my informants cultivate time as a terrain of resistance, positing a catastrophic asymmetry between the slow, historically deep temporality of the desert landscape and the rapacious, forward-thrusting temporality of Southern California’s utility-scale “solar frontier.”

But, first, I will introduce the Ivanpah Solar Electricity Generating Station, current contender for the world’s largest solar thermal power plant. Ivanpah offers a good example of an object that is “heterotemporal,” inducing a range of often conflicting temporal states in the American public. First announced to great fanfare, Ivanpah was presented as a model for future utility-scale solar energy development: a monument to human ingenuity at the coalface of climate change. Within a short period of time, however, a litany of faults and flaws have materialized, ranging from unforeseen costs to problems with its performance, leading many pundits both inside and outside the renewable energy industry to announce the “death” of such utility-scale renewable energy developments. By returning in time to Ivanpah’s early days, we can get a better sense of the precise temporal formation to which my interlocutors were most passionately opposed.

Figure 5. Preferred Alternative

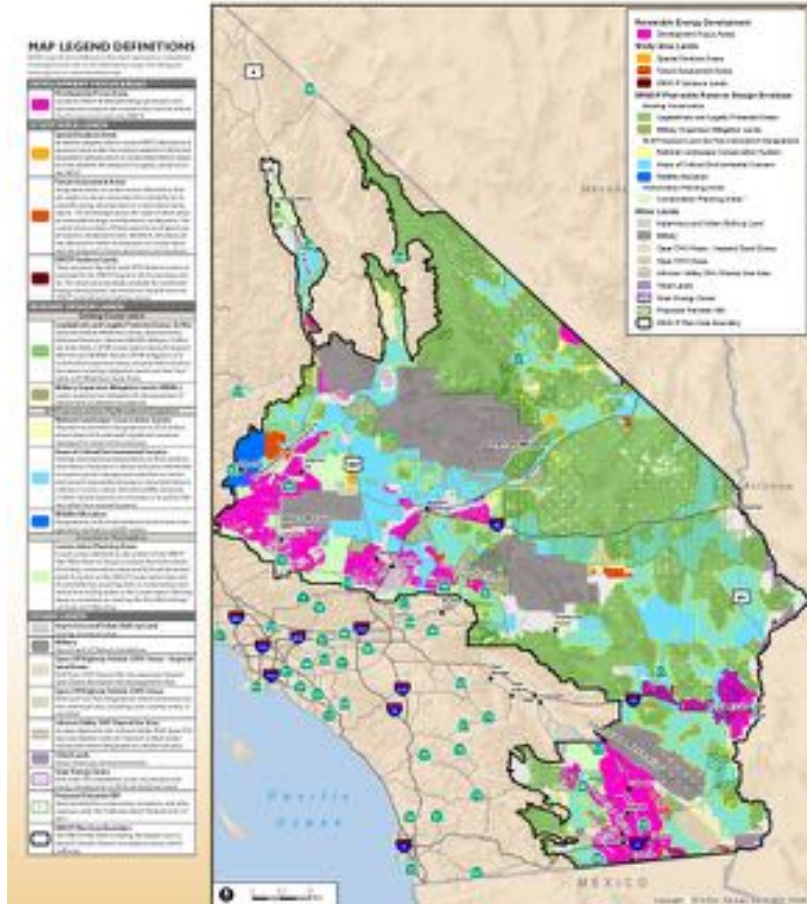


Figure 7.
A screenshot taken
from the DRECP.



Figure 8. An anti-“big solar” sign located on the main road into Landers, a small community in the Morongo Basin.

Gold Rushing: Infrastructural Desire and Critique in the Ivanpah Valley

In February, 2015, I decided to take a trip to see for myself what had become the topic of many a heated discussion: Ivanpah. Aware of her long-time interest in the project, I had invited Carrie's daughter Jennifer to join me. Jennifer and I were also accompanied by my friend and housemate, Natalie, an engineering graduate and passionate photographer. As an environmentalist in the American "transcendentalist" tradition of Emerson, Thoreau, and Muir, a personal hero whom she quoted often, Jennifer saw Ivanpah as the site of an act of desecration. Given the failure of her many previous efforts to prevent or relocate its construction, an affect of lament and sense of personal failure had therefore collected for Jennifer in the Ivanpah Valley—painting its rugged terrain with a stubborn coat of remorse. Less critical of Ivanpah specifically and "big solar" more generally, the aspiring engineer Natalie approached the solar power plant within a different affective framing—what she saw as an "addition to" rather than a "subtraction from" both the aesthetic and affective experience of Southern California's already impressive physical landscape.

As currently the world's largest solar thermal power station, Ivanpah deploys 170,600 heliostats over almost 4,000 acres of desert, each of which focuses the sun's heat onto receivers located atop three solar power towers measuring 450 feet apiece (see Figure 9). When fully ramped up, the power station has a reported gross capacity of 392 megawatts of renewable electricity—enough to power 14,000 homes and singlehandedly double the U.S. solar energy output. Costing \$2.2 billion dollars to build, Ivanpah's backers repeatedly liken it to the Hoover Dam, another example of what David Nye (1996) calls the "technological sublime." One might feel giddy at this list of facts alone. Yet as anthropologist Brian Larkin (2013:329) argues, infrastructures like this one also exist as "poetic forms" with the power to incite a diverse range of imaginative and affective responses in excess of their purely technical functioning. Although many people celebrate Ivanpah as a monument to American ingenuity in a time of environmental crisis, for example, others condemn it as a testament to human folly. Certainly, my companions Natalie and Jennifer each embodied a version of these responses. Emerging as a major flashpoint of conflict and controversy in California's renewable energy economy, Ivanpah therefore has a complex sociopolitical life not only as an infrastructural assemblage but also an assemblage of collective fantasy.³⁶

³⁶ For influential full-length works in the anthropology of infrastructure, also see, e.g., Bear 2007, Larkin 2008, Carse 2014, Harvey & Knox 2015, and Anand 2017.

Notably, this sociopolitical life had begun a long time before Ivanpah was actually completed and brought online. On a sunny October afternoon in 2010, for example, Governor Arnold Schwarzenegger and President Obama's first Secretary of the Interior Ken Salazar joined high-ranking energy industry representatives to celebrate the "ground breaking" for Ivanpah. As planned, they congregated on a golf course adjacent to the construction site. Behind the crowd, bulldozers were noisily pushing down the desert vegetation to make way for the heliostats, each one as big as a garage door. A small group of protesters had also assembled at the site of the ground breaking ceremony; they waved flags saying "Save Ivanpah" and featuring colorful caricatures of the endangered desert tortoise, which as part of the project's environmental mitigation measures were being dug out of their burrows to clear a path for construction. Speaking above the hubbub of the protest and construction to a crowd of mostly energy industry employees, Schwarzenegger began his speech:

...there are some people that look out in the desert and they see miles and miles of emptiness. I see miles and miles of a gold mine, of a gold mine of great, great opportunities. And this is one of the perfect kind of examples right here... Projects like this one are helping us meet our long-term energy and environmental goals while creating jobs and moving us toward a cleaner, more sustainable future—a future where California leads the nation as well as the world.

Following Schwarzenegger at the podium, the Vice-President of Regulatory Affairs for BrightSource Energy Joshua Bar-Lev then extended the Governor's lines of rhetorical flight into new spaces of U.S. national fantasy, stitching together Old Testament imagery with explicit reference to the frontier and to twentieth-century technological achievement—each connected by themes of adventure, exploration, discovery. Pitched vertiginously forwards into the future via remarkable act of temporal telescoping, Mr. Bar-Lev's address generates with considerable rhetorical economy an almost phenomenological sense of acceleration in U.S. historical time:

Like Jacob, we are standing at a moment of great awe and revelation [...] This is a beginning, folks. This is the Apollo Project, the lift off—the lift off that will lay the seeds for the future, an energy future that creates jobs here in our community, an energy future we control, not one controlled by foreign countries. This is the dawn of that future and we are the pioneers.

Also building on the tropes and themes offered up by both Schwarzenegger and Bar-Lev, U.S. Department of Interior Secretary Salazar likewise asserted the *revolutionary* and *pioneering* nature of Ivanpah, whilst further foregrounding the role of American *vision* and *ingenuity* as the forces via which a shiny new future will be forged out of the raw materials of the past and present. After giving their speeches, these three figures posed for photographs with a dedication plaque that declares Ivanpah as a “transformational project and cornerstone of California and the nation’s burgeoning clean energy economy” (see Figure 10).³⁷ Given the grandstanding tone of their speeches, one would be forgiven for forgetting that Ivanpah at this point in time existed as little more than a rhetorical, political, and economic conjuring act (cf. Tsing 2000).

Much could be said about this particular political performance. But my purpose for the present chapter is to unpick some of the discursive, affective, and political formations of time at work here. Pulling in one rhetorical direction, for example, is an essentially Lockean logic of land and labor, for which the uncultivated “wastes” of the Ivanpah Valley are only of value insofar as they await patiently the introjection of ingenuity and industry—a framing familiar from the monumental dams and irrigation systems of the American Southwest to which Ivanpah has been repeatedly likened.³⁸ Embedded within a public culture for which the movement of historical time is often equated with movement through geographical space—and always from east to west—also at work in Schwarzenegger’s address is the notion of California as a privileged place of historical progress (see Shoop 2008). *The desert as a primordial wasteland; California as the cutting edge of historical becoming*; Ivanpah is here positioned as the immense infrastructural hinge that enables the reconciliation of these two Anglo-American chronotopes, thereby transforming the desert’s “miles and miles of emptiness” into “miles and miles of a gold mine.”

This brings us to a second temporal strand at work within these speeches. While identified in American public culture with a distinctive temporality by virtue of its perceived position on the cutting edge of historical becoming, the space of California is also associated with its very own “unique tempo of social change” (McWilliams 1999:25). Often, this tempo is articulated in reference to the 1849 Gold Rush, which left its material mark on the physical landscape whilst also installing in local public culture a specific sense of the way in which the economy,

³⁷ For all quotes, see www.gov.ca.gov/news.php?id=16372. Accessed April 10, 2017.

³⁸ See, e.g., Worster 1985, Nye 1996, Wehr 2004, and Round 2008. We encounter two such waterworks as well as their social side effects (what I call “*shadows*”) in Chapter 3 (the Imperial Valley irrigation system) and Chapter 4 (the Los Angeles Aqueduct).

the human body, and the thrust of time and history are all entangled. As such, the 1849 Gold Rush serves as what literary theorist Casey Shoop (*ibid.*:2) has called a “primal scene for California’s historical imagination.” Indeed, by gathering together many of the frontiertime themes and tropes deployed by Schwarzenegger and his colleagues at the Ivanpah ground breaking into a charismatic and seemingly coherent chunk of narrative content, the 1849 Gold Rush has in recent years emerged as a potent refrain³⁹ through which Southern California’s contemporary “solar frontier” is described and understood.

As the anthropologist Anna Tsing (20003:5101) writes, however, frontier narratives are “notoriously unstable”—very much like frontiers themselves. As a refrain, the Gold Rush contains within its contours many layers of association as well as a deep historical ambivalence that renders it available for a wide range of sometimes competing articulations and interpretations. For the advocates of these utility-scale solar energy megaprojects, like Schwarzenegger, the 1849 California Gold Rush suggests a highly idealized string of associations that together constitute what political theorist Lauren Berlant (1991:20) has described as an “alphabet of collective consciousness or national subjectivity.” Among others, these associations include the rapid extraction of great wealth; the collective domination an unruly landscape; and the forging of a rugged and entrepreneurial national subject against the spectacular backdrop of the American Southwest (McWilliams *ibid.*:25). These are much more than simply free-floating associations, however. They are shaped by a vigorous social memory that is deeply embedded within the material features of the local landscape, for example, in the abandoned mines and mining towns that have emerged in recent years as popular tourist destinations (see Limerick 1992; DeLyser 1999; also see Chapter 1).

While many Californians celebrate the “solar gold rush” as just the latest chapter in an ongoing saga of regional and national self-definition, however, others adopt a more critical position.⁴⁰ To do so, they emphasize the 1849 Gold Rush’s long-lasting afterlife of ecological injury in order to suggest that these renewable energy developments may leave an equally tainted and intractable environmental legacy. In his public comment on the draft DRECP, for example, the

³⁹ According to Gilles Deleuze and Felix Guattari, a refrain refers to “any aggregate of matters of expression that draws a territory into territorial motifs and landscapes” (1987:313; also see Hastrup 2013a:64; Ogden 2011:43-71). Just as birdsong works to “create and hold territory” within a forest, for example, this allegory and the motifs it gathers together enact a process of territorialisation upon the desert, staking out the region’s histories and geographies for collective consumption in specific ways.

⁴⁰ Open in this way to competing (celebratory and critical) interpretations, the 1849 Gold Rush calls to mind the “master dialectic of sunshine and noir” that historian Mike Davis (1998:23) situates at the heart of Southern Californian historiography.

desert resident Michael Garabedian declared that “a new gold rush fever is infecting industrial scale solar leaders and bureaucrats.”⁴¹ Also referencing Schwarzenegger’s miles and miles of a gold mine speech, Michael continues: “The former Governor’s vision is apt in a number of ways. During the 1849 Gold Rush and the ensuing years we have witnessed myriad problems and hazards... [and] the proposed DRECP is a blueprint for another golden era of environmental destruction.” According to Michael, then, “a hormone driven rush of enthusiasm is propelling [utility-scale] solar developers, investors, governments and environmentalists” despite the environmental costs now known to be associated with this kind of development. In private, Michael went further to describe to me both the political and corporate architects of the solar gold rush as “horny teenagers” not totally in control of their actions. Itself highly visceral, Michael’s choice of language foregrounds what he takes to be the virulent nature of this “new gold rush fever” and the self-propelling temporality of greed it confers on those it infects.

In describing how workers caught in the web of early industrialization began to develop new forms of time consciousness, E.P. Thompson (1964) has famously shown how temporal regimes can burrow deep into the human sensorium—a point wonderfully illustrated by the involuntary, repetitive, spasmodic, machine-like movements of the factory-working protagonist in Charlie Chaplin’s 1936 masterpiece *Modern Times* (see Meneley 2004:171). Along similar lines, Michael’s comment also suggests an imbrication of the economy, technology, and human body. In contrast to the highly routinized and affectless clock time of industrial capitalism, however, Michael’s idea of a “gold rush fever” seemingly refers to a theory of financial exuberance premised on a powerful surge of physical excitement—in line with what historians have identified among the so-called ‘49ers (e.g. see Holliday 1999, 2002). This is what I call “gold rushing.” For the purposes of the present chapter, gold rushing names (in the eyes of Michael and others like him) a contagious tempo of acceleration that attaches itself to the fantasy of clean energy capital, hijacking human desire as the vector of its own proliferation. As Philip Smith, a Chemehuevi elder, desert resident, and vocal critic of utility-scale solar projects told reporters, for example, “the sun belongs to all of us. [Ivanpah] will destroy our homes, just so that Google, Brightsource, and NRG can profit from the sun’s energy. It’s about *fast money*, it’s all about *fast money*” (Rogers 2010).

Moreover, for Michael, Philip, and many others like them, the diagnosis of “solar gold rush fever” was often accompanied not only by expressions of sorrow

⁴¹ Available at www.drecp.org/draftdrecp/comments. Accessed April 10, 2017.

and outrage, but also by speculation, insinuation, and outright accusations of political and corporate corruption.⁴² As the anthropologist Carol Greenhouse (1996:5) argues, the way in which time is constructed, understood, and experienced says something important about people's ideas of agency and its compatibility or incompatibility with specific institutional arrangements. Bracketing for now the actual veracity of these accusations, we can nevertheless still read the often-conspiratorial accounts of gold rushing offered by desert residents as signaling a sense of impoverished social and political agency (West & Sanders 2003; Harvey & Knox 2015:135-60).

As such, I argue that these rumors reveal how gold rushing is felt by its critics to be shortcircuiting what Sarah Sharma (2014:12) describes as "the slow intersubjective time of a contemplative and deliberative public sphere that is the assumed form of a properly civic and politicized public." Put differently, the so-called "streamlined" or "fast tracked" permitted process is thought to be paving the way for inadequate environmental impact reviews and unsatisfactory public consultation, leaving many feeling robbed of their lawful right to voice concerns and in turn paving the way for a surge of discontentment. As we've seen, Carrie articulates her criticism with the image of a "flash flood"—an uncontrollable burst of energy. While differing from one another in important ways, both the flash flood and gold rushing function to identify a "sloping temporal order" in which desert residents feel "pitched forward" into a future beyond their control (Robbins 2004:164). In addition, gold rushing is felt to be outpacing not only the proper temporality of the political sphere but also the relatively slow and historically deep space of the Californian landscape. In response, my environmentalist interlocutors appeal to alternative images of time, history, and place as a method of "occupying" more forcefully what the human geographer Michael Watts has called "the violent geographies of fast capitalism" (quoted in Nixon 2011:7). This is the topic of what follows.

⁴² As described above, for example, some have accused the DRECP author agencies of making the plan as impenetrable as possible in order to impede public input and thus pave the way for its acceptance. Another rumor suggests Steve Black, special counsel to U.S. Department of the Interior Ken Salazar, was romantically involved with a lobbyist for the renewable energy company NextEra Energy Resources in a way that unduly influenced the selection of "development focus areas" within the plan.



Figure 9. The Ivanpah Solar Electricity Generating Station (source: www.energy.ca.gov).



Figure 10. Breaking ground in the Ivanpah Valley. The plaque held by Governor Schwarzenegger is styled after those marking out sites of “historic interest” across the California landscape — perhaps intended to communicate the significance of the Ivanpah Solar Electricity Generating Station to an imagined audience of the state’s future (source: www.doi.gov).

Deep Time: Economies of Care and Attention in a “Very Slow Landscape”

Just north of Carrie’s home in the southwestern Mojave Desert, sandwiched between the Twentynine Palms Marine Corps Base and an area set aside by the BLM for off-roaders, a seemingly unremarkable patch of desert is casually cordoned off with steel fence stakes and two strands of barbless wire. Upon closer inspection, the fence’s function still remains unclear. There is no signage designating ownership or warning trespassers to keep out; certainly no nature trails or viewing platforms. For the most part, the landscape is easy to dismiss or disregard entirely. And indeed, most people do just that. But for those in the know, there is something very special here. Something valuable. Contained within the fenced area, an unassuming shrub is considered to be among the planet’s oldest living things: it is known as “King Clone” creosote.

So-called because of the pungent, creosote-like odor given off when its waxy, resinous leaves are crushed, the olive green creosote bush (*Larrea tridentate*) is near-ubiquitous across the Mojave, Sonoran, and Chihuahuan desert landscapes of southwestern North America. Whilst today synonymous with these desert spaces, however, palaeoecological evidence indicates that it is a relative newcomer to this part of California. Eleven to 12,000 years ago, at the end of the Ice Age, the southern Mojave landscape would have been dominated by juniper woodland and grassland. But as the climate gradually became warmer and drier, the junipers retreated to the nearby mountains, and the creosote bush crept up from the south. In turn, the pioneer was so successful in the competition for increasingly scarce water that it soon became one of the most widespread plants in the arid American Southwest.

While creosote bushes do generate a significant numbers of fuzzy seeds at each flowering, only very few of them are able to germinate. Instead, the creosote bush spreads “clonally” through underground roots which radiate out from the shrub, sprouting to produce new but genetically identical bushes around it. As the older creosote dies, it leaves a sandy patch of soil surrounded by a ring of its successors. As the process repeats, the creosote gradually creeps outwards like extremely slow-moving ripples on a pond. A single bush has a life expectancy of about 80 to 100 years. In genetic terms, however, these so-called “clonal creosote rings” may be legitimately considered alive for significantly longer periods of time.

King Clone was first discovered in the early 1970s by Frank Vasek, a botanist from the University of California, Riverside (see Stringfellow 2016). With his students, Vasek was carrying out longitudinal field studies in the Mojave Desert, having been hired by Southern California Edison to evaluate the potential

impacts of planned gas and electrical lines—precisely the type of development that gave rise to the MBCA (see Figure 11). Studying high-altitude aerial imagery of the Lucerne Valley taken by the U.S. Air Force during the 1950s, Dr. Vasek’s research partner Hiram Johnson noticed something remarkable. From this privileged view, the outline of an unnaturally circular creosote ring appeared, its regular shape suggesting a single organism. Excited by such an idea, the scientists investigated further. Genetic fingerprinting confirmed the bush as a single clonal colony. Using radiocarbon dating and known growth rates of creosote, they estimated the age of the colony to be 12,000 years, making it much older than the previous record-holder for the planet’s oldest living plant: a 5,000-year-old bristlecone pine also located in California.



Figure 11. Vasek’s students with the King Clone; April 1, 1979 (source: moveproject.org).

Today, I am stood in front of King Clone with teacher Eva, Carrie, teaching assistant Samantha, and a dozen or so teenage high school students. “Let’s all take a moment to imagine what this plant has seen over the course of its lifetime,” says Eva, whom we also met in the last chapter. It’s an unusually overcast day in the Mojave Desert. “This plant was here when saber-toothed tigers hunted giant sloths. It has survived the retreat of ancient lakes. And it’s still here today. It’s like a little living Stonehenge.” Pausing for a moment, Eva lets this image sink in among her students. It’s nearing one o’clock and we’re coming to the end of our field trip; the King Clone creosote bush is our last stop on today’s tour of what Carrie likes to call the desert’s “ancient elders.” We have spent the morning

sketching rock formations, tracking the endangered desert tortoise, and learning about biological soil crusts. These knobbly, blackish organic crusts contain an ultradelicate matrix of bacteria, lichens, mosses, algae, and microfungi which are foundational to the desert's health, Eva teaches us. "They might not look like much," she continues, "but they're the glue that holds the desert in place. They take hundreds or even thousands of years to form, but can be destroyed in seconds by a single misplaced footstep. We must learn to respect them."

After lunch, we return to the air-conditioned comfort of the high school classroom. We push the desks to one side; two students unfurl a piece of rope from one wall to the other. It's about 50 feet. "Imagine this is the earth's timeline," Eva directs us. "One end marks the formation of the earth 4.6 billions years ago. The other end represents today.... That's about ten feet per billion years." With clothes pegs, the students take turns marking on the rope when they think certain historical events happened: the emergence of first life, the extinction of the dinosaurs, the evolution of humans, the building of the Egyptian pyramids, the end of the Ice Age. As they do, the students move all around the rope—traversing its entire length, towering above it, stepping over it, and reaching down to touch it. Eva helps us as we go. She asks: Did the Ice Age end before or after humans evolved? The students answer in unison: "After!" Working together, we manage to get things in more-or-less the right order. But our absolute timings are way off—the historic events are far too evenly spaced along the timeline, rather than bunched towards "today" like they should be. Once we're done, Eva corrects our guesstimations. The students appear to be having fun—no doubt the field trip and activity make for a welcome respite from the humdrum routine of school life. Fifteen year-old Joshua has an especially large grin on his face: "I've always loved history class," he exclaims. "This is like history, only it's so much longer!"

After class is over, I sit down with Eva and Carrie for an interview. "The Earth is over 4 billion years old," says Eva. "That's a really long time and a really big number. So it's hard for students to conceptualize that number through books and language alone... The field trip is about trying to bring that number to life for them and to give it meaning." Agreeing with Eva, Carrie says: "And the desert is a great place to do that. It's all right here! Once you know where to look, there's so much natural history here... Very ancient stuff like King Clone... It gives the students something to sink their teeth into." The question is, what is this *something* into which students might sink their teeth?

In a recent essay, Richard Irvine (2014) has encouraged anthropologists to expand the temporal horizons of their analyses in order to better accommodate the relationship between human and geologic temporalities. To do so, Irvine argues,

anthropologists must approach so-called “deep time”⁴³ not only as an intellectual abstraction but also as an embodied, phenomenal experience evoked by sensory encounters with particular objects or landscapes (e.g. see Raffles 2012; Massey 2006). Illustrating what such an encounter might look like, Irvine quotes from the writings of John Playfair, a scientist included among a group accompanying the nineteenth-century Scottish geologist James Hutton (1727-1797) on his canonical field trip to the Berwickshire coast. At one point in the field trip, the party comes across a dramatic break in the sedimentary sequence of the coast, which provided spectacular evidence of the geological processes then being described by Hutton. Recalling the moment, Playfair has written that: “On us who saw these phenomena for the first time, the impression made will not easily be forgotten... We felt ourselves necessarily carried back to the time when the schistus on which we stood was yet at the bottom of the sea. The mind seemed to grow giddy by looking so far into the abyss of time” (Irvine *ibid.*:162).

Clearly, then, when in the presence of “deep time,” we are also in the presence of a powerful chronotope: “a point in the geography of a community where ... [time] takes on flesh and becomes visible for human contemplation” (Bakhtin 1982:7). Yet as Irvine (*ibid.*162-163) describes and Eva and Carrie are both very aware, Playfair’s account demonstrates how encounters with deep time take place not only via an act of intellectual contemplation but also via an active sensory engagement with what Playfair calls the “huge solid fact” of the Berwickshire coast. At this point, it might be objected that what I am describing with regard to the King Clone cannot properly be considered an encounter with “deep time.” Certainly, the lifespan of King Clone is tiny when compared with the immense temporal depth of the planet’s geologic history. Nevertheless, I argue that the field trip orchestrated by Eva and Carrie does constitute a scene of sensory engagement with *extrahuman* temporality—albeit mediated through the more mundane materiality of the creosote bush.

However, my analysis differs from Irvine’s in at least one key way. Following Playfair’s account, Irvine describes the phenomenal experience of deep time as an immediate and spontaneous explosion of feeling provoked by the sheer physicality of the Berwickshire coast. Thus, while at one point Irvine mentions the nineteenth-century sensory culture of scientific fieldwork—of which Playfair’s “giddy mind” is an artifact (Rudwick 2007)—he therefore does not explore in detail how cultivated capacities of aesthetic engagement work to give shape to temporal experiences.

⁴³ Notably, the concept of “deep time” enjoys an intimate relationship with the American desert; it was in response to the rugged terrain of the Basin and Range Desert that the American nature writer Jon McPhee (1982) first coined the term.

This is not a criticism; Irvine's emphasis lies elsewhere. With that said, here I would like to briefly draw attention to the regimes of aesthetic appraisal as well as the economies of perception that provide the ground for what are often idealized as immediate experiences of extrahuman spatiotemporalities such as "deep time." While previous sections focused on the affective intensities of linguistic utterances and rhetorical practices, Eva and Carrie clearly emphasise the charismatic materiality of the Southern Californian landscape as a critical site of spatiotemporal experience—precisely because the extreme scales of space, time, and force involved are difficult to "conceptualize ... through books and language alone," as Eva described it during our interview. However, while the undeveloped desert landscape may in fact appear to the naked eye as "ancient," its aura of age and slowness must be actively conjured. Indeed, this is the precisely point of Eva's high school field trip, which employed practical acts like sketching rock formations and tracking desert tortoises to ground the imaginative practices of "time travel" which function to bring the farflung past into the experiential field of the present—all within an everyday moral framework of "respecting one's elders." In addition, Eva's rope-as-time exercise represents a striking performance of the rectilinear historical consciousness of institutionalized Western historiography, which in turn works to emphasise for these students the radical asymmetry between the relatively meager scope and scale of human history and the vast temporal depth of the desert landscape (on the official mode of Western historicism, see Palmie & Stewart 2016:210; cf. Hastrup 2012).

As I learnt, then, attuning to the desert's temporal depth is not simply about *where to look*. It's also about *how to look*. During fieldwork, I sat with Carrie and others on a public advisory council organised by the BLM, the federal agency in charge of managing much of Southern California's public lands. Together, our collective task was to help find ways to "connect both youth and adults with the spectacular resources of the California desert by identifying education and interpretation opportunities in the sciences, recreation, the arts, economics, and history." At one of our meetings, a difference of opinion took shape. Artist, teacher, and Joshua Tree co-resident Kim Stringfellow has produced a series of popular self-guided automobile audio tours of significant spots in the Mojave Desert and beyond (Scott 2010). Kim believed, as she told the council that day, that this medium offered invaluable opportunities for connecting people to the social and natural history of the California desert. Rather than fighting against America's love of the car, Kim argued, the BLM should instead embrace it—instrumentalizing it as an apparatus of public engagement and learning.

Many others thought this seemed like a good idea. Led by Carrie, however, another contingent of councilmembers politely but firmly disputed the value of the self-guided automobile audio tour for their self-avowed objective: to mobilise people to care for the desert. According to their aesthetic ideology of slowness and intimate distance, when viewed at speed from beyond the “mediating screen-lens” (Petho 2011:103) or cinematic surface of the car windshield, the California desert could not but fail to cast its spell (cf. Louter 2010). For Carrie, so she told the councilmembers, the only “real way” to experience the full wonder of the desert landscape is close up and on foot. “The desert is the opposite to what we’ve been taught to find pleasing in nature,” Carrie told the council. “It’s a very slow landscape. I think that we fear the quiet actually, we fear slowness and having nothing to do... In our culture if you’re not constantly doing something then you’re considered lazy. We need the kind of instant gratification that the desert isn’t equipped to give. We must learn how to be slow again.” Thus, in order to care either for or about the California desert, Carrie says, we must learn to appreciate it on its own spatiotemporal terms; this involves calibrating our collective perception to the landscape’s slowness and temporal depth.

Temporal Occupation in an “Industrializing” Desert

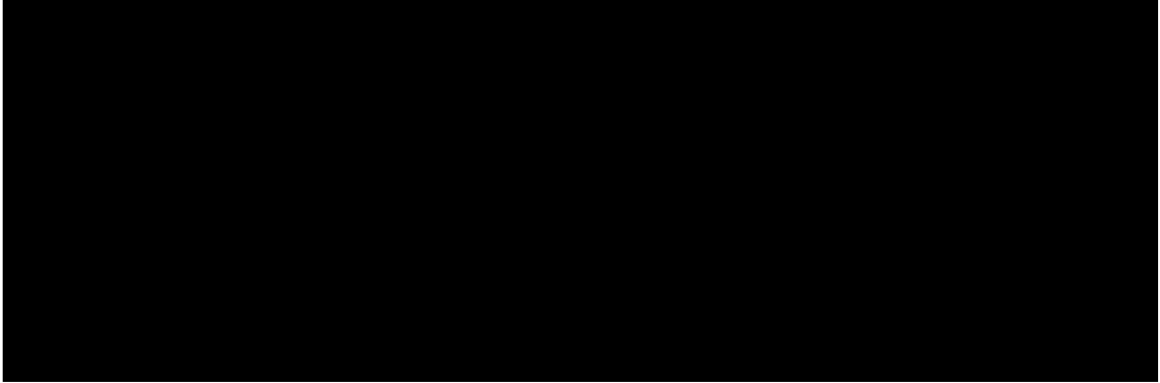
Thus, gold rushing and deep time denote two chronotopes, disjunctive temporal qualities mapped into the same physical geography, each of which implicates time, space, and the human body in different ways and according to different modalities of value. Yet these incompatible chronotopes do not merely coexist. In conflicts over California’s utility-scale solar energy economy, they come into more-or-less direct antagonism with one another, thereby offering desert advocates and activists a frame through which to understand, organize, articulate, and justify their own efforts and actions.

Take so-called “Camp Ivanpah,” for example. In September 2010, about one month before Shwarzenegger, Salazar, and Bar-Lev took to the podium to celebrate the “revolutionary” and “pioneering” nature of the Ivanpah Solar Electricity Generating Station, a ragtag band of approximately 30 protesters hiked into the heart of the construction site. This time, they carried more than just placards. Weighed down with gear, food, and also educational materials, they set up camp for three days and nights amidst the sagebrush, barrel cacti, and desert tortoise. Holding workshops, taking hikes, and talking with reporters, the protest brought together Anglo-American environmentalists with indigenous activists, scientists with artists, and outdoor enthusiasts with residents from nearby towns in order to

publicize their collective opposition to what they described as the “industrialization” of the Mojave Desert.

Among the camp’s co-organizers were Carrie’s daughter, Jennifer, and Jennifer’s husband, Frazier. As Jennifer later described to me, many of the protesters at Camp Ivanpah were already companions or at least acquaintances from the relatively tight-knit grassroots environmental activist community in the high desert of Southern California—giving the weekend camp a familiar, friendly, and somewhat festive feel. Many if not all of the protesters were themselves keen hikers, campers, and outdoor enthusiasts engaging in precisely the kinds of pastime they would on any other clement autumn weekend in the California desert. Indeed, according to the ideology of intimate distance and embodied encounter described above, it is these kinds of pastime (hiking, camping) that simultaneously signal and constitute the conditions of possibility for a personal orientation of care and protection towards the desert’s “very slow” physical landscape. By relocating these everyday activities to the threatened space of the Ivanpah Valley, however, Camp Ivanpah resignifies them as not only a political but also a “prefigurative” (Graeber 2002) act: performing the very organization of spaces, bodies, and affects that they hope to manifest more broadly.

As such, Camp Ivanpah joins the protest with which I opened this chapter. By gathering in the very places destined for destruction, both groups of protesters clearly and explicitly attempt to harness what they understand to be the charismatic materiality of the California desert in support of their claims. Bringing together a wide range of actors into close proximity with one another, the protests also signal a politics of place based on a shared sense of solidarity forged for the most through partially overlapping intimacies with the landscape. In this way, at least part of the power of their approach is rooted in a spatial tactic. With striking regularity, however, the protesters featured here staked their claims in terms that were not only spatial but also temporal, thus carving out a space for time as both a target and terrain of occupation. As I have argued, however, it would be unhelpful to separate out these practices of *temporal occupation* from their spatial dimensions—whether these be the concrete environments of their performance or the ecologies of desire that shape their claims to urgency. Much like the solar energy infrastructures they take as their target, these practices of occupation cultivate a particular fusion of history and geography on which a chronotopic analysis will offer fresh perspectives.



For these protesters, then, the vast temporal depth of the desert landscape constitutes an invaluable and irreplaceable resource. In this way, the protesters posit an extreme asymmetry between the fast money and the relatively short-term lifespan of these infrastructural megaprojects (20-30 years) and the considerable age of what stands to be lost and never recovered. Unlike many other kinds of commercial development, however, the renewable energy megaprojects being proposed here have a legitimate claim on the future wellbeing of both the regional and the planetary environment (cf. Howe & Boyer 2015). As such, at stake here is not so much well-worn debates over “development” versus “conservation” or “energy” versus “the environment” but radically divergent modes and scales of reckoning value in an era of convergent climate crises. Capturing well the temporal predicament at the heart of this controversy, the environmental journalist Hannah Waters (2012) asks: “To go for the long-term good and sustainable energy, or save a few species? Or wait, maybe that's the other way around: invest in the latest solar innovation in lieu of millions of years of evolution? That’s the question we’re facing, not just in Ivanpah but also at other sustainable energy sites [throughout the world].”

We have now arrived at a position at which we can compare two of the dominant chronotopes associated with the California desert: “gold rushing” and “deep time.” For gold rushing, the natural spaces of the landscape are figured as little more than an inert backdrop against which the drama of human history plays out. They are only of any value insofar as they constitute “raw materials” awaiting patiently the introjection of American imagination, ingenuity, and industry. Here, then, we can say that the otherwise “dead” spaces of the desert become enlivened by the forward movement of social time. By contrast, however, within the chronotopic construction of deep time it is instead the wide, open, slow, and ancient spaces of the desert which function to enliven or otherwise “thicken” the temporal dimension as an important locus of enchantment and care—albeit one that stands to be lost forever under the temporal bulldozer of California’s utility-scale renewable energy economy. Time does not so much flow forward through space as slowly accumulate or accrete within it—infusing it with value. I’m

thinking here especially of Carrie's articulation of the desert's ultradelicate biological soil crusts as an "ancient elder" in dire need of reverence and respect: "They take hundreds or even thousands of years to form, but can be destroyed in seconds by a single misplaced footstep. We must learn to respect them."

As the anthropologist Timothy Choy (2011:26-27) has argued, the prospect of loss associated with endangered things can at times evoke a kind of "anticipatory nostalgia"—a complicated temporal affect in which feelings of past loss are projected into an imagined future. In turn, visions of "future pasts" (cf. Rosenberg & Harding 2005:4) can engender a wide range of social and political responses in the present. As Choy notes, species can be endangered, as can particular landscapes or ecosystems. In this case, however, anticipatory nostalgia has been attached not to an ecosystem (the desert) or single species (like the endangered desert tortoise, for example) but to the depth of time itself. By contrast, I have described the way in which gold rushing conjures a highly idealized version of California's past in the very act of performing its future. In this way, I argue that gold rushing participates not so much in anticipatory nostalgia as in *nostalgic anticipation*. Whether embedding these developments within a logic of progress or narrative of degradation, however, both camps actively cultivate a sense of time and history not only as a neutral dimension along which life unfolds but as a powerful visceral and moral force in the contemporary world of events.

Having now examined two of the dominant (but by no means only) chronotopes at work in conflicts of California's utility-scale renewable energy economy, the spaces of their performance, and the points of their antagonism, I would like to return briefly to the controversial planning document introduced towards the beginning of this chapter. By carving up the desert spaces of Southern California into a set of contiguous, clearly demarcated zones for either "conservation" or "development," the DRECP can be seen as an attempt by state and federal authorities to mediate between these two competing chronotopes at one particular scale of their operation: the "landscape." However, as the plan's many critics have noted, the assumptions contained within the DRECP and the futures it prescribes were themselves relatively unresponsive to the forward movement of time, history, and technological progress. Embarrassingly for its authors, this left its proposals tightly tethered to an outmoded model of utility-scale renewable energy megaprojects that privileged the "expensive and pointless white elephant" of centralized generation over what has emerged in recent years as the current state of the art: the distributed generation of solar energy across Californian rooftops (Crane 2014). Put differently, the relatively slow temporalities of land-use planning and bureaucracy have here been outstripped by the forward-

thrusting temporalities of technological development as well as the shifting contours of the contemporary American infrastructural imaginary (e.g. see Abram & Weszkalnys 2013; Collier & Lakoff 2008). Published four years behind schedule thanks to a number of political, bureaucratic, and administrative hiccups, the draft DRECP thus projected an ossified vision not even of the *present* but of the technological *past* into the future. As such, the draft DRECP in the end presented an overwhelmingly spatialized solution to a problem that is fundamentally spatiotemporal or what I have described as “chronotopic” in nature.

Conclusion

Building on the last, this chapter has examined the ways in which people call upon the different conceptions of history and time embedded in the physical landscape of the California desert in order to construct, contest, and respond to a sense of crisis. As described above, California’s DRECP covers a massive 22.5 million acres of public and private land, setting aside over two million of these for renewable energy development by as soon 2040—a space more than six times the size of Los Angeles. For many Californians, the unprecedented scope of the plan suggests a precipitous moment for the California desert, a historic threshold after which the landscape may remain forever changed. To make their case, the proponents of these utility-scale renewable energy megaprojects draw on the chronotope of California as the cutting edge of historical becoming: a rich narrative resource with deep genealogical roots. By contrast, critics appeal to an alternative image of the Californian landscape an ancient, fragile, and endangered historical resource in need of protection and care.

In her work on crisis-stricken Cyprus, anthropologist Rebecca Bryant (2016:20) argues that moments of crisis “bring the presentness of the present to the fore. In such moments, we become aware of the present that ordinarily slips out of consciousness, and it becomes something viscerally present, a point hovering between past and future.” Bryant describes such a moment as an *uncanny present*—a splinter of time situated outside of the normal flow of ordinary life and rendered strange by a hyperattentiveness to the “here and now.” Clearly, not all crises are commensurate along the temporal cracks they open up or in the types of temporal anxiety they induce. Yet the idea of an “uncanny present” captures well the sense of historical urgency animating the ecopolitical efforts of Carrie and others like her. As I hope to have shown, however, this uncanny present is not situated outside of the flow of Carrie’s everyday life but, rather, is thoroughly embedded within its material, practical, and imaginative contours.

Moreover, by appealing to the notion of an uncanny present, I do not wish to suggest a moment eviscerated of either significant historical content or of future orientations. On the contrary, my ethnography reveals how this uncanny present is in fact marked by a profound temporal “double vision”—by both a hyperattentiveness to the “here and now” and a heightened sense of historical consciousness. Such historical consciousness may assume many forms. In interviews and casual conversations, for example, my interlocutors often articulated a powerful if indistinct sense of living amidst “a shift of historic proportions” in the conditions of everyday life and its immediate environment (Berlant 2008:8). In turn, this catalyzes an interrogation of their own historical agency—their capacity or lack thereof to not only act *within* but *also* upon history (Roitman 2013:7). Finally, the notion of historical consciousness employed here also emphasises the way in which contemporary experience may be generated through a fusion of heterogonous historic images and episodes in the present. As such, I have argued that time exerts a pull on human bodies that is mediated through both rhetorical acts and practical acts of encounter with places and things.

In the process, I excavated two of the dominant chronotopes associated with the California desert—*gold rushing* and *deep time*—which work to give the temporal politics of Southern California’s “solar frontier” its distinctive shape. While dominant, however, these two spatiotemporal formations are very far from totalizing; a multitude of temporal encounters bubble away below the threshold of their discursive stranglehold. This begs the question: What about those for whom these chronotopes offer very little or no traction for understanding and navigating their immediate social and physical environment? What practical resources do such people draw upon to not only apprehend but also manipulate the flow of time? Continuing with the themes of temporality, materiality, and place, the next chapter will thus shift the scale of its analysis from discursive and political formations of time towards the everyday lived experience of crisis. Doing so, the chapter also shifts location from the wide open and undeveloped spaces of the desert to the ruined landscape of the Salton Sea, once a popular tourist destination, which today sits largely abandoned on the precipice of total social and ecological collapse. Here, I show how marginality can be understood *chronotopically* in terms of a place out of joint with the dominant times within which it is embedded.

Chapter 3.

Life in the “Meantime”

If dirt is “matter out of place” (Douglas 2002), then what about a place constituted of dirt, debris, and detritus of all kinds? A place that is itself very much a ruined and discarded object? Straddling two of the state’s poorest counties, Imperial and Riverside, the Salton Sea is California’s largest and most unbeloved of lakes. Created in the wake of an industrial accident in the very early twentieth century, the lake has been sustained ever since by a constant inflow of agricultural wastewater from the Imperial Valley—one of the most active and productive agricultural regions in the country.

Beginning in the early 1950s, real estate speculators and developers seized upon this monumental error as a monumental opportunity, building marinas and yacht clubs, restaurants and nightclubs, and subdividing thousand of acres of land along the sea’s shoreline. For a while, these entrepreneurs were hugely successful. Hailed as the “Californian Riviera,” the Salton Sea attracted celebrities, tourists, and retirees by the tens of thousands from across the country. By the late 1970s, however, chronic mismanagement of the sea converged with a series of natural disasters to transform the place from a “paradise in the desert” into a ruined landscape of near-total abandonment, disinvestment, and dilapidation. In the context of California’s convergent climate crises, massive rural-to-urban water transfers are now beginning to threaten the agricultural runoff that only barely sustains the sea. As such, a wide range of commentators declare the Salton Sea “a ticking timebomb” and “a slow motion train wreck,” while environmentalists warn that the sea’s ecology may soon “fall off a cliff”—beyond any hope of salvation—unless radical steps are urgently taken to save it. In response, the state has made repeated promises to restore the sea stretching back over thirty years, but these promises have until now gone unfulfilled.

Today, hints of the Salton Sea’s former glory still haunt its shores: boarded-up yacht clubs, rusting boat frames, and cracked concrete swimming pools, covered in graffiti and repurposed by gangs of skateboarding youths into their own personal playgrounds.⁴⁴ A thick carpet of trash covers the terrain (see Figure 12). The air smells rank, and the grey, moon-like lakebed is littered with desiccated fish carcasses that crunch underfoot. Caught between the very real danger of total

⁴⁴ Graffiti I saw and noted during fieldwork includes *Buried Alive*, *All Tired Out*, *Everything Must End*, *Money Makes the World Go Round*, *Greed Made This*, *Mother Nature vs. Capitalism*, *Don’t Abandon Me*—among others. Taken together, such messages coalesce into a critique of the Salton Sea’s current condition (cf. Knight 2015).

socioecological collapse, and the hope of full remediation, the Salton Sea's few remaining residents endure amidst the debris and decay in a state of social abandonment and historical suspension: "sweating it out," as locals like to say. This chapter asks: How are time, history, and memory experienced and negotiated within this moment of tentative anticipation? Despair may set in. Nostalgia might take over. Against all odds, however, glimmers of hope also persist. As such, long-time Salton Sea resident and businessowner Glen tells me, "I've always thought the sea would grow, would do something. It's taken much longer than I thought it would. But in *the meantime*, if a property comes up for sale, and if the price is right, then I buy it. I haven't overpaid for any of it. It's an investment in the future."

In the previous chapter, I explored the ways in which my environmentalist interlocutors activate the trope of the desert as a slow and historically deep space in order to counter what they perceive to be the forward-thrusting temporality of California's "solar frontier." In doing so, I excavated two of the dominant chronotopes associated with the California desert—*gold rushing* and *deep time*—which work to give the spatiotemporal politics of the state's solar energy economy its distinctive shape. Taking up what Glen calls *the meantime* as its object of enquiry and analysis, this chapter continues with the themes of temporality, materiality, and place whilst also shifting its scale of analysis towards the more intimate spaces of everyday life—a zone we will occupy for the remainder of this thesis. My aims are twofold. First, the chapter offers an account of marginality as neither purely a spatial nor temporal condition but a "chronotopic" (cf. Bakhtin 1982) one located at the disjuncture between dominant discursive formations of spacetime (gold rushing, deep time) and the far less polished realities of lived experience (see Frederiksen 2013:11, 2014). Second, the chapter describes one specific situation in which—rather than a temporal threshold, turning point, or rupture located outside of the flow of ordinary time (cf. Bryant 2016)—crisis has over time morphed into an ongoing and all-encompassing spatiotemporal environment of everyday life and practice.

To meet these aims, the chapter proceeds in four main phases. After giving an account of the history and politics of the Salton Sea, I first introduce two 'seaside' towns and the cultures of "active awaiting" that prevail there (Han 2012:31).⁴⁵ Second, I examine the ways in which a local landscape of discarded and

⁴⁵ In recent years, anthropologists and scholars in cognate disciplines have had much to say about the nature of waiting as an affect, practice, and cultural form more broadly. Whilst earlier studies focus on waiting as an effect of power, later studies have shown how an overabundance of free time can be reappropriated as a space of economic and political agency. In short, waiting is rarely if ever a simply passive act (e.g. see Crapanzano 1986; Bourdieu 2000; Jeffrey 2010; Harms 2013; Frederiksen 2013 O'Neill 2014).

decaying objects functions to concretize feelings of abandonment and crisis among its inhabitants. Third, I focus on one popular pastime along the shores of the Salton Sea—fishing—as a technique of temporal experience that mixes together multiple modes of agency and enables John, a currently underemployed Salton Sea resident, to actively reconfigure his relationship to both the present and the future, thereby carving out a livable ordinary life from amidst the debris, decay, and pollution. In the fourth and final phase of the chapter, I describe a “moral panic” (cf. Durington 2007) over the abuse of crystal methamphetamine among local youths as indicative of a set of widespread anxieties to do with the potential perils associated with an overabundance of free time and an everyday life unplugged from the productive rhythms of the wider social world. In order to fully grasp the state of socioecological stagnation in which the Salton Sea and its residents are currently suspended, however, we must first delve into the region’s turbulent history, one marked to an extreme degree by the complex interplay of catastrophe and creation, ruination and resurgence.



Figure 12. One of the innumerable ruined, graffitied buildings that line the Salton Sea’s shores.

The Salton Sea: An Unnatural History

Truly here was a scene of desolation... Not a blade of grass or green thing of any kind relieved the monotony of the parched, ash-colored earth, and the most melancholy scene presented itself that I have seen.

– John W. Audubon's *Western Journal: 1849-1850*⁴⁶

For its very early explorers and settlers, the Imperial Valley was seen first and foremost as a harsh and inhospitable landscape—"nature at its most intractable and bewildering" (Limerick 1985:20; see Chapter 1). Yet, it was also noted, the valley was also home to vast, gently sloping plains of rich alluvial soil and a year-long sun-drenched growing season, thus infusing the landscape with considerable agricultural potential. As with much of the arid American Southwest, all it lacked was a reliable source of water (Worster 1992). By the late nineteenth and early twentieth centuries, motivated by their collective cultures of capital, technology, and religion, a small cadre of private venture capitalists and engineers began to view this southwestern portion of "Alta California" with hungry eyes—as a fallen land in need of redemption (see de Buys 2001:11).

Thus, the logic of *reclamation* (at once practical and ideological) transformed the melancholy of early explorers like John W. Audubon into desire. The challenge, as these men saw it, was to harness, "discipline," and redirect the Colorado River in order to make the desert wastes "blossom like a rose" (see Round 2008:52). Over the *longue durée* of deep time, the Colorado had in fact rerouted itself several times—periodically reversing course and emptying not into the Sea of Cortez but into the Salton Sink, a geological depression formed by the gradual pulling-apart of the Pacific and North American tectonic plates. The original irrigation plans called for making that northward flow permanent, as well as bringing it under human control. To do so, engineers built some sixty miles of irrigation canals in both the U.S. and Mexico. At first they were successful. Construction began in 1900 and the first irrigation water flowed as early as 1901. By the beginning of 1905, there were over 120,000 acres of irrigated farmland in the Imperial Valley, while its population had exploded from only 2,000 to more than 14,000 in these few short years (Mitchell 2007:571).

In the spring of 1905, however, the first in a series of catastrophes struck. An already mighty Colorado River swelled with stormwater and broke free from what by all accounts was a shoddily constructed irrigation system (see de Buys 2001; McGuire 2003; Stringfellow 2011; Voyles 2015a). Initial attempts to seal the

⁴⁶ Taken from Audubon, 2010:166

breach failed. For a total of 18 months, the entire Colorado River emptied into the Salton Sink—filling up the massive trough as if nothing more than a bathtub. Entire towns were submerged; thousands of acres of irrigated farmland were lost. Acting to protect its own interests, Southern Pacific Railroad jumped to the rescue, redirecting all rolling stock to Salton Sink. In turn, two thousand workers labored day and night to plug the gap, unloading more than 3,000 railroad cars full of boulders, wood, gravel, dirt, and debris into the flooded irrigation canals. The scheme did work—eventually—and the Colorado River was forced to resume its former course, once again flowing south into the Sea of Cortez. The lake formed by the flooding was not deep, but it was enormous: at first covering nearly 600 square miles of desert (Voyles *ibid.*:226-227).

For the next half a century or so, the Salton Sea was left more-or-less alone. Its only use: a dumping ground for agricultural runoff. At first, this runoff offset evaporation, thus maintaining the sea in a viable yet fragile state of existence, as well as binding its fate to that of the valley's agricultural operations. By the mid 1950s, however, this period of relative calm came to an abrupt end. Speculators once again saw in the in the Salton Sea a projection of their own collective desires, only this time according to the opportunities afforded by a newly burgeoning postwar tourist and recreation industry (Culver 2012:139-197). Seemingly overnight, resort towns like Bombay Beach and Salton City sprung up along the sea's shoreline—each with its own marina, golf course, nightclub, and restaurants. Developers promised the high life at low prices. "Think about the picture you have in mind of the perfect place," one booster asks. "Wouldn't it be much like this? A place ringed by snow-capped mountains and bathed in warm sunshine winter and summer, and cooled by sea breezes. A place where you could go swimming in warm smooth salt water [all] the year round" (quoted in deBuys 2001:210). Before long, game fish were introduced into the Salton Sea; they quickly flourished. Thanks to its high salt content and low altitude, the sea also gained a reputation for being the fastest boating lake in the country. Whether to fish, boat, or simply lounge by the water, visitors included the likes of President Eisenhower, the Beach Boys, and the Rat Pack. At its peak, the Salton Sea drew 1.5 million visitors each year—more even than the much-celebrated Yosemite National Park.

The sea's heyday was short-lived, however. In all the excitement, very little thought and few resources were put over to the long-term management of this accidental and improbable lake. In the late 1970s, disaster struck again. A pair of tropical storms (Hurricanes Sandy in 1976 and Doreen in 1977) joined a precipitous increase in agricultural runoff, causing water levels to rise rapidly. Homes and businesses along the sea's shoreline were severely flooded, many damaged beyond

any hope of repair. Tourism quickly waned. By the early 1980s, Bombay Beach, Salton City, and the other resort towns had been largely abandoned—as described below. In the early 1990s, changing water-management priorities added insult to injury by mandating diversions from agricultural areas, like the Imperial Valley, to urban and suburban areas, like the Los Angeles Basin and San Diego: a trend that has only intensified with the onset of California’s historic drought (Polk 2015). Less irrigation water means less agricultural runoff, the Salton Sea’s only source of sustenance. As a result, the sea’s shoreline is receding at a spectacular rate, exposing miles and miles of unstable, chemical-laced lakebed. In turn, massive wind-whipped dust storms envelop the surrounding towns and cities, carrying with them both discomfort and disease (see Chapter 4). “We created it,” a Salton City resident once told me—conjuring gothic horror tropes of abandonment, abomination, and revenge. “But now it’s turning on us. The Salton Sea is a monster, a monster coming to get us all.”

Meanwhile, with little input and no outlet, the Salton Sea is becoming an increasingly nutrient-rich broth—making for a highly fertile although hugely overburdened ecology of contradictions. Periodic algal blooms lead to fish “die offs” of staggering proportions: over 7.5 million fish in a single summer’s day, for example (Marcum 1999; see Figure 13). Above its surface, the lake nonetheless emerged as an invaluable stopover for a remarkable array of birds migrating along the Pacific Flyway, many species of which are classified as “vulnerable” or “endangered” (Patten et al. 2003). Deep within its churning ecology, however, a wide range of infectious diseases like cholera, botulism, and hepatitis spread rapidly, first among the fish and then the birds that feed on them. In 1996, for instance, one especially virulent strain of avian botulism claimed 1,100 brown pelicans, along with 13,000 white pelicans, egrets, and gulls, in just four months; dozens of volunteers joined staff from state and federal agencies to help collect infected bird carcasses and feed them into a purpose-built incinerator (see Cohn 2000:298).

On September 21, 2012, a strong smell of rotting eggs wafted across great swathes of Southern California, reaching as far the Los Angeles, some 150 miles to the northwest of the Salton Sea. Caught off guard, regulators spent two days trying to identify the cause. Candidate culprits included a soil recycling plant, a landfill, and an oil refinery. Eventually they traced the odor to its source—a cloud of hydrogen sulfide released by decomposing materials deep within the Salton Sea (cf. Parr

2006). “I’ve been here over 19 years, and I don’t recall anything like this,” reported a spokesperson for the South Coast Air Quality Management District (see Lovett 2012).

Down by the water’s edge, however, residents are all-too-familiar with the smell, which in recent years had emerged as a highly distinctive aspect of the sensory experience of the local landscape and the feelings of abandonment it anchors. “It’s pretty much an all-the-time thing,” Glen later told me. “If they wanted to know where it came from, they should’ve just asked us.” In turn, the so-called “Big Burp” of September 2012 has brought renewed attention to the plight of the Salton Sea and its neighboring communities from relatively far-flung places: San Diego, Los Angeles, Sacramento. While some pundits point to the smell as a clear indicator of the sea’s diseased and deathly nature, all the more reason to let it dry up, others affirm the smell as indicative of an extreme ecological effervescence in need of human care and stewardship. For example, the Superintendent of the Salton Sea state Recreation Area, Steve Horvitz, told reporters: “[The Salton Sea] is the opposite of dead... It’s turning into something that won’t support whatever life is in it now. But I take great issue when I read that the Salton Sea is dying. It’s not dying. It’s changing” (Simon 2012).

On the North American frontier, “wildness” has long been conceived of as something to be conquered, tamed, and brought under human control (Lawrence 1984). By their own self-aggrandizing accounts, the engineers of Imperial Valley’s early twentieth-century irrigation system set out to “tame” the undisciplined desert and thereby “save it from itself” (see Round 2008:54)—a logic that emerges again in the solar energy megaprojects described in the last chapter. But in doing so, these engineers’ dreams of mastery soon collided with and came unstuck against the convulsive materiality of Colorado River and the landscape it courses through. In turn, when routed through the contingencies of an unruly geography, the desire to tame this wildness turned out in the end to produce something wild in yet another sense: “something dangerous, risky, and out of control” (Kirksey 2015:67) but also generative and creative. In this way, then, “wildlife” has been reformatted into a kind of “wild life” threatened as much by its own wild liveliness as by hazards intruding from the outside (see Hinchcliffe et al. 2013:531). In fact, Glen calls this the Salton Sea’s cruelest irony: that which sustains it also endangers it (cf. Berlant 2011). In this way, the interweaving of geological, biological, and social forces across multiple scales of space and time (see Hastrup 2012) has produced what most if not all agree is profoundly singular, sensuous, and impure place (cf. Lefebvre 1991)—littered with both rubble and ruins that crystallize the contradictions of the sea’s past in its present (see Benjamin 2007; Stewart 1996;

Gordillo 2014).⁴⁷ It is in part, I argue, this impurity (at once material and categorical) that has condemned the Salton Sea and its inhabitants to the purgatorial zone they currently occupy (cf. Voyles 2015a).



Figure 13. Desiccated fish carcasses litter the shore of the Salton Sea, gradually turning to a fine dust.

The Place That Has No Place

It's a sunny, summer, "low desert" day in June, 2015. About 200 or so concerned citizens pile into a shiny new auditorium at the University of California, Riverside's Palm Desert Campus, approximately 40 miles to the northeast of the Salton Sea. Early arrivals swap stories while waiting for the meeting to begin. Some are kitted out in shorts and sandals; others are wearing suits and ties. As the time nears 11am, the venue quickly fills up. The few remaining seats are taken; latecomers line the edges of the auditorium, spilling over into the foyer outside. During the course of fieldwork, I had attended about a dozen public meetings to do with the Salton Sea. Most were held in well-worn high school classrooms or

⁴⁷ In an image that clearly resonates with the social life of the Salton Sea, Walter Benjamin (2007:257-258) famously envisioned history as one immense catastrophe "piling wreckage on wreckage." Like this chapter, Benjamin was also interested in the "minor temporalities" (cf. Deleuze 1986) of failure, ruination, and impermanence that ceaselessly churn below the threshold of grand narratives of historical progress and overarching human betterment (see Benjamin 2002, 2007; also see Tsing 2015).

community centers and attended by a hard core of twenty or so local residents and environmentalist out-of-towners. Clearly, today's meeting is an entirely different kind of affair. Across the auditorium, for example, I spot Robert Moon, the mayor of nearby Palm Springs. At the back of the room, a young lady—perhaps a student?—operates some large and expensive-looking audiovisual equipment: the event is being broadcast in real-time on the Internet. At the front, one desk and two chairs have been arranged to face a panel of smart, middle-aged individuals: four men and two ladies. The clock says 11.03 and one of the men at the front speaks into a microphone: "OK then... Let's begin."

Like the others seated at the front of the room, the man is a member of the Sacramento-based Little Hoover Commission. Founded in 1962, the "LHC" is a self-described independent oversight agency tasked with ferreting out inefficiency in California state governance—it picks topics, conducts investigations, and then recommends improvements via legislative intervention.⁴⁸ In recent weeks, the LHC had decided on the state and fate of the Salton Sea as a topic of investigation; having travelled from the state capitol to tour the sea, it had organised today's meeting to collect "testimony" from local residents, experts, and other stakeholders in the sea's wellbeing. In Sacramento, I was later told—rather excitedly—by an employee of a local water district, the Little Hoover Commission is a powerful, high-profile organisation with a "very real" capacity to influence the way in which funds are allocated and resources are managed: their involvement marks a significant shift in the situation of the Salton Sea as an administrative issue from the margins to the center of the state's attentions. My friend Glen was far less impressed. He emplotted the event within a local historiography of bureaucratic ineptitude, frustration, and disappointment spanning more than 30 years: a periodic spike in public interest; a committee formed; a plan developed; a report authored—but no substantive or lasting changes made. "The illusion of progress," Glen shrugs. He sits throughout the entire meeting with crossed arms, cultivating a quiet air of disdain as the event unfolds before him.

Glen is not alone; many others agree that a situation of political paralysis and bureaucratic bungling has contributed significantly to the constitution of the Salton Sea as a serious social and environmental crisis. Speaking at the LHC event, for example, Chris, a local resident and employee of the U.S. Fish and Wildlife Service, describes the situation like so: "This is a disaster waiting to happen, if it hasn't already happened.... The sea isn't waiting for us. It's receding. *The politics has been very slow on this*, and now the sea is outstripping the rate of that. And so because of that, we have this ticking timebomb." If things continue unchanged,

⁴⁸ See www.lhc.ca.gov

Chris warns the LHC, the sea's ecology will soon "fall off a cliff"—at a major cost not only to the environment's wellbeing but also to the regional economy and public's health.⁴⁹ A ticking timebomb. A cliff's edge. With these mixed metaphors, Chris clearly conjures a rhetorical space of urgency, emergency, and crisis: a threshold or turning point in time located at the interface of social, political, and ecological temporalities that are radically mismatched. Worryingly, according to Chris, any action may now be too little, too late: the disaster may have already happened, waiting for the world to catch up.

At this point, one member of the LHC interjects to ask biologist Chris what he considers to be responsible for the political paralysis that has plagued the Salton Sea's social life. Chris takes a sip of water and considers his answer. He then replies:

In terms of the lack of action for some substantial time, I would say that there's no stakeholder that represented the interests of the Sea itself. The sea doesn't have a spokesperson or a governing authority of its very own. It's a feature of the local landscape that has an impact on a lot of different groups and jurisdictions around it. But it's not really for any of them their major concern. And as it becomes less valuable as a recreation area, that wanes even further. It isn't until people begin to focus on the threat [...] that you get people once again trying to deal with it.

During fieldwork, I heard this same question answered many times according to a similar, related, or sometimes significantly different social assessment. For Chris, for instance, the Salton Sea belongs simultaneously to everybody and to nobody—straddling as it does two counties, two congressional districts, and the remit of half a dozen or so competing boards and agencies. Others highlighted how the Salton Sea suffered from its relatively remote location at the geopolitical fringe of California—far from the major seats of political power in Sacramento, San Francisco, Los Angeles, and San Diego. Still others, like Imperial Valley community health worker Luis, articulated the issue to me in terms of environmental injustice, whereby the everyday vulnerabilities, risks, and harms associated with the mismanagement of scarce ecological and economic resources are unevenly distributed and experienced across the state's physical and social landscape. "I guarantee you that if [the Salton Sea] was in Malibu, Orange County,

⁴⁹ One report estimates the costs of inaction at the Salton Sea to be over \$70 billion over the next 30 years, including costs from dust-related health impacts, the loss of ecological habitat, diminishing recreational revenue, and property devaluation (see Cohen 1999:1).

or some other rich neighborhood, it would not be looking the way it is now,” he once told me. Finally, my friend and neighbor Will attributes the Salton Sea’s present condition to its inability to find stable footing in a mainstream North American ecopolitical imaginary still wedded to the myth of pure, timeless, “natural spaces” untrammelled by human presence (e.g. see Cronon 1996). “You’re much more likely to spot a ‘Keep Tahoe Blue’ bumpersticker on the roads in Palm Springs than a bumpersticker referring to the Salton Sea,” he laments. “I think that’s because the Salton Sea doesn’t conform to our idea of what nature should look like.”

Thus, each of these statements expresses or emphasises a somewhat different (but by no means incommensurate or incompatible) diagnosis: that the Salton Sea has fallen through the cracks of political and bureaucratic jurisdiction, for example, or has fallen victim to a cultural calculus of social and environmental value that discredits both its marginality and its impurity. It was in the context of this research that a *Los Angeles Times* article captured my attention (Jones 1998). “No one can say exactly when the Salton Sea was extinguished from the public mind,” it begins. “I would put the time in the mid-1970s. After that, the largest inland body of water in California, nearly twice as large as Lake Tahoe, no longer registered in the collective psyche. It had ceased to exist.”⁵⁰ How, I wondered, might a 525 square-mile body of water cease to register in the collective psyche—cease even to exist—or at least for such a statement to make good social sense both to its author and, one assumes, to its intended audience?

In *Economies of Abandonment*, the anthropologist Elizabeth Povinelli (2011) suggests something of an answer. In that text, Povinelli elaborates the distinction between the discursive and material orders of what she has calls *corporeality* and *carnality*—a distinction she first makes in *Empire of Love* (2006). Simply glossed, “the corporeal” is Povinelli’s term for the “discursive construction of materiality ... [that] shapes, carves, and assembles a given formation of the material world” according to a particular grid of intelligibility (2011:108; also see Foucault 1973). While powerful, however, such discursive constructions of materiality never take place without simultaneously producing an errant, unintegrated remainder—what Povinelli calls “the carnal” (ibid.:109). In this way, the corporeal denotes what is “sayable and visible” (ibid.:50) within the dominant social order, while the carnal crackles within the social scene merely as noise or as static—as socially and politically illegible. Povinelli describes this noise as “the part that has no part” (ibid.:47; also see Ranciere 2006). Yet it is important to note here that carnality is

⁵⁰ Even when presented with maps of the state, many of the Californians depicted in Bill Wisneski’s 2015 documentary, *Breaking Point*, have no idea what or where the sea is.

never simply negative; it can also provide a positive occasion as well the necessary material conditions for the redistribution of social sense and the reconstitution of new sociomaterial worlds. Think of the Salton Sea itself, for example—a spontaneous ecology that has sprouted, however precariously, amidst the excreted substance of Imperial Valley agribusiness.

Paraphrasing Povinelli, we might begin to see the Salton Sea as “the place that has no place” in the North American geographical imaginary. Put differently, when the California desert (like the world more broadly) is shaped, carved, and assembled according to the binary of “wilderness” and “resource,” the Salton Sea is what fails to find stable footing in the dominant discursive formation or grid of intelligibility (Voyles 2015a). Neither a shiny new landscape of progress nor pristine wilderness, the Salton Sea is therefore excluded from the dominant spatiotemporal narratives associated with the Southern Californian landscape and thus condemned to a state of political purgatory. So excluded, however, the Salton Sea does not obtain in a state of suspended animation. Rather, it remains swept along in the inexorable flow of what Povinelli describes as the “durative present” (ibid.:3; also see Wool & Livingstone 2017). Wild life continues to proliferate; the sea continues to shrink; birds and fish continue to die; the dust storms continue to blow. In turn, as a renewed interest the plight of the Salton Sea suggests, such wild life constitutes a zone, at least potentially, for the improvisation and articulation of alternative forms of environmental care and stewardship that embrace rather than eschew the sea’s monstrous ecology.

How, then, are time, history, and memory experienced and negotiated within this place that has no place? On the ground, suspended between tentative hopes for full remediation and the spectre of the sea’s total socioecological collapse, a complex form of interstitial social time prevails along the ruined shores of the Salton Sea. As described above, this is what Glen calls “the meantime.” In what follows, I will paint a picture of daily life in the *meantime*, theorized as an “atmosphere” (Brennan 2004; Frederiksen 2014) of temporal affects or “structure of [temporal] feeling” (Williams 1977) that includes, for example, an uneasy mix of both boredom and urgency. I will then show how this affective atmosphere is mediated through the local landscape of abandonment and decomposition (see Navaro-Yashin 2009, 2012), which works to generate a collective sense of crisis not as a threshold or turning point in time but as an ongoing spatiotemporal condition—an environment or milieu—of everyday life.

Bombay Beach: “Sweating It Out” in a Ruined Landscape

Hardest hit by Hurricanes Kathleen and Doreen of all the Salton Sea resort towns, the eastern end of Bombay Beach sits largely flooded or submerged in mud. The rest, a grid of paved streets laid out over approximately one square mile of land, is kept dry, only barely, with the help of a huge levee. Residents, mostly retirees, live in an eclectic assortment of homes, trailers, and RVs—each in various states of disrepair. The amenities are few: one small market, a bait shop, two bars, a volunteer fire station, and a children’s play park; funded by the community, slides and monkey bars were built—but no shade. In the summer heat, which can reach well over 120 degrees Fahrenheit, the metal bars are scorching to the touch. There’s not much else. The nearest gas station is over 20 miles away, while the nearest supermarket is more than an hour’s drive.

Once in the low four figures, today the town’s population stands at around 250 full-time residents. In the winter months, however, this number can swell significantly with an influx of so-called “snowbirds”—appearing each October in their RVs from distant places like London, Ontario and Madison, Wisconsin (see Counts & Counts 1996). Heading south, these snowbirds stay in shopping mall parking lots and highway truck stops. Arriving at the Salton Sea, they set up camp for the winter: decorating their RV sites with miniature windmills and bright pink plastic flamingoes. Many suffer from the aches, pains, and ailments of old age—they’ve come on their doctors orders for the dry heat and the mineral springs that line the Salton Sea’s eastern shore. Come March and April, they pack up their homes and head north for the summer.

Like the permanent residents, the snowbirds are mostly white retirees. In recent years, however, a younger and more diverse demographic has also moved into town—especially in the years following 2007’s financial crisis. For example, John, Anna, and their son Cody moved to Bombay Beach from Los Angeles in 2012. After John lost his job as a construction worker, he was unable to keep up with his mortgage repayments. Their home went into foreclosure and they were forced onto the street. For several weeks, they slept in the back of John’s van or occasionally at motels before eventually finding an affordable place in Bombay Beach. For \$500 a month, a small fraction of what they were paying in the city, they’re able to rent a small two-bedroom house. John tells me that “the cost of living here is a blessing—but there aren’t many opportunities for work. We’re trying to make a new start. Once we’re back on our feet, we’re going to move back to Los Angeles.”

While John seeks refuge from the relatively high cost of city life, then, others seek asylum of another sort. A lady I will call Danielle, for instance, tells me how she moved to Bombay Beach from El Centro, a nearby city plagued by gang violence, with her niece and nephew, whom she takes care of. When I asked her what everyday life is like in Bombay Beach, she answers: "There's not very much to do down at Bombay Beach... I don't have a car and the bus only comes once a day... But I've gotten used to that now. And on the plus side: you don't have to worry about gangs or anything like that." Thus, for both John and Danielle, this town's stunted and interstitial temporality offers some degree of respite, albeit at the cost of limited opportunities for both work and socialization. According to some people I spoke with, these changing demographics are generating tensions of class and race within Bombay Beach—manifesting most often in fears to do with lawlessness, vice, and the deterioration of the local social scene.

At the social focal point of Bombay Beach is the Ski Inn, the more popular of the town's two bars. Rumour has it that tourists could once water-ski right up to the bar's entrance for cocktails and fish dinners. Today, however, the sea's shoreline sits barely visible from the door through a quarter mile of heat haze. I'm sitting at the counter and drinking iced tea with Ruth. Dressed in white slacks, a colorful short-sleeved silk shirt, and a white beret, Ruth is widely considered *the* person to talk to regarding the Salton Sea's social history. She has a "great story," I was told time and time again—identified by my friends and informants as an important stock in trade for the budding anthropologist. As I learnt, "having a good story" is a prized virtue among many Salton Sea residents, which indexes not only the objective content of this or that narrative but also an individual's capacity to craft their past experience into a compelling tale that bears upon and illuminates the present moment in some unexpected manner (cf. Basso 1996). Helpfully, Ruth has brought along an album of photographs to our appointment and idly flicks through them as we talk. Most are old and faded. Every now and then, she points out a favorite: her husband, young and bathing-suited, standing alongside a shiny speedboat; their daughter, posing happily for the camera with a "Miss Salton City" sash draped across her shoulder.

In her own words, Ruth has been "enchanted" with the Salton Sea ever since first visiting with her family in the 1950s. Back then, things were different: the place was alive with color, excitement, and possibility. As a teenager, she would await with great anticipation her vacations at the Salton Sea's resort towns: Salton City, Salton Beach, North Shore, Bombay Beach. Even the names were exotic and alluring. After several years, Ruth moved to up-and-coming Bombay Beach with her husband. Together, the newlyweds ran a small store selling sodas,

souvenirs, postcards, and fishing tackle. Bombay Beach was busy and business was good. Above the counter, they pinned photos of the men and women who swam the entire width of the sea: 13 miles. "But hardly anyone swims in the Salton Sea anymore," Ruth tells me sadly.

At this point, Ruth's story takes a turn for the worse. In 1976, Hurricane Kathleen struck. Winds reached up to ninety miles an hour, sending a wall of solid water over 10 feet tall through nearby Ocotillo, destroying much of the town. Across California and Mexico, the tropical storm claimed thirteen lives; hundreds were made homeless. In California alone, the damage was estimated at \$160 million—making it one of the most costly storms in the state's history. At Bombay Beach, the Salton Sea's level rose by 8 inches in just a few hours, putting much of the town under water. "[There was] no warning at all," remembers Ruth. "Just this sudden roar and then water everywhere. We had a friend that lived down there [by the shore] and water was coming through her front door as if it wasn't there. So we invited her over and we sweat it out together. Some 'upped' and left—bailed out—but not us, we weren't going anywhere." Just a year later, Hurricane Doreen also struck Bombay Beach, compounding the considerable damage beyond any hope of recovery. Only a few buildings were spared. All but the very hardiest of residents moved away, leaving the town to fall even further into a state of disrepair.

Shortly after that, Ruth's husband died suddenly and unexpectedly. "He loved this place," she tells me. "It broke his heart to see it like this." Then, in the late 1990s, Ruth was diagnosed with cancer. In recent years, she says, disease and death has enveloped the ageing community: "A couple of strokes. A brain tumor here. An artery bypass there. It's one thing after another... [Bombay Beach is] being worn away one old person at a time." This, Ruth tell me, is in fact her greatest worry: that, without an influx of younger residents, this special place will one day simply cease to exist.

Deep down, I believe most of us think that's what's in store for the Salton Sea.... We've been abandoned. We've already lost such a lot. Now they're taking our water too. But these are tough people. We're not going to just give up and move away. Sometimes I wonder where we get the strength to continue. But then we just keep on going and I think we probably always will do.

In her story, Ruth moves more-or-less seamlessly between the history of the Salton Sea and her own biography, thus weaving the two into a single narrative. Having

been diagnosed with cancer, Ruth lives within *the meantime* in the shadow of her prognosis: “haunted by the possibilities of her future self” (Jain 2007:80). As such, she is doubly burdened by both a physiological *and* a social mode of parenthetical temporality, which become tangled together in a generalized sense of existential uncertainty. “I’m not sure what will die first,” she once told me. “Me or the Salton Sea.”

Perhaps unsurprisingly given this intersection of physiological and social uncertainty, her comments index a great ambivalence towards the future both near and far, oscillating as they do between sad expressions of resignation and stubborn proclamations of survival. Caught between such a vivid past and such an unsure future (compare Figures 14 and 15), nostalgia saturates Ruth’s story. According to Svetlana Boym (2002:12), “Nostalgia is a sentiment of loss and displacement. But it is also a romance with one’s own fantasy. [...] Nostalgic love can only survive in a long-distance relationship.” Like many of the other people I spoke with at the Salton Sea, however, Ruth actively fashions her nostalgia into a critique of the sea’s present state wielded not from a position of distance but from deep within the scene of her own abandonment. Put differently, Ruth longs not to halt the flow of time; nor for a utopic past that never was; but to resituate her home within the zone of historical forward movement from which it has been extruded (see Stewart 1988:235; Choy 2011:41). As we chat, drink iced tea, and thumb through Ruth’s photographs, we also play checkers. It’s the bar’s board; many of the pieces have been lost, replaced by old bottlecaps. Ruth is winning. She chastises me for playing too hurriedly. Around here, she reminds me, things move much more slowly than I’m probably used to. Winning is important, yes, but the real point is to “pass the time.” Like playing cards or chess, drinking coffee or beer, sitting out on the porch, or fishing for tilapia in the Salton Sea, other favored pastimes around these parts, checkers takes shape here as an important technology or technique of temporal experience: one way of transforming the “meantime” into a pleasurable space of social encounter.



Figure 14. Tourists relax and recreate during the Salton Sea's 1960s heyday (source: greetingsfromsaltonsea.com)

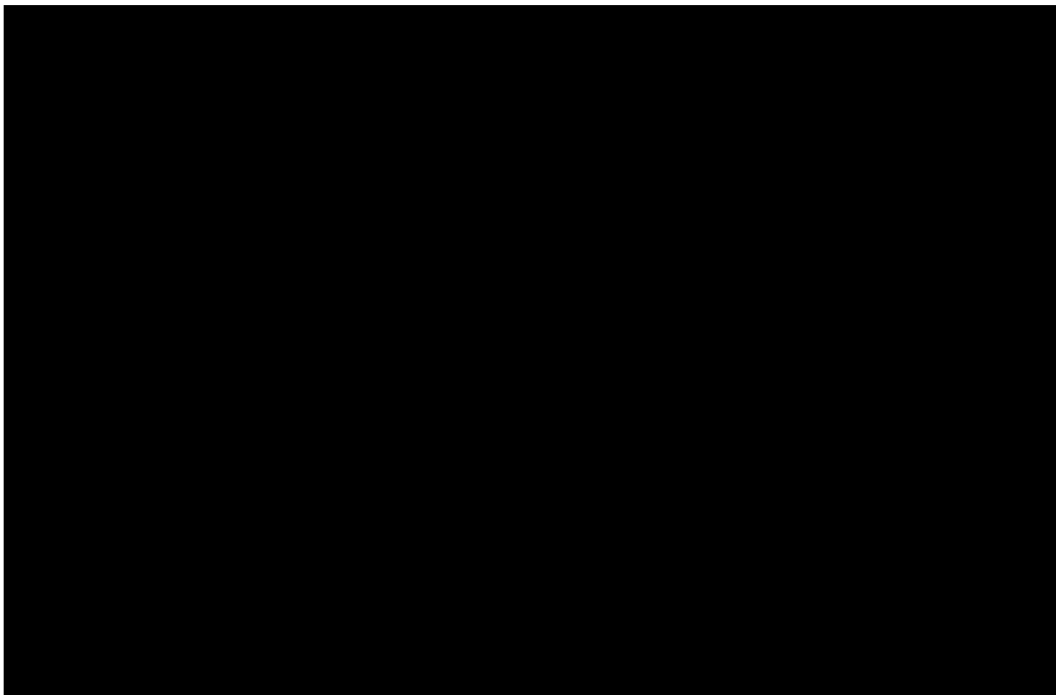


Figure 15. Today, much of the Salton Sea's built environment lies in ruins.

Salton City: The City That Never Quite Was

In May 1958, prominent real estate developer M. Penn Phillips began developing Salton City on the sea's eastern shore: building roads, subdividing the land, and selling residential lots for \$200 down. He enrolled the famed modernist architect Albert Frey to design an entire business district, along with schools, churches, an 18-hole golf course, hotel, yacht club, and the largest marina in California. Buyers flocked by the busload to the barren desert, having seen Phillips' adverts on the television peddling the joys and the virtues of life in the desert by a "shimmering sea." Within just a year, Phillip's sold his Salton City interests to the Texas-based Holly Corporation, which doubled-down on the television advertising campaign and sponsored sporting events on the sea, attracting hundreds more prospective homeowners. A million-dollar water distribution system was completed in 1961, with the capacity to serve 40,000 people. Power lines were installed and more than 260 miles of paved streets were laid down. Spread out over almost 20,000 acres of shifting sands, Salton City was now ready—for a population that never came (see Graves 1991). "Around the time the lots were sold, a recession was setting in," one Salton City resident remembered.⁵¹ "Only a few hundred or so houses were built, and few were homes that people actually lived in... And that was the *real* disaster here. Everything was done on spec, but then the economy tanked and nothing got built." Accused of false representation, the Holly Corporation promoters packed up their tents and returned to Texas, leaving the still-unfinished Salton City behind them.

At almost 4,000, the population of Salton City remains several times larger than that of Bombay Beach. Spared the worst of Hurricanes Kathleen and Doreen, the built environment is also considerably less downtrodden—although signs of disinvestment still litter the landscape. According to Glen, city residents include a professional golfer, former movie executive, retired journalist, several active and retired contractors, and many military retirees. "[The desert] can be a harsh and unforgiving place to live," he tells me, "but we always come to the aid of others in times of need," thus emphasizing notions of neighborly sentiment and painting a picture of almost village-like solidarity within the tightknit Salton City community.

Now aged 68, Salton City bar-owner Glen moved with his family to Salton City in 1966. His father, a war veteran, had suffered from respiratory problems; doctors said the dry desert air would help sooth his lungs. As a teenager, Glen busied tables at the glamorous Salton City Yacht Club. By the time his own two

⁵¹ The comment refers to the U.S. recession of 1960-1961, which in fact preceded the second largest period of economic expansion in U.S. history—from early 1961 to late 1969.

children had grown up and left home, however, the sea was already “dying.” Today, then, Glen spends much of his spare time advocating on behalf of the Salton Sea—organizing events to publicize its plight, teaching his friends and family about its colorful history, and writing strongly worded letters to his local politicians. As we speak, Glen pulls out a file and places it on the table between us. He opens it and pulls out a thick handful of documents: charts, graphs, maps, letters, photographs, and plans for restoration. While one series of photographs documents the Salton Sea’s retreat over the years, for example, a diagram maps that retreat into the future according to various scenarios of action and inaction. Another document details a restoration plan of epic proportions: to export Salton Sea water via canals into Mexico’s Laguna Salada, 100 miles to the south, and then replenish it with seawater piped up from the Sea of Cortez. With a pricetag of anywhere between 15 and 38 billion dollars, the Bureau of Reclamation concluded long ago that this proposal had “low feasibility”—and yet it continues to attract support.

Thus, for Glen, these documents constitute a powerful site for not only imagining but also working to materialize a desirable future for both himself and his community: an everyday technology of anticipation. The way Glen sees it, restoring the sea would bring jobs, income, and opportunity to the socially and economically depressed region. And, in turn, if a booming economy were to drive out an “undesirable element” who find themselves suddenly unable to afford the cost of living in Salton City, Glen says, “that’s unfortunate, but that’s just the way life is.” In turn, Glen hopes that a restored sea and renewed investment might at long last transform the paved streets and empty lots into a prosperous lakeside community.

In the face of repeated frustration and disappointment, however, Glen cultivates something of an ironic distance between himself and the hope of full restoration. And yet, as described in the introduction to this chapter, he continues to invest in regional real estate in the hope that prices will one day appreciate. If living by the Salton Sea all these years has taught him much at all, says Glen, it’s that fortunes can change at the blink of an eye or drop of a hat. On the other hand, Glen’s close friend and long-time neighbor, Norman, is far less hopeful about the Salton Sea’s prospects for the future. “You have a lot of people that are waiting for things to finally happen, and they feel like it’s just around the corner,” he tells me. “But they’ve probably felt that way for 10 or 15 years now... I’m getting on [in age] now and I certainly don’t expect to see any miracles in my lifetime.” In this way, the precise temporal status of Salton City is underdetermined, changing depending on whom you ask (cf. Ssorin-Chaikov 2016). For Glen, it is a space of potential: an

unfinished project awaiting completion. For Norman, it is a ruined landscape the best years of which have long passed. Thus, like Bombay Beach, Salton City is also marked by a state of interstitial time towards which residents forge a wide variety of orientations.

Tellingly, for example, Ruth brings an album of faded photographs to our appointment; her stories tend toward the past, which she recalls warmly. Like others, she preaches a practice of active leisureliness carried out through specific techniques or technologies of temporal agency, including playing cards, checkers, chess, or backgammon; drinking beer or iced tea in the afternoon sun; or taking long walks along the beach while allowing her mind to wonder. Generating slow moments of “self-interruption” that, in this particular case, work to synchronize the rhythms of everyday life with the still-stunted flow of historical time, these practices manifest a form of “lateral agency” (Berlant 2007a) that does not seem to follow the sovereign logic of effectuality or self-extension—a point to which I will return below. In contrast to Ruth, however, Glen brings charts, graphs, maps, and plans for the Salton Sea’s restoration along to his interview, the material markers of a much more forward-thrusting form of agency, which manifests most markedly in Glen’s practices of environmental activism and real estate speculation. Thus, while Glen also remembers the Salton Sea’s past fondly, his energies coalesce around the question of the sea’s future: not only its survival, but also its potential prosperity.

Here, the French sociologist of everyday life Michel De Certeau (2011) has developed a grammar of practice that proves helpful, centered upon the distinction between what he calls “strategies” and “tactics.”⁵² According to de Certeau, then, *strategies* are the operational logic of those in positions of power. Directed towards the circumscription and control of space according to “abstract models,” they arise when an actor separates itself from a particular spatiotemporal environment in order to dominate it from without (ibid.:29). In contrast, as the “arts of the weak” (ibid.:37), *tactics* operate within the cracks and folds of the discursive and material realities generated by strategic impositions. While strategies seek to command, control, and conquer, then, tactics must instead move forward along a much more meandering temporal trajectory of spontaneity, opportunism, irreverence, and reverie (ibid.:35). As Judith Farquhar and Qicheng Zhang (2005:321) have noted, the politics of everyday life developed by de Certeau can therefore accommodate stillness, slowness, and “nonaction” without reducing these to a state of passivity. “Such a politics,” writes de Certeau (ibid.:xxiv), “should also inquire into [...] the microscopic, multiform, and innumerable connections between *manipulating* and

⁵² On de Certeau’s “poetics of everyday life,” see Highmore 2001a:145-173. On de Certeau’s “methodological imagination,” see Highmore 2006.

enjoying, the fleeting and massive reality of a social activity at play with the order that contains it.” Accordingly, we might read everyday life along the shores of the Salton Sea as “tactical” in this sense—as an art of “escap[ing] without leaving” (ibid) practiced within the spatiotemporal interstice generated by state strategies and dominant spatiotemporal forms. However, as we shall see, such tactics of temporal experience must be practiced with caution; if improperly cared for, such an overabundance of free time can generate a range of physical and psychological harms.

So far, I have introduced two Salton Sea resort towns and the cultures of “active awaiting” (Han 2012:31) that prevail there amidst an atrophied economy of possibilities. In doing so, we have encountered a number of very different ways of reckoning abandonment: in the statistical fact of population decline and economic disinvestment, for example, or in melancholic stories that juxtapose the sea’s vibrant past with its stagnant present. I will now examine the ways in which abandonment can also be lived as a particular “atmosphere of temporal affects” or “structure of temporal feeling” that both inheres in, and is discharged by, the materiality of the landscape and the discarded, decaying physical artifacts that constitute and enliven it.

Debris, Decay, and the Tangibility of Temporal Affects

Most days, from her house in Bombay Beach, Ruth takes a walk down to the shore of the Salton Sea. In the summer months, to beat the searing heat of the Colorado Desert, she leaves early and returns home before breakfast. For the rest of the year, she heads out after lunch or at dusk. Some days, she drives to a neighboring town or one located on the opposite side of the sea—like Salton City, Desert Shores, or Salton Sea Beach. But gas is expensive and the nearest gas station is over twenty miles away, so she tries to drive only very sparingly. While popular hiking trails weave their way through the nearby Anza-Borrego Desert State Park—crawling with weekend hikers and campers kitted out in expensive technical gear bought in fancy San Diego stores—that’s not Ruth’s scene. She much prefers to stay close to the Salton Sea, tracing its receding shoreline with the steady fall of her footsteps.

Whenever I was in town, whether for a day or for a week, I’d try to join Ruth for her daily walk through the abandoned homes and discarded things of the Salton Sea. Her memory jogged by the sight of some landmark, Ruth would sometimes share stories of its past. “Look at this,” she says, gesturing over the wide blue waters. “There’s nobody. [Forty years ago] on a Sunday like this, it would have been packed with people. It’s such a different place now.” Against the

backdrop of today's silence, Ruth tells me she can still hear the sounds of the sea's heyday: the roar of speedboats; a cacophony of laughter; the clink of cocktail glasses in the evening. She points to one especially sorry-looking structure, now collapsed and covered in graffiti. "Can you believe it? That used to be somebody's dream home," she says. "Now look at it... All thanks to mankind and his hasty ways." On other occasions, however, the hot roar of the desert winds, the lapping of the sea against its shore, and the reflection of the sun against its azure surface would sweep us along in a comfortable silence.

As she walks, Ruth scans the terrain for interesting artifacts—a shard of color or chrome amidst the litter, for example. From time to time, something inexplicably catches her attention: she stops suddenly, dropping to one knee and turning the object over in her hands. Very rarely, she places something in her creased, sun-faded leather backpack to take home. In the dozen or so times I accompanied Ruth for her walks, I saw her do this only once—with a discarded child's toy. Nevertheless, over many years, Ruth has built up a sizeable collection of these objects, mostly packed away in unmarked cardboard boxes in her garage. Taking a random box down from the stack, I open it up. Contained within is an odd assortment of weathered artifacts, both large and small. These include:

- a half-finished journal with leather cover;
- a discolored Polaroid photograph of a child's birthday party;
- a shard of vinyl from a record;
- a torn and rotting United States flag, neatly folded;
- a black high-heeled shoe;
- a rodent's (?) skull and bird's feather;
- a ring-tab beer can;
- a small drawstring canvas bag full of spent bullet casings.

Many of the objects were visibly broken, incomplete, fragmented, fractured, or watermarked. Some had been very carefully wrapped in tissue paper or placed in zip-lock sandwich bags. Most, however, have been piled haphazardly into the box and left to continue along their particular trajectories of decay and deterioration, each in various stages of decomposition. Disembedded from the contexts of care that rendered the everyday domestic objects meaningful as somebody's personal belongings, these discarded and part-decayed artifacts nonetheless still retain the affective residues of their former lives (Douglas 2002:161). To me, at least, the effect was an uncanny and sometimes uncomfortably intimate view into the everyday life of a stranger; perhaps unsurprisingly, this effect was most pronounced with

the half-finished journal and photograph, each deeply inscribed with an eerie sentimentality. I ask Ruth, what makes for an interesting object? "I don't really know," she answers. "Some things just call out to me... I guess I like things that *feel* a certain way. [...] They have to have some kind of character in them." In this way, foregrounding the ways in which objects can *feel* and *call out*, Ruth accentuates the affective textures rather than the classificatory aspects of her unconventional collection (Navaro-Yashin 2012:211; cf. Elsner & Cardinal 1994:1).

How, then, can we make sense of Ruth's collection? Perhaps one way might be to compare and contrast it with the official collections of the Western museum. As human geographer Caitlin DeSilvey (2006:326) writes, for instance, "acts of counting, sorting, stacking, storing and inventory work to convert things from the category of stuff to the status of museum object... [These] conservation technologies slow or halt physical decay, while interpretive strategies present the objects as elements of a static and unchanging past." In this way, she continues, "ephemeral things, decontextualized and catalogued, acquire a socially produced durability in carefully monitored environments" (ibid.; also see Buchli 2002:15). As such, objects are kept in climate-controlled storage areas, special paints are applied to protect artifacts from ultraviolet rays, and any lingering molds or microbes are eliminated from textiles to prevent their deterioration. Thus, concludes DeSilvey (ibid.), "most places designed to preserve the past take great pains to ensure that the physical and biological processes that underlie that past have been neutralized." In turn, the museum collection both expresses and reproduces in physical form a vision of order, stasis, and fixity—denying the primacy of the present in favor of the past whilst also abrogating the passage of everyday time in all of its material manifestations.

Alongside this paradigm of collection and conservation, art historians John Elsner and Roger Cardinal (1994:4) call for more attention to be paid to what they call "the quieter, subversive voices rising out of that unacceptable residue lying in culture's shadows" (quoted in Navaro-Yashin 2012:211; also see Newell 2014). Ruth's collection constitutes one such "subversive voice." Unlike the artifacts in Western museums, which are carefully kept, conserved, and maintained, the objects in Ruth's collection are on the whole left to deteriorate within her garage. As such, "the abject properties of these objects are not segregated from their desirable aspects" (Navaro-Yashin ibid.). On the contrary, the decaying and decomposed nature of the objects seemed to be the reason they were valued and collected in the first place (cf. F. Hastrup 2011:124).

The difference between what I have called here "official" and "subversive" collections was brought into especially clear focus by one ethnographic episode.

Her garage overflowing with cardboard boxes full of abandoned and reclaimed objects, Ruth had been “overcome” with a sudden urge to do something with them. Thus, she had invited Belinda, founder of the nearby Salton Sea History Museum, to search through the boxes for objects of interest—historic artifacts to transfer to the museum’s air-conditioned collection of other Salton Sea-related artifacts, photographs, and memorabilia.⁵³ After rummaging through a few of the cardboard boxes on one balmy afternoon in October, however, Belinda soon concluded that there was little of worth for her museum, and had subsequently left Ruth’s house smiling, yet empty handed. For Belinda, the deteriorated condition and mundane nature of these everyday domestic objects apparently diminished their value as historical artifacts. Yet it is my assertion here that these discarded items captured Ruth’s attention because (not in spite) of their mundane nature and deteriorated condition, which together work to crystallize the sense that the Salton Sea is caught in a *situation of ongoing crisis* which, very far from over, continues to interrupt and unsettle the expected trajectories of everyday life and even history itself.⁵⁴ More tentatively, I also suggest that Ruth’s habit of reclaiming these carnal things from their state of abandonment might be read as a both an act of resistance and a gesture of care directed, albeit metonymically, towards both herself and her home: the Salton Sea.

That said, however, perhaps a more pertinent way to make sense of Ruth’s collection is not to focus on the sociomaterial lives of the objects and artifacts contained within it, *per se*, but to shift attention towards the embodied practice of discovering, handling, gathering, and gradually accumulating these discarded, decaying objects. Indeed, the enthusiasm with which Ruth takes her daily walks combined with her relatively haphazard mode of archiving these founds object points us in precisely this direction.

Unfolding within the sensuous present of the Salton Sea’s shoreline, the act of collecting works to bring Ruth into close association with the sea’s past. On occasion, such engagement with the past takes shape through a purposeful act of intellectual contemplation spurred on by the aesthetic qualities of specific objects, as when Ruth speculated about the owner of an abandoned, sorry-looking stuffed

⁵³ Originally housed at the recently restored North Shore Beach and Yacht Club, designed by architect Albert Frey, the Salton Sea History Museum is today homeless.

⁵⁴ In her analysis of “recovery” in the aftermath of the 2004 Indian Ocean tsunami in a Tamil fishing village, Frida Hastrup (2011:16) likewise explores how “villagers made use of a mundane material register of household belongings that were ruined, lost or replaced, because such a register lent itself aptly to the prevalent sense that the tsunami is not strictly an event of the past to be commemorated through monuments but rather a figure that has literally seeped in to the fabric of the everyday.”

bear she chanced upon during one of our morning walks. Very rarely, she goes so far as fashion such speculation into an explicit critique of “mankind and his hasty ways.” More often than not, however, Ruth’s invocation of the past assumed a far less direct angle of approach. As an effect of hiking slowly amidst the heat, breeze, and overarching scene of disrepair of the Salton Sea, for example, Ruth’s mental grip on the present begins to loosen, in turn generating a space in which the otherwise subordinated sounds and images of the past can, seemingly unsolicited, irrupt into the perceptual field of the present. Importantly, Ruth is not attempting to conjure and inhabit a fully realized past reality (cf. Handler & Saxton 1988). Rather, she is creating a space for the affective residues of the past to bubble forth to the surface of the present: a more indirect act of remembrance. As such, the embodied act of collecting constitutes for Ruth a much-valued opportunity to engage in what, based on his ethnography of amateur archaeological practices in rural France, the anthropologist Matt Hodges (2013:485) has described as a “primary” engagement with the past—one grounded in “a loosening and melding of temporal identities” (ibid.) in which *history* exists not only or even primarily as a textual or discursive engagement but as a living presence that saturates the senses and excites the imagination (also see Rosaldo 1980; Stewart 1996; Bonilla 2012).

As I have argued so far, the Salton Sea and communities that reside there are enveloped by a complex form of interstitial social time. This *meantime* is comprised of a wide variety of temporal dispositions, practices, and affects, including nostalgia, melancholy, boredom, anticipation, exhaustion, endurance, and longing. When taken together, these dispositions constitute a culturally produced and collectively felt “atmosphere of temporal affects” or “structure of temporal feeling” that is stretched across the social and material space of the Salton Sea (Williams 1997; Brennan 2004; Frederiksen 2014). As anthropologist Yael Navaro-Yashin (2012:202) has noted, such affective atmospheres are “generally theorized through metaphors that invoke abstraction, imaginaries of immateriality, and conceptualizations of invisibility.” By following closely Navaro-Yashin’s own account of her interlocutors’ vernacular collections of abandoned, everyday objects gathered in war-town northern Cyprus, however, in this section I have foregrounded the many ways in which discarded and decaying material things can discharge constellations of temporal affect—“emitted through these objects’ very solidity, presence, visibility, and tangibility” (ibid.:203)—albeit in ways that are always mediated and qualified by the people who encounter them.

It is, I contend, not a coincidence that along the shores of the Salton Sea the residents’ collective attentions tend to coalesce on objects that communicate a sense of rapid abandonment and arrested development (see Figure 16). Excreted from

the flow of normal time and their everyday regimes of care, these “carnal” (Povinelli 2011:109) things effectively capture the feeling of living amidst an ordinary crisis, not merely as a temporal turning point or an event to recover from, but an everyday environment to be inhabited and endured. In the next section of this chapter, I will track one mundane practice of endurance deployed within this purgatorial zone, fishing, before examining the ways in which an enforced overabundance of free time is understood to harbor a set of both socially and physically toxic possibilities—as embodied in the figure of the methamphetamine-addicted youth.

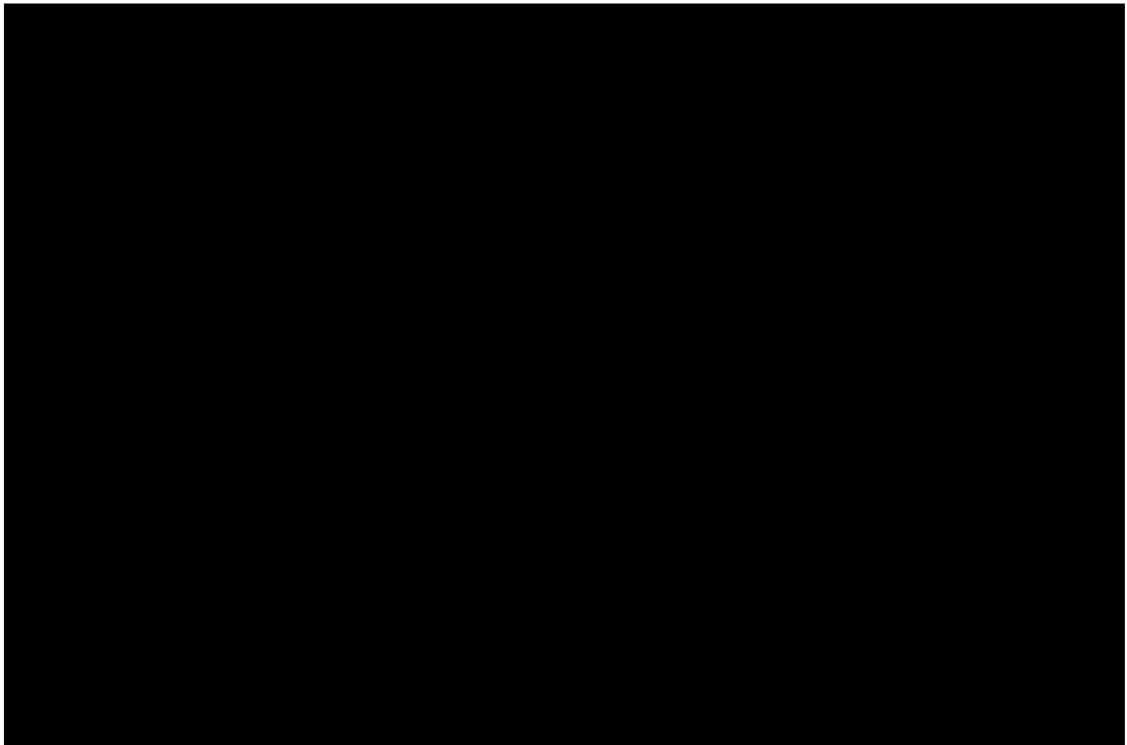


Figure 16. Discarded couch, Salton Sea.

From Recovery to Endurance: Fishing as a Technique of Temporal Experience

In a previous section of this chapter, I introduced John, who had moved to Bombay Beach from Los Angeles with his family after losing his job and his home. John had done all he could to secure his small slice of the American dream, working hard to pay his mortgage and provide for his family. “We were happy,” he told me. “We had work, we had a home, we had everything we needed.” But when the housing bubble burst in 2008, so did his dream. After losing his job as a construction worker, John had to choose which of his creditors to shortchange at the close of each month just to keep the lights on and the water running. Soon, the “juggling

act” become too much—their home went into foreclosure and they were forced onto the street before finding their way to the Salton Sea.

Notably, John’s story is far from unique. Since 2007, 14 million homeowners in the United States have lost their homes to foreclosure, spurring an acute rise in rates of homelessness across the country (Stout 2016:159). In turn, I spoke with more than one victim of missed mortgage repayments and home foreclosure who had moved to the Salton Sea to take advantage of its low cost of living. Although the vast majority of Salton Sea inhabitants were not destitute or homeless, some were. Either way, most were dissatisfied with their standards of living there; many described in intimate detail their plans to leave town as soon as they could afford to. John, for example, had posted flyers in the area advertising his services as a handyman. He took on clients whenever he could, trying to save up enough money to return with his family to their former life back in Los Angeles.

I first met John on the shores of Bombay Beach, where he was fishing for Mozambique tilapia (*Oreochromis mossambicus*)—the only fish hardy enough to survive the sea’s hypersaline waters. At his feet, sunken into the shore’s thick sludge, a black plastic bucket overflowed with silver fish averaging 2 pounds—“the perfect size [for eating],” John told me. Striking up a conversation, I told him I was staying in town for a couple of weeks and looking for something to do: daily life in Bombay Beach moved slow and was beginning to wear me down. “Yeah, it can be a real drag,” John agreed. “The key is to get a good routine going [and] to keep yourself busy.” Kindly, John invited me to meet him in the same spot the next morning. He would bring his spare rod. We’d fish together and eat what we caught for lunch.

As agreed, I arrive the next morning at 8am. John is already set up with his two rods, an ice chest, and an umbrella to protect our bodies from the sun. As I approach him, John waves hello. He fixes a worm to the hook of his spare rod and hands it over to me, then showing me how to cast out by miming the action with his own rod. After a couple of tries, I get the hang of it. Within 10 minutes or so, John gets his first bite of the morning. He reels in the fish, unhooks it, and tosses it into the bucket; he then fixes another worm to his hook and casts out again. Just a minute later, I feel a palpable tug on my own line and do the same.

John describes to me how the right depth to fish varies from season to season. In the warmer spring and summer months, fish are caught in shallow water ranging from four to ten feet. In late fall and winter, the fish hold in deeper water and are more likely to congregate around submerged structures—like the remains of the pier at an abandoned Navy base. “I love winter fishing because you

don't have to battle the heat," says John. "You might not get the big numbers like you can do in the spring and summer, but the bite is much more predictable." He continues: "As you can see, there's not much to do in Bombay Beach... At first it was a nice break [from city life] but after a while it can get you down. We're far away from our friends and family here... We used to see my brother and his family most weeks, but now that's out of the question." Steady work is also hard to come by around the Salton Sea, John explains, and so "fishing is great way to spend the morning. It gives me a good reason to get up and out of the house when I'm not working."

There's no catch limit. You can keep as many fish as you can catch, clean, and eat. Best of all, they're free. If we don't catch the fish, they will die off. [The Salton Sea] is the most productive [inland] fishery in the whole state. The potential here is massive. Right now it's being wasted. Look at who fishes here: mostly retired people and minorities. And they're not exactly the kind of people with any [political] clout. I wouldn't be surprised if it all dries up before too long.

After a while, the conversation trails off, the repetitive act of casting out and reeling in lulling us both into a state of pleasant reverie. As we fish, we smoke cigarettes. Before I know it, four hours and an entire pack has passed; John and I have filled our bucket with over fifty tilapia. Some of these we'll eat for lunch—John will try to sell the others to his neighbors and friends for two bucks a fish. Back at John's house, we fire up the grill while his wife, Anna, prepares a salad. John deftly slices open a fish from rectum to gills and yanks out the guts. His knife cuts along both sides of the dorsal fin, down in front of the tail, and then behind the pectoral fins. With their mild, white meat, tilapia are some of the best tasting fish in the world, John explains to me as he works. However, not everyone is as enthusiastic as John about these particular fish; in 2009, the California Office of Health Hazard Assessment issued a public advisory detailing the potential health risks of eating fish from the Salton Sea, which harbor high levels of selenium, arsenic, and other contaminants (each originating in the agricultural wastewater that sustains the sea).⁵⁵ But John isn't too worried. "I've met people who've eaten these fish for their whole lives," he says, delivering a forkful of grilled tilapia into his grinning mouth. "You shouldn't eat them everyday, but once or twice a week is fine."

⁵⁵ Available at oehha.ca.gov

According to anthropologist Adeline Masquelier (2013:487), “the temporality of everyday life [ideally] combines recurrence with linearity.” Repetitive actions such as eating, working, and sleeping are themselves embedded within the cyclicity of the seasons. In turn, however, these repetitions are punctuated by special or unexpected events—including births, deaths, or the arrival of a tropical storm, for example. In this way, Masquelier argues (*ibid.*), “it is this tension between regularity and novelty that makes time flow and creates a sense of forward movement.” In the absence of the various events which “create intervals in social life” (Leach 1966:135), however, John and many others like him experience time along the shores of the Salton Sea as suspended, stagnated, simultaneously a physical presence and an enigmatic horizon. During fieldwork, I heard residents describe themselves variously as *invisible, free, forgotten, waiting for something to happen, just hanging out, able to do whatever they like*—but also *imprisoned*—thus capturing the multiple ambivalences of everyday life in the meantime.

Anxious to get on with his life, John experiences this overabundance of free time and enforced inactivity as a “drag.” In this context, fishing functions therapeutically to generate much-needed feelings of anticipation and accomplishment. Like any good game of checkers or chess, each fishing session is at once predictable and unique, constituting a temporal marker that punctuates the meantime in a way that combines comfort and familiarity with a sense of purposeful forward-motion.⁵⁶ Sometimes he will zone out on mornings like ours, John says, just hoping to pass the time—although he also often spends his fishing sessions actively imagining and planning for his family’s eventual return to Los Angeles. As such, these mornings infuse the present with a sense of future-orientation: a stepping stone on the path to a better life. In this case, fishing emerges as an important technique of temporal experience that enables John to reconfigure his relation to both the present and the future.

In her essay *Slow Death: Sovereignty, Obesity, Lateral Agency*, political theorist Lauren Berlant (2007a) contrasts the “sovereign agency” of the neoliberal subject with what she calls “lateral agency.” Whereas sovereign agency engages in forceful projects of self-extension, Berlant argues, lateral agency instead “floats sideways” (*ibid.*:779), seeking out slow moments of self-abeyance which “do not occupy time, decision, or consequentiality in anything like the registers of autonomous self-assertion” (*ibid.*:757). In his own words, fishing for John offers an avenue of escape from the daily grind of life in the meantime: a kind of self-interruption. In addition,

⁵⁶ In a paper that was influential to my thinking here, Masquelier (*ibid.*) makes a similar argument with regards to the making and sharing of tea amongst underemployed young men in contemporary Niger.

however, it also provides him with a valuable opportunity to feed himself and his family, earn a little extra cash alongside his sporadic handyman jobs, *and* plan for his family's future life. In this way, Berlant's distinction between "self-maintenance" and "self-extension" fails to obtain (ibid.:759). Indeed, the latter is constitutive of the former—endurance is a precondition of emergence (cf. Ringel 2012, 2014). In turn, everyday life in the meantime cannot be reduced to a passive experience of waiting, but should be understood as a "tactical" (de Certeau 2011) genre of existence through which Salton Sea residents, like John, labor to create livable ordinary lives for themselves.

All is not positive, however. Consider the slow but steady accumulation of contaminants like selenium in John's body, for example, as he is forced to rely at least in part on the Salton Sea for sustenance. Like the sea itself, then, John is thus endangered by that which nourishes him (cf. Berlant 2011), and the spectre of selenium poisoning discloses as a distinct possibility the attrition of the biological as well as the social subject in times of convergent crises. As we shall now see, the meantime is also perceived to potentially pose a very different set of dangers to the health and wellbeing of the Salton Sea residents.

From "Wasting Time" to "Wasted by Time": The Dark Side of the Meantime

When asked what young people do for fun at the Salton Sea, Bryan, a 17 year old high school student from nearby North Shores replied: "Nothing really. There's nothing to do here at all." His friend explained, "There's no mall, no movie theater, no gym or basketball court. All you can do is ride around with friends... After a while, that gets pretty old." In this way, these young men characterise the social space of the Salton Sea as one in which an overarching sense of boredom prevails in the wake of simply having "nothing to do." As anthropologists and scholars in allied disciplines have shown, however, boredom is much more than an inner state of being that in turn indexes a lack of stimulation. Rather, it is a collective mode of attention that simultaneously expresses and responds to shifts in local political and economic conditions (e.g. see Marlovits 2008; Jeffery 2010; Stevenson 2014; O'Neill 2014). In turn, as the anthropologist Lori Jervis and colleagues (2003:46) have noted, "because boredom is an uncomfortable state, it may engender attempts to escape it either physically or psychically, often through fantasy, play, social interaction, risk-taking, and, potentially even conflict." At the Salton Sea, young people like Bryan and his friend depict "partying" as a common activity that is deployed to relieve the discomfort associated with everyday life: "Sure, kids around here drink and do drugs—because, well, what else can they do," Bryan

told me. “This is not exactly the kind of California you see on the television.” When pressed, Bryan offered the examples of *Beverly Hills 90210* and *The O. C.* as televisual examples of everything the Salton Sea is not—and *vice versa*.⁵⁷ For these young people, then, the great majority of whom perceive their opportunities curtailed by an impoverished economy of possibilities, boredom and partying are not simply “age-appropriate forms of self-expression” (Willging et al. 2014:4) but also manifestations of a sense of being out of spatiotemporal joint with the wider social world by which they are surrounded (see e.g. Frederiksen 2013, 2014).

Notably, this pattern is also reproduced elsewhere in rural North America. As the anthropologist Angela Garcia (2010:24) has observed, for example, “drug use has steadily increased across the rural United States. Since 2000, the mainstream media have reported steadily on the problem of methamphetamines in the so-called American heartland, which many now liken to a rural ghetto.” In addition to escalating rates of underemployment and poverty in the wake of the transition from a primarily extractive economy to one grounded in the service industry (Willging et al. 2014; see Chapter 1), Garcia (ibid.) attributes this significant increase in methamphetamine use across the rural American West to an “abundance of wide open spaces [...] and many abandoned buildings” in which the chemical can be both manufactured and consumed undetected. Popular culture has also played its role in reinforcing such associations. Beginning in 2008, for example, the hit television show *Breaking Bad* sedimented in the American public imaginary the connection between the manufacture and consumption of methamphetamine and the rugged landscapes of the high desert; closer to home, filmmaker Daniel J. Caruso’s 2002 thriller, *The Salton Sea*, situates a story of methamphetamine-fuelled crime and violence within the sea’s many abandoned and dilapidated spaces. Perhaps unsurprisingly, however, such representations do very little to interrogate in any detail the complicated set of social, political, and economic factors that contribute to the co-production of “the abandoned building” and “the drug addict” as these figures proliferate across the North American landscape. As Garcia (ibid.:25) concludes, “A connection needs to be made among these dynamics, the associated changes in physical landscape, and the increasing levels of despair and addiction.”

Usefully, then, anthropologists of drug use, abuse, and addiction like Garcia and others have shown how such phenomena cannot be meaningfully disembedded from the broader social and moral worlds they inhabit (e.g. see Raikhel & Garriott 2013). In the Imperial Valley, this social and moral world is in a

⁵⁷ Both shows portray the lives of youths and young adults in two considerably more affluent communities within Southern California: Beverly Hills and Newport Beach.

state of significant upheaval. While the fate of the local economy is still tied to the prosperity of the valley's agricultural operations, these operations in turn rely on a steady flow of irrigation water from the Colorado River. In the context of California's drought, however, the state's water policies are now shifting in order to favor the massive redistribution of water from agricultural areas to urban ones. By threatening the valley's irrigation water and the livelihoods of the many thousands of farmworkers who rely on it for employment, the drought is therefore also generating an increase in local rates of unemployment, poverty, and homelessness.⁵⁸ In turn, spikes in alcoholism, domestic violence, and drug abuse have all been reported across the region, with methamphetamine emerging as a particular cause for concern (Ruiz & Smooke 2015). This constitutes an oblique and yet striking angle via which California's convergent climate crises can become woven into the "recesses of the ordinary" (Das 2006:1).

Sometimes described as "America's most dangerous drug" (Jefferson 2005), crystal methamphetamine has haunted at the edges of U.S. public culture for decades (Jenkins 1994).⁵⁹ Yet in the Imperial Valley, local healthcare workers like Luis have declared that abuse of this psychostimulant (known locally as *meth*, *ice*, *glass*, or *crank*) is beginning to reach near-epidemic proportions. In 2001, the National Drug Intelligence Center dubbed Riverside County "the methamphetamine capital of the United States" (see National Drug Intelligence Center 2001). In both firsthand accounts and popular portrayals of methamphetamine use, the stimulant is defined first and foremost in temporal terms according to the "rush"—a soaring high which can last upwards of eight hours and includes sensations of heightened alertness, confidence, impulsivity, and sexuality.

In turn, amphetamine addicts are also widely known for their *binges*, during which the intoxicated person may become immersed obsessively in the performance of "repetitive, meaningless tasks" for days on end (see Center for Substance Abuse Research n.d.). Both highly addictive and highly destructive, long-term meth use can result in paranoia, precipitous weight loss, and the spread of sores across the body and face. Yet despite these terrible side effects, the drug continues to exert a powerful pull of attraction upon the addict. In turn, it has

⁵⁸ One report attributes a loss of 17,000 jobs to the drought (AghaKouchak et al. 2015).

⁵⁹ William Garriott (2013:216) notes how "the methamphetamine addict has become such a potent figure of criminality because it represents a dangerous conflation of moral, legal, and biological forms of deviance and difference." In addition, I am arguing here that a sense of temporal deviance or what I call "social arrhythmia" also contributes to the constitution of the methamphetamine addict as a figure of criminality and fear.

become commonsensical in both the U.S. judiciary imaginary and broader public culture that addiction fuels criminality as drug users engage in criminal acts in the pursuit of more drugs (but cf. Garriott 2013:215). As criminologist Mariana Valverde (1998) has argued, however, drug addiction should not be understood merely as a “disease of the will.” Rather, drug abuse might be more usefully understood as a fitting response to a stressful environment (also see Berlant 2007a). Like the used and discarded heroin syringes described by Garcia (ibid.:6) that litter the landscapes of New Mexico’s impoverished Española Valley, the meth pipe likewise constitutes a “tiny but dense site where history and subjectivity merge”—working to weave wider conditions of economic and environmental crisis into the intimate spaces and rhythms of everyday life.

At this point, I wish to shift attention from the *reality* to the *spectre* of drug abuse and addiction. In recent years, a veritable moral panic has erupted both within and beyond the local community in which rumors of drug abuse converge with the overarching scene of disrepair to crystalize among residents a collective sense of danger, depravation, and lawlessness. In conversations about the abandoned and dilapidated buildings that characterise much of the Salton Sea’s built environment, for example, talk soon turns to the psychological and physiological ruin that is presumed to stalk their dark corners. Importantly, collective attentions also fixate on the figure of the bored, idle, and wayward teenager and young adult. In September 2015, a group of concerned citizens went so far as to petition local law enforcement to increase their surveillance of the area, citing what they perceive to be a marked upswing in levels of drug abuse and crime among their list of concerns. “I can’t let Cody [her son] out of my sight,” Anna once told me. “There are too many tweakers [meth addicts] out there. They’re just kids but they get drunk and high and then they cause trouble. We’re completely off the map here, so they think they can do what they want without getting caught.”

When discussing the effects of drugs on the local community, John singles out one house a couple of roads over from his own as a particular locus of suspicion. Last year, John tells me, a group of young men moved into the house, numbering from about 3 to 6 and aged anywhere from 18 to 30. During the last twelve months, great amounts of trash have accumulated in the yard of the house, gradually piling up week by week against the chainlink fence. On more than one occasion, John has even stumbled across discarded meth pipes, plastic “baggies,” and other elements of drug use paraphernalia near his home. Much more than these spatial and material markers of perceived deviance, however, John focuses on the divergence of these young men from what he takes to be the respectable

rhythms of the normative everyday: “They ‘party’ for days on end,” he says, “and then we don’t hear a peep from them for weeks... They stay up all hours [of the night] and then sleep all day... God only know what they’re up to.” While John cannot know for certain whether the individuals in this house are in fact using methamphetamines, or engaging in other types of illicit behavior, their absence from the structured rhythms of the civil sphere in Bombay Beach thus creates a zone for speculation and apprehension.

At least in part, the moral panic I am describing here draws its affective force from an imagined geography in Modernist thought that has long cast “wastelands” as risky, unproductive, and lawless spaces (e.g. see Gandy 2013; DeSilvey & Edensor 2013)—an imagined geography that is perhaps more entrenched outside Salton Sea communities than within them, but that nonetheless still retains much of its force along the sea’s shores. As such, the ruined, marginal, and carnal landscape of the Salton Sea evokes anxiety here not merely as an “allegory” (cf. Benjamin 2007; also see Dawdy 2010) for conditions of abandonment and decline but also as a concrete material form which affords a zone of concealment and secrecy well-suited to the practice of criminal behaviors like drug manufacture and consumption.

In this way, the moral panic is partially spatial in nature. Yet it can also be productively examined along temporal lines. Crucially, as intimated above, the rush of amphetamines can be understood as a technology of temporal experience—unleashing a surge of mental and physical stimulation that acts as a powerful antidote to a local temporal reality of boredom and despair. While for John the act of fishing sutures patience to productivity in order to generate a mode of occupying time that is at once wholesome and purposeful, however, the wasted, withered, and socially arrhythmic figure of the drug-addicted youth conjures visions among the Salton Sea residents of severely stunted futures and everyday lives disconnected from the positive tempos of productive activity. Let me be clear: I do not wish to deny the very real and equally terrible fact of methamphetamine addiction in the Imperial Valley, a force that by all accounts is wreaking havoc on the local social fabric. Nor do I want to draw attention away from the political and economic conditions that underpin this force. According to local discourses of social description, however, I argue that this moral panic expresses a distinct set of anxieties about the potentially toxic consequences of life in “the meantime” that is partially autonomous from the epidemiological fact of abuse and addiction. As a figure of deviance, the drug-addicted youth channels and ignites a sense of temporal marginality, as well as concerns over the potential perils of an enforced

overabundance of free time. Put differently, as opposed to *passing* or *wasting* time, the drug addict has according to this moral panic in fact become *wasted by time*.

Conclusion

Clearly, the socioecological landscape of the Salton Sea, simultaneously ruined and unfinished, can lay scant claim to being a space of either high-octane technological progress or vast temporal depth—two of the dominant spatiotemporal modes associated with the California desert. Rather, it is characterised by a distinct sociotemporal reality captured by the phrase “the meantime.” Building on the themes of temporality, materiality, and place presented in the preceding two chapters, I have thus argued for a theory of marginality that is neither purely spatial nor temporal but chronotopic in its formation. Put differently, the space of the Salton Sea simultaneously concretizes and communicates an interstitial time of historical suspension and stagnation whilst simultaneously offering valuable opportunities to conceptualize and enact a temporal ‘otherwise’—whether a nostalgic past or hoped-for future.

In this chapter, I have further explored the mechanisms by which “crisis” can mutate from a rupture in time (no matter how drawn out in history that moment might be) to an all-encompassing spatiotemporal environment of everyday life. In turn, the operative social logic along the sea’s shores has shifted from “recovery” after a catastrophic event to “endurance” as an ongoing mode of engagement with the material, practical, and imaginative elements of the ordinary. In turn, I have described a range of daily activities along the shores of the Salton Sea like playing checkers, collecting abandoned artifacts, and fishing in the sea’s polluted waters as techniques of temporal agency that enable the sea’s few remaining residents to reconfigure their relationship to the past, present, and future, thereby carving out a livable ordinary life from amidst the debris and decay. With the ethnography I have presented, I hope to have given a sense of how an excess of free time features not simply as palpable presence in the everyday lives of Salton Sea locals, but also as an object of care and ethical action—much like “deep time” for the environmentalist advocates and activists described in the last chapter—to which a variety of orientations can and indeed should be cultivated (cf. Dalsgaard et al. 2014). Such a claim strongly resonates with Lisa Stevenson’s (2014:176) suggestion (in a very different context) that the “recuperation of a certain rhythmicity ... may be a way of caring for oneself and others.” Yet this care should also be accompanied by caution: such an overabundance of free time

carries with it a potent set of poisonous possibilities that are evidenced by the socially arrhythmic figure of the drug-addicted youth.

The next chapter turns to yet another ruined landscape, the Owens Valley, a place which over the last century has like the Salton Sea been decimated by a convergence of infrastructural violence, environmental degradation, and social abandonment. In the early 1900s, the City of Los Angeles began diverting water from the Owens River, which flowed through the valley and into its terminus: the Owens Lake. Within a few short decades, however, the Owens Lake had all but disappeared, generating a series of huge dust storms that engulfed the communities that live nearby. Approximately 300 miles northeast of the Imperial Valley, the Owens Valley constitutes a sobering scene for those concerned with the fate of the rapidly shrinking Salton Sea—as potentially a flicker of its future in the present (Iovenko 2015). Tracking the Owens Valley dust as it traffics through communities, homes, and human bodies, the chapter asks: What happens to people’s experience of self, place, and home when Southern California’s convergent climate crises not only *surround* the subject, but also begin to work their way into his or her psychical and physical spaces? And how, then, do Owens Valley residents respond to the transgressive materialities and toxic efficacies of these immense dust storms? Blurring the boundary not only between the event and the everyday but also between the organism and its environment, this dust provides a striking example of the ways in which the context of California’s convergent climate crises can become—in many ways quite literally—folded into the recesses of the ordinary.

Chapter 4.

The Embodiment of Catastrophe

Even if they don't know it by name, most Californians are familiar with the Owens Valley: its rugged landscape had been transported into their homes as the scenery for countless movie productions and television shows, such as *The Virginian*, *The Good, The Bad, and the Ugly*, and *The Lone Ranger*. More than this, however, the Owens Valley has in the last century emerged as not only the *stage for* but also the *object of* drama—one of the most bitter and longest running resource conflicts in the recent North American past, the contours of which constitute the context for this chapter.

In 1913, the City of Los Angeles completed construction on its first aqueduct, built to carry water from the Owens River over 240 miles southwest to the city's thirsty industries and inhabitants. Alongside the explosion of urban and suburban Los Angeles—what historian Kevin Starr has called “the most exquisite invented garden in history” (quoted in Piper 2006:67)—this impressive infrastructural form also set in motion the dessication of the Owens Valley, home to a number of rural communities. Perhaps this drama's greatest casualty is the Owens Lake. As recently as 1924, a steamboat still trafficked freight and passengers across the 108 square-mile expanse of water. Yet within just a few short years, the lake was reduced to nothing more than a shallow, briny pool, surrounded by a huge expanse of exposed and unstable lakebed.

Throughout the latter part of the twentieth century, this lakebed was the source of a series of immense, wind-whipped dust storms that engulfed the entire Owens Valley and those that live there. During especially bad storms, people later recalled to me during fieldwork, the dust would darken the entire sky—blanketing cars, businesses, homes, and people with a fine, white, flour-like “fog.” Laced with heavy metals like arsenic, cadmium, and nickel, found naturally in the local landscape but now rendered airborne, the dust could work its way into the ears, eyes, throats, and lungs of the Owens Valley residents, carrying with it both discomfort and disease. When the dust blew, people were warned to stay inside the air-conditioned comfort of their homes. But even this offered only partial reprieve, because the ultrafine dust could find its way through the smallest apertures and interstices of the built environment. Schools and businesses would close. Hospitals and doctor's offices would soon fill with asthmatic children and their worried parents, the elderly and the infirm, and people of all ages suffering from a wide variety of dust-aggravated ailments.

“It has a funny taste to it. It burns your eyes and can make you cough,” Sue, a lifelong resident of the Owens Valley, once told me. “If it can strip the paint off my truck, imagine what it can do to the human body.” Drawing attention to the psychological as well as the physiological effects of life in the shadow of these dust storms, a 1986 report published by doctors from the nearby China Lake Naval Base observes: “The populace complains of coughing, sneezing, and irritation of the eyes. Psychological problems emerge as some people become apprehensive because of difficulty in breathing. People become annoyed and anxious. Cats behave aberrantly. Dust enters buildings through cracks and crevices and covers exposed items” (Saint-Amand et al. 1986:32). Refusing to stay in place, huge, seemingly solid walls of dust overflowed the valley’s topographical and administrative boundaries; scientists tracked these dust storms with their satellites for more than 150 miles, spilling over into the more heavily populated Orange, San Bernardino, and Riverside Counties and—here completing the circle—even reaching as far Los Angeles itself (see Figure 17). In turn, the dust storms have set in motion a long saga of legal disputes, negotiations, and tentative agreements that continues apace into the present—thrown once again into the limelight by global climate change and the state’s historic drought.

This chapter is about the sometimes noxious quality of the flows, transfers, and attachments that “hinge a body to its environment” (Hirschkind 2006:29). As such, it poses a series of ethnographic and analytic questions about personhood, place, and the active interrelationship between the two. In the ordinary course of affairs, common sense tells us that places sit more-or-less still and that it is people that move within, between, or away from them—perhaps bringing them to life along the way (Casey 1996:23)—a pattern replicated in much social theory. As such, we can detect within the anthropological imagination a kind of “sedentarist metaphysics” (cf. Malkki 1992) which approaches place through the often moralized lens of stability, fixity, and boundedness: what I will call the rootedness of place. Sometimes rendered explicit, such assumptions often lie buried deep within the analysis.⁶⁰

⁶⁰ According to anthropologist Lisa Malkki (1992:61), traditional anthropological theory is marked by “territorializing, often arborescent conceptions of nation and culture,” which both naturalizes and moralizes the supposed rootedness of particular peoples in particular places, rendering suspect those for which a “stable, territorialized existence” (Clifford 1988:338) is not a fact of life. My aim here is to invert Malkki’s argument in order to shine a light on an implicit sedentarism in

In this way, for example, it makes sense for the anthropologist Keith Basso (1996:63) to write of the rugged landscapes of New Mexico as a “repository of distilled wisdom” and a “[symbol] of a culture and enduring moral character” for his Western Apache interlocutors—a well-known example to which I will return below (also see, e.g., Kahn 1990; Myers 1991; Feld & Basso 1996). Similarly, the influential phenomenological philosopher of space and place Edward Casey (2000:228) places great stress in his work on what he calls the “perduringness” of place, which he describes as temporal mode of long-term consistence that offers a “*via media*” or middle way between eternity and the flux of everyday life. Notably, these two claims are much more than co-incidental. Rather, it is the perceived perdurance of place that allows it to function as an enduring archive or anchor for a culture’s moral character. This is what sociologist Eviatar Zerubavel (2012:40-43) refers to as the “constancy of place.”⁶¹

Blowing across borders, through homes, and into bodies, the Owens Valley dust (what one resident described to me as quite literally “little bits of place”) upends these presuppositions, inviting us to rethink the ways in which places, bodies, intimacies, and identities are each intimately and *actively* entangled. In turn, these dust storms invite us to reckon not only with the porosity, permeability, and mutual absorption of bodies and their surroundings but also with the mutual absorption of the ethnographic case and its broader historical context. In the preceding chapter I showed how, in the ruined landscape of the Salton Sea, “crisis” has transformed from a fleeting threshold or turning point located in time to an all-encompassing environment of everyday life—the very space in which people live, work, and play. Building on the arguments presented in Chapters 1 and 2, however, I argued not for an approach to crisis that favors space at the expense of time, but one that attends to the ways in which space and time becomes fused in the currents of everyday life—what Bakhtin (1982) calls a *chronotope*.

In the present chapter, then, I offer an account of how such a spatiotemporal environment does not simply encompass body, persons, and selves; it can also work its way into the physical and psychical spaces of the individuals who inhabit it. I seek to make this argument by means of a specific method: focusing primarily on the life of single person. As Anand Pandian

anthropological theory not as this pertains to the rootedness of peoples, but of places themselves.

⁶¹ There is, however, a growing corpus of anthropological works that focus on relatively unruly and inconstant places, to which this chapter hopes to add (e.g. see Harrison 2004; Ogden 2011; Hastrup 2013a; Lipset 2014). Notably, the majority of these studies focus on coastal, riverine, or wetland “fluid environments” (Hastrup & Hastrup 2015) in which water acts the key vector of instability or volatility. By contrast, the Owens Valley is a profoundly desiccated landscape in motion.

(2010:66) has written, “Anthropological work on selfhood and personhood has often dwelt closely upon singular individuals to capture both the creativity and exemplarity of their lives” (also see Desjarlais 2003; Biehl 2005; Garcia 2013). Here I will focus on the practices through which one elderly interlocutor, Sue, attempts to remake both her home and her life in active response to the transgressive materialities and toxic possibilities of the Owens Valley dust storms. In doing so, we can further appreciate the ways in which environmental crises, rather than impinging on the ordinary from beyond it, become actively folded or layered by individuals and communities into the most intimate recesses of their everyday lives (Das 2006:1). To conclude the chapter, I will briefly compare the conception of place that emerges in the following pages with Tim Ingold’s (1993, 2000) Heideggerian “dwelling perspective,” which as others scholars have pointed out is in end confounded by an overly romantic notion of landscape and locality (e.g. see Cloke & Jones 2001; Massey 2006). Before introducing Sue and unpacking my argument, however, I begin with an account of the dessication of the Owens Valley’s environment following the construction of the Los Angeles aqueduct at the start of twentieth century: a supreme act of infrastructural violence the myriad ramifications of which are still being felt today. Given the significance of this history to the argument that follows, I will spend some time recounting it.



Figure 17. An Owens Valley dust storm (source: www.hcn.org).

Life in the “Shadows” of the Los Angeles Aqueduct

As the early morning mist burns off the northern corner of the San Fernando Valley, Rupert and I walk along the “engineering marvel” (Libecap 2007:41) that helped transform Los Angeles from the dusty market town of its past into the modern metropolis of its present. An engineer with the Los Angeles Department of Water and Power (LADWP), Rupert is middle-aged, fit, and with a closely cropped goatee beard. He’s sporting expensive-looking Ray Ban sunglasses against the Southern Californian sun. Together, we hike a few yards further up the hill. Rupert stops suddenly and turns to me. “Here it is,” he says.

Rupert and I are stood at the foot of the so-called “Cascades,” the terminal point for the Los Angeles Aqueduct. Here, Owens River water, conveyed for over 240 miles from the northeast, is first cleaned and filtered before entering the city’s water supply system. On November 5th, 1913, at this precise spot, a public dedication ceremony was held for the recently completed aqueduct (see Figure 18). That afternoon, William Mulholland, a former sailor and gold-digger turned chief water engineer, addressed a crowd of 30,000 Los Angelenos. His speech was brief and to the point: “This rude platform is an altar, and on it we are here consecrating this water supply and dedicating this aqueduct to you and your children and your children’s children—for all time” (Miller 2016:65). Eyewitness accounts tell how the crowd roared in response. Mulholland unfurled an American flag and an Army canon sounded. This was his signal: Crews turned the two steel wheels that unlocked the spillway gates and sent water flowing into the San Fernando Reservoir. At this point, Mulholland turned to Los Angeles Mayor J.J. Rose and uttered his famous statement: “There it is, Mr. Mayor. Take it.” The audience celebrated by plunging cups into the torrent of Owens River water.

At the turn of the twentieth century, the population of Los Angeles had exploded from 11,183 residents in 1880 to 319,198 residents by 1910 (McWilliams 2002:14). City leaders knew that the limited local water supplies could not sustain such growth for long—nor support their own ambitious visions. Alternative sources were sorely needed. Together, Mulholland, Rose’s predecessor Mayor Fred Eaton, and their close associate Joseph Lippincott, an engineer with the U.S. Bureau of Reclamation, set their sights on the Owens River. Using a combination of “chicanery, subterfuge, spies, bribery, a campaign of divide-and-conquer, and a strategy of lies to get the water it needed” (Reisner 1993:65), these men sent city agents posing as farmers and ranchers to buy up land (and in doing so attain the attendant water rights) throughout the Owens Valley—a scandalous episode famously investigated by the fictional private detective Jake Gittes in Roman

Polanski's 1974 popular film noir *Chinatown* (also see Kahrl 1983; Walton 1993; Piper 2006).

With water rights now in hand, city engineers set about building the 233 mile-long aqueduct and conveying water south to the city from the Owens River. Lead by Mulholland, construction began in 1908 and was completed just five years later—on time and under budget. An estimated 5,000 workers labored under the extreme environmental conditions using modern machinery alongside fifty-two mule teams. Costing approximately \$25 million (Libecap *ibid.*:41), the aqueduct attracted national and international attention as one the nation's largest and most costly public works projects, second at the time only to the Panama Canal. The entire Los Angeles basin supplied the city with a flow of only 68 cubic feet per second. By 1920, however, the aqueduct was furnishing Los Angeles with a flow of several times that, 283 cubic feet of water per second, helping support the city's growth from 319,198 people in 1910 to 1,238,048 by 1930 (McWilliams *ibid.*). Over a century later, the aqueduct continues to be an important source of water for Los Angeles, accounting for about half of its supplies.

Up until the early 1920s, Los Angeles exported only relatively modest surface flows from the Owens River, which at the time did very little to affect agricultural operations in the valley—the region's primary economic engine. As such, Los Angeles and the valley's remaining farmers and ranchers co-existed without much conflict. In 1923, however, the city's explosive growth converged with a drought to generate a significantly increased need for water within the city limits. In response, Los Angeles began once again acquiring water rights in the valley, this time drilling wells, pumping groundwater, and placing an unsustainable stress on already overstretched Owens Valley water supplies. The city's checkerboard purchasing pattern pitted neighbor against neighbor in competition for remaining groundwater; the valley's residents had to do more with less. Many locals left in search of a better life elsewhere in California and beyond.

Before long, a resistance movement had emerged among what was left of the Owens Valley citizenry in response to the city's strong-arm purchasing tactics—led by local bankers and landowners Mark and Wilfred Watterson. In an effort to pressure Los Angeles into providing more favorable rates for the deeds the city desired, the Watterson brothers organized the ranchers and farmers to stand up for themselves and their interests against the LADWP. When these negotiations faltered, however, the resistance movement turned violent. Beginning in 1924, the city's aqueduct and wells were dynamited more than once; a group of armed ranchers even seized control of the Alabama Gates, where the rebels could divert water headed for Los Angeles back into the Owens Lake. In response, Los

Angeles sent guards armed with shotguns and dogs to quell the rebellion and protect its considerable investments in the valley.

At the time, this episode was dubbed by the press “California’s Little Civil War” (see Piper 2006:35). While public sentiment lay largely with the rebels, the city held the lion’s share of the power. When the Watterson brothers were indicted for embezzlement in 1927, what remained of the resistance quickly dissolved. With nobody and nothing to stand in their way, Los Angeles had by 1930 acquired 88% Owens Valley town properties, and 95% of all agricultural acreage along the valley floor (see Libecap *ibid.*:85). Today most of the land is leased by the LADWP to ranchers as pasture—without any water rights.

Notably, the great majority of the people I spoke with in the Owens Valley were very aware of this history. Although unsuccessful, the resistance provided a source of considerable pride in the region, also offering a powerful affective frame for understanding the present social, physical, and economic state of the valley, which some have likened to a colonial outpost of the City of Los Angeles. Certainly, the city is by far the largest private landowner in the valley—much to chagrin of the locals. It is not an uncommon sight to see “City of Los Angeles Property” signs across the valley peppered with bullet holes.

From the 1930s through to the late 1980s, diversion of both surface flows and groundwater from the Owens Valley continued unimpeded, over time transforming what was previously productive farmland and orchards into parched desert. Existing as a spectacular testament to the dizzying scale and rapidity of environmental transformation in the valley, miles upon miles of unstable lakebed has emerged where the gleaming expanse of the Owens River once stood. An especially mercurial environment, temperatures on the lakebed routinely exceed 100 degrees Fahrenheit; winds often reach over 60 miles per hour. In addition, salts also seep up from an underground brine pool—blossoming into silver, mushroom-shaped clusters of alkali crystals that cover lakebed’s entire surface. While pretty to look at, strong winds can tear the salts up from the lakebed and carry them far and wide in the form of the immense dust storms described above.

By the early 1990s, the Owens lakebed had in this way earned the unenviable distinction of being the largest single source of “particulate matter” pollution in the United States (Reheis 1997). By one estimate, a massive 900,000-8,000,000 metric tons of dust were lifted off the lakebed each year (see Gill & Gillette 1991)—exceeding the federal air quality standard for PM_{2.5} by severalfold.⁶² In 1972, Inyo County sued Los Angeles for violating California’s

⁶² PM_{2.5} is the category used to describe airborne particles that are equal to or less than 2.5 micrometers in diameter. Because of their very small size and capacity to

Environmental Quality Act. A wave of further lawsuits then followed, although none were able to commit the city to dust mitigation efforts. In 1987, the U.S. Environmental Protection Agency officially labeled the Owens Valley as a “non-attainment area,” a category that denotes a serious violation of the 1970 Federal Clean Air Act. Over the next several years, Los Angeles engaged in another series of legal battles with local authorities over airborne particulate pollution in the Owens Valley and the issue of their culpability. In inflammatory rhetoric typical to the antagonistic relationship between county and city, a high-ranking pollution official from Inyo County once described the dry lakebed as “the black eye in the abusive relationship that we have suffered in this valley.” He then added, “There comes a point where the abused spouse says, ‘No more’ ... That’s where we are today” (quoted in Piper *ibid.*:163).

Eventually, a mitigation proposal *was* approved by both the LADWP and local pollution control officials. The cleanup was set to begin in 2001. After a number of false starts and hefty fines from federal judges, the LADWP finally launched the largest and most comprehensive dust control project in the history of the United States—costing in excess of \$1 billion dollars. As a result of this project, the particulate matter pollution has been reduced by 90 percent (Braxton-Little 2015). In recent years, however, the remaining particulate matter pollution has become a source of renewed rancor between Inyo County and Los Angeles, which argues that it cannot be held responsible for all the particulates in an area that naturally emits dust—especially in an era of anthropogenic climate change and the state’s historic drought.

In sum, then, the City of Los Angeles and the Owens Valley are not discrete or distinct entities. Rather, they are deeply and intimately entangled. As cultural geographer Matthew Gandy (2013:1311) notes, “the process of urbanization [...] increasingly [...] encompasses spaces that lie far beyond the administrative confines of metropolitan boundaries” (also see Cronon 1992). In turn, the Owens Valley dust storms overflow its topographical and administrative boundaries, even making it as far as Los Angeles. The political scientist Peter Dauvergne (1997) has coined the term “shadow ecology” to describe the often destructive impacts of a country’s pattern of natural resource consumption on environments beyond its own sovereign borders. In the Owens Valley, the notion of a shadow ecology takes

lodge deep in the lungs, authorities have declared this to be the most dangerous form of particulate pollution to human health (see California Air Resources Board 2009).

on eerily literal significance. At least for a time, the Owens Valley inhabitants were made to dwell in the shadows of the city's thirst and the dust storms it helped generate. All this poses considerable problems to dominant theories of place within the discipline of anthropology.

In his influential ethnography of New Mexico's Western Apache, *Wisdom Sits in Places*, Basso (1996) explores the ways in which the names and stories associated with particular landscapes are mobilised by his interlocutors in everyday conversation as active vectors of both historical consciousness and collective moral learning. Drawing on the phenomenological philosophy of Jean Paul Sartre, Basso (1996:107) describes how landscapes may be forged through practice into "repositories" of cultural meaning and infused with the capacity to actively shape and guide social action (also see Feld & Basso 1996). Certainly, Basso moves well beyond the treatment of landscape as a mere a "framing convention," as Eric Hirsch (1995:1) once described its role in early ethnographic writing. By defining place as "space made meaningful by cultural actors" (cf. Moore 2005:19), however, Basso installs a specific notion of human intentionality and consciousness as the central pivot around which "place" turns. In turn, the landscape figures as little more than an inert canvas upon which "meanings" are inscribed.

In reply, anthropologist Donald Moore (ibid.) has noted how at least two assumptions dwell in "humanist" theories of place-making like Basso's own. The first is the "self-sovereign subject" (ibid.) whose meanings forge active place from inert space. In the second, translocal connections and circulations tend to be "bracketed out from place's enduring sense" (ibid.) to produce a neat image of places as fixed, bounded, and self-contained entities. For Basso, for instance, the high deserts of New Mexico become the site where meaning, memory, and wisdom "sit," separated entirely from the kind of long-range interrelationships that work to continually shape and reshape the historically and symbolically contested landscapes of the arid American Southwest—some of which were described in Chapter 1. As such, Moore (ibid.) concludes, place "becomes far too settled in several senses."

By tracking the manifold textures of everyday life amidst the turbulent terrain of the Owens Valley, this chapter attempts to chart a different, less settled path for anthropological understandings of "place." As I will show, places are not only scenes of abiding stability and security rooted within a harmonious set of local social and cultural relations. They may also be haunted by an uncanny or even toxic intimacy shaped by connections that are both historically and geographically distal as well as proximate to one's immediate locus of attention,

practice, and experience. In turn, then, instead of situating intimacy with the private realm and distinguishing it from the public world of work, society, and politics, I explore the premise that what counts as intimacy shapes and is shaped by the broader historical and social milieu in which it is embedded (Stewart 2007; Berlant 2010; Sehlirkoglu & Zengin 2015). To do so, I focus on the life, times, and everyday living space of one particular Owens Valley resident whom I call “Sue.”

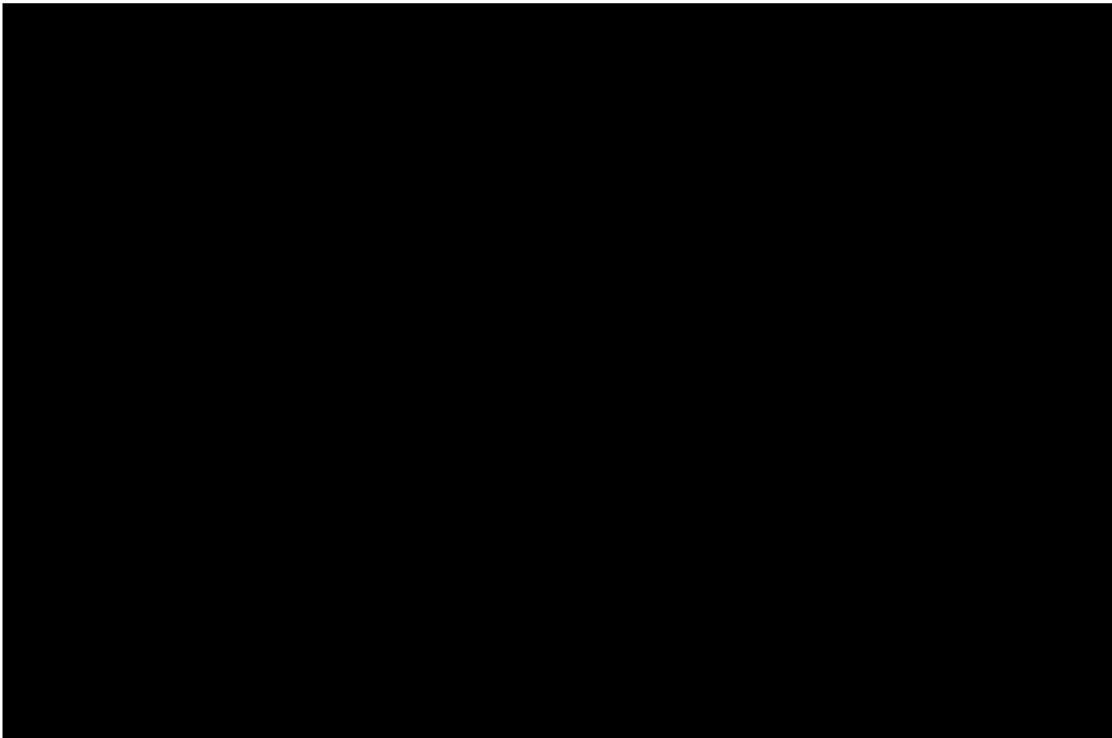


Figure 18. On November 5, 2013, the City of Los Angeles held a ceremony to celebrate the centennial of the inauguration of the Los Angeles Aqueduct (source: www.ladwpnews.com).

Setting the Scene: “SAFE BEACH, BEST DUST!”

“This is my favorite spot... Or it used to be, anyway. Here, you can get a sense of the change.” I’m sat now with Sue on the porch of her home in Keeler, a small town on the western edge of the lakebed. She hands to me two photographs. The first shows a luscious carpet of native grasses peppered with wildflowers; it’s a so-called “alkali meadow” to the north of Keeler. In the second photograph, the colorful grasses and wildflowers have been replaced by a miserable tangle of saltbush and tumbleweed. Taken together, these two photographs present a startling image of the changes wrought on the landscape in recent years. A long-time resident of Keeler and lifelong resident of the Owens Valley, Sue has for many years paid close attention to such changes. She describes how natural springs that once gurgled forth from the valley floor first disappeared in the 1980s. As already

shallow water tables diminished even further, the valley's trees began to perish. Today, acres upon acres of native grasses that rely on water tables no more than a few feet deep are also struggling to survive.

Nowhere are these changes more apparent than in Sue's current hometown, Keeler. Up until the late nineteenth century, Keeler was a thriving Owens Lake community, a crucial stop on the trade routes used to deliver silver to Los Angeles from the Cerro Gordo mines located high up in the Inyo-White Mountain Range. Originally called Hawley, the town was built by the Owens Lake Mining and Milling Company (OLMMC) to process and smelt the silver ore delivered by aerial tram from the mines over 9,000 feet above. When the 1872 Lone Pine earthquake destroyed a pier located in Swansea, a few miles to the north, Hawley was chosen as the site for the construction of a new wharf to facilitate the transport of silver ore and ingots across the Owens Lake on the steamship *Bessie Brady*. At that time Hawley was renamed Keeler in honor of its original planner, OLMMC employee Julius M. Keeler. In 1883, the Carson and Colorado Railroad was then extended to the town from Mound House, Nevada, connecting the community with others across the region. A commemorative plaque still announces Keeler as "The End of the Line."

Setting out west across Owens Lake from Keeler to Cartago via the *Bessie Brady*, the silver ore and ingots were then freighted 200 miles by wagon to Los Angeles, which by this time had already grown into a bustling commercial center. Today, most historians agree that the extractive economy of the Owens Valley provided much of the economic catalyst that propelled Los Angeles to regional prominence during the late nineteenth century, in a sense helping to generate the thirst it was later forced to quench (e.g. see Walton 1993; Wehrey 2013). At the same time, the epic, wind-swept summits of the Inyo-White Mountain Range were being rapidly denuded of their thick pine and juniper forests for timber and charcoal, producing a profoundly anthropogenic environment that persists to this day. As such the fate of the local landscape was intimately entangled with the fate of Los Angeles long before construction on the city's aqueduct had even begun. In turn, Keeler's own fate was intimately tied to that of the silver mines. So when the going rate for silver plummeted in the late 1880s, so did the town's good fortune. In the early twentieth century, a second boom—this time in mining zinc—bought some new social and economic life to the town, sustained by small surges in the mining of lead, soda ash, and limestone after that. By the 1950s, however, all mining operations had ceased for good. The railroad service stopped in 1960 and the tracks were removed soon after.

Of all the Owens Valley communities, Keeler was by far the hardest hit by the dust storms described above. During the fiercest storms, particulate matter pollution levels were measured up to 1,860 micrograms—more than ten times the EPA standard and triple the level believed to cause significant harm to human health (Roderick 1989). Recalling times before dust mitigation had started in earnest, one senior local air pollution official described how samplers stationed at Keeler would periodically “choke” from all the dust. These dust storms are so closely associated with the town that most locals still refer to the fine white dust as “Keeler fog.” As we will see, many residents also attribute a wide range of ailments to the dust, blaming the storms for the state of their hometown. In a 1989 *Los Angeles Times* article, for example, written at the peak of the dust storms, painting contractor and Keeler resident Mike Ushman captured a prevalent sentiment when he dubbed his home “a town of lung disorders” (Roderick *ibid.*). Yet when these dust storms arrived on the scene in the late 1970s, they compounded a process of social and material disinvestment that was by then already well under way.

Keeler once boasted a population of 5,000. Today, however, the town serves as little more than a sad reminder of a booming extraction economy that went bust many years ago—a typical scene across many parts of the arid American Southwest (e.g. see Limerick 1992). It is a sight to behold. Weather-beaten from all the years of sun and salt, a dust-covered, decaying wastescape of boarded up buildings, junked cars, and empty shacks is being slowly but surely reclaimed by hardy, salt-loving wild grasses. Abandoned trailer homes, stripped of all their paint, are buckling under their own weight. Inside a dilapidated “beach resort”—now nowhere near the water’s edge—a swimming pool gradually fills to the brim with wind-whipped dirt (see Figures 19 & 20). Visible to the north of the town, innumerable hay bales have been scattered across the Keeler sand dunes by the LADWP as part of an earlier dust mitigation attempt. An ironic, hand-painted sign of unknown origin reads: “This Beautiful setting Provided By L.A. Water Dept. [LADWP] ... Please! WEAR YOUR HAZ MAT SUITS AT ALL TIMES! SAFE BEACH, BEST DUST!”

Another weathered sign announces Keeler’s population as 50. Yet I could walk the town’s abandoned streets for an hour or more without encountering another person. Although an occasional car might pull into town, perhaps in search of gas or a rest room on its way to Death Valley National Park, more often than not it would quickly turn and drive away. Somewhat surprisingly, a post office still operates in Keeler, and things are a little livelier during its opening hours—the weekday mornings—as people travel from nearby to check their PO

boxes and buy stamps, chatting for a while at the counter. Geraldine, a U.S. Postal Service employee, jokes with me that she has only ever counted about 30 residents; she doesn't know where the other 20 are hiding. All the while, the dust continues to find its way through the fabrics of my clothes and backpack, covering all of Keeler in a vast granular carpet that drifts constantly from building to building.



Figure 19. Keeler, California.



Figure 20. "Safe Beach, Best Dust!" The dry lakebed can be seen in the distance.

Unsettled Places, Porous Selves: Narrating the Convulsive Landscape

It's a brisk spring morning in the Owens Valley. I pull into Keeler off California State Route 136; having passed Sulfate Road, I turn west onto Old State Highway and then north onto Railroad Avenue, the place names recording the community's history. A flock of shorebirds careens up ahead of me, together wheeling from side to side on their way to the large artificial "wetlands" created as part of the LADWP's multi-million dollar dust mitigation attempts. I had visited Keeler several times before to document it with my camera and in my fieldnotes as what I came to consider the abjected Other to urban and suburban Los Angeles. This time I'd come with a different objective in mind—to visit with Sue. I had met Sue a week before at a public meeting organised by the Owens Valley Committee, a local grassroots environmental organization based in Bishop, about 60 miles to the northwest of Keeler. Founded in 1983, the Owens Valley Committee began its life by publishing advertisements in the local newspaper to alert the public to the environmental plight of the Owens Valley. Today, the organization has taken shape as a significant actor in the region's history, having made a long career of taking the LADWP to task for its role in the degradation of the local landscape.

At the meeting, a representative from the LADWP had come to update the public on their latest dust mitigation methods. For two decades, the city had flooded the lakebed with hundreds of thousands of acre feet of water each year in order to tame the dust. Now, however, the city says it will use tractors to turn the moist lakebed clay into a series of furrows and basketball-sized dirt clods, "bottling up the dust for years while saving enough water to supply 150,000 Los Angeles residents annually" (Tory 2014).

Afterwards, about half a dozen Owens Valley residents had lingered in the community center to discuss the relative merits and drawbacks of the approach. Relatively inexpensive and nearly waterless, the approach had proved effective in tests; but, one gentleman wondered, how would it fare when scaled up to the considerable size of the entire lakebed? As a keen birder, a man I'll call Mike was worried about the fate of the shorebirds and waterfowl that had come to rely on the artificial wetlands produced by the city's "shallow flooding," which covers approximately 27 square miles of the lakebed. In an era of disappearing wetlands, the Audubon Society has identified the anthropogenic environment of Owens Valley as one of the seventeen most important avian sanctuaries in all of California. In 2008, they invited amateur birdwatchers to the lake to count the birds—an incredible 46,000 birds and 112 different species were reported in one day (Piper 2011; see Figure 21). What would this new "nearly waterless"

mitigation method mean for their wellbeing? Of this small group, I later learned, Sue lived by far nearest to the lakebed and its unruly materialities—giving her a different perspective on the relative risks and merits of the new approach. She was also concerned for the birds; she had grown to enjoy their company, recently buying a pair of good quality binoculars to watch them from the porch of her home. But, so she told the group, Sue was much more worried about the noise and dust that the earth-moving machines might generate in the short term.

After introducing myself and my project, Sue invited me to visit with her in her home the following week. “Don’t forget to bring your gas mask,” she warned me. A short, plump woman, Sue was good-natured, generous with both her time and her opinions. Now in her early 70s, she wore her fine white hair cut close to the scalp. To go with the buzzcut, she dressed from head to toe in khaki—khaki shirts, pants, socks, and boots—which she bought from a military surplus store located across what she still referred to in conversation as “the lake,” thus revealing how the sheer rapidity of environmental transformation in the region had even outpaced local idioms of place. Sue had moved to Keeler from Independence, California—another Owens Valley town to the northeast of the lakebed—with her husband Mark, a soldier and a welder. Keeler was Mark’s childhood hometown; they had returned to take care of his ailing parents, who both passed away not long after. “That was 1978,” Sue tells me on her porch. She describes to me how Jimmy Carter was president; the Vietnam War had not long ended, still very much a fresh wound on both the national body and its collective psyche. Owens Lake was already dry by that point, Sue says, although nobody seemed to care too much about it back then. Keeler was not yet the ghost town it was to become, although it was already “well past its prime.”

“A lot has changed since then,” Sue tells me. 37 years have passed, and with them the turn of the new millennium. The dust storms had first peaked and then waned; the LADWP has been forced kicking and screaming to clean up its mess. Suffering a series of minor heart attacks, Mark passed away in 1997. Just a couple of years after that, Sue had also fallen ill, a point to which I will return below. I asked her if she blamed the dust. “I do,” she told me, her tone spiked more by melancholy than by anger, perhaps mellowed by the passing of time I thought. She described to me in vivid detail those massive, ferocious dust storms of the late twentieth century, which began in earnest in the 1970s:

When the wind blew just right, there would be what we called a ‘white out’. The whole valley would fill up [with dust] like a bathtub. It would block out the sun. What you would do is, you would come inside, close all

the windows, put your cooler on, and try to filter out as much of the dust as you could. But even then the dust could find its way in through the tiniest cracks. So you would rub your finger over any flat surface and there would be a fine white coating of dust... On a really bad day, you couldn't even see the mountains.

As she speaks, Sue gestures west to the majestic Mount Whitney, which at over 12,000 feet boasts the highest peak in the 48 contiguous United States. Although hers alone, Sue's story resonates in both form and content with many others I heard during fieldwork. In both interviews and casual conversations in people's homes, after public meetings, and in local stores and coffee shops, people would describe the dust storms to me—often without prompting. Like Sue, each storyteller would emphasize the immense spatial scale and the explosive energy of these dust storms, as well as their capacity to envelop and overwhelm the human sensorium. One gentleman likens the storms to the iconic mushroom cloud of an atomic explosion, for example, while another describes Keeler as the "ground zero" of the dust storms (cf. Chapter 2). Sat at a bar in Lone Pine after a long day of birdwatching on the lakebed, the conversation soon turns to the dust; my friend Mike recalls a four-car pile-up between Cartago and Olancho on U.S. Route 395, supposedly caused by an especially bad storm. Another man, kitted out in a pearl snap shirt, cowboy boots, and a wide-brimmed Stetson hat, recalls how he walked into a lamppost during one dust storm, awakening the next day with a black eye.

In addition, many others—here notably women—foregrounded the insurgent materiality of the dust in a way that draws attention to its capacity not only to envelop but also to traffic across physical thresholds and corporeal borders, perhaps revealing a gendered logic of anxiety (cf. Murphy 2000, 2006). "When the dust storms strike, it's best to take cover," warns Janet, another Owens Valley resident. "[The dust] collects in your clothes, your hair, *everything*... It irritates your eyes and nose until you get out of it." Marion agrees: "It's terrible. We even covered our windows with plastic sheeting, hoping that would slow it down. *But it just keeps on coming*... You feel like if it's coming through the windows, it must be getting in your lungs too. I dread to think what it does to your insides."

My point here is this: With striking regularity, these stories and anecdotes gather their collective concerns around the openings and orifices of the home and the body, revealing a set of deeply visceral anxieties over the permeability of physical and domestic borders and the potentially toxic intimacy of person and place. More than simply a stage across which action unfolds, the "place" of the Owens Valley shifts in these stories from *ground* to *figure* as a capricious actor in

the myriad dramas of everyday life. My argument, however, is not simply that landscapes possess a significant materiality, which carries with it the potential to resist or exceed human projects of action and meaning making (Bennett 2010). Rather, in a continual movement of excess and incorporation, I am much more interested in the ways in which this point or moment of resistance becomes enfolded into new practices, identities, and genres of everyday living which contain an image of the convulsive landscape at their very core. In this way, we can say that the interrelationship between person and place is recursive. Karl Marx describes these recursive interrelations as an “intricate metabolism” that mixes together land and labor, remaking both in the process (quoted in Kosek 2006:18)—a metaphor also taken up by scholars of urban space and the flows of material within it (e.g. Gandy 2004). As I will now describe, however, the movements of dust through homes and into the interior spaces of the human body in fact calls upon us to rethink the idea of an “intricate metabolism” linking person and place as much more than mere metaphor.

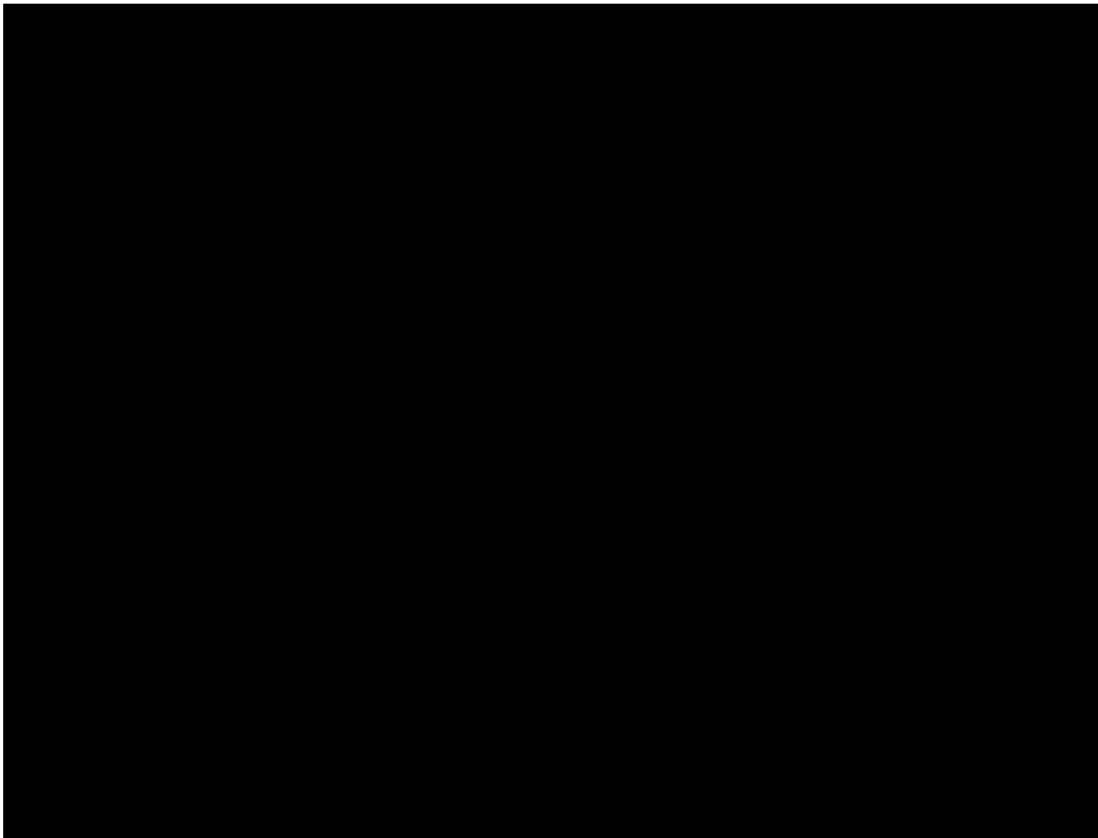


Figure 21. Bird watching at the Owens Lake. The water seen in this photograph has taken a circuitous route to its final destination, having been returned to the lake from Los Angeles by the LADWP as part of their dust mitigation project. The fluorescent smocks and hard hats worn by these birders denote their presence on what is, essentially, a massive construction site. Today, environmentalists advocate on behalf of this intensely anthropogenic landscape, perhaps marking a turn away from “Nature” or “Wilderness” as the sole arbiter of ecological value.

“You Can’t Cordon Yourself Off From Air”: Metabolism Beyond Metaphor

As argued above, the Owens Valley dust storms have entered the canons of local history, not only as an accomplished fact captured in a transparent description of past events, but also as familiar genre of “cultural poetics” (Stewart 1996) which both archives and expresses a widespread concern about the porosity of the home and the body—two distinctly modern dreamworlds of complete enclosure and self-containment (see Martin 1994 & Cohen 2009 on the body; see Kaika 2005:51-78 on the home). In addition to leaving their mark on local idioms of place, identity, and history, however, these dust storms have also left a literally material mark on the collective physical body of the Owens Valley residents, having now become incorporated into “local biologies” through the event of inhalation and process of anatomical pathogenesis (Lock & Kaufert 2001; Petryna 2004).

Once inhaled, the Owens Valley dust storms can burrow deep into the lung tissue, causing the organs to scar, stiffen, and decrease in capacity over time; it can also work its way into a person’s eyes, ears, and throat. In addition, the dust storms also traffic in a complex concoction of more directly toxic chemicals, such as arsenic, cadmium, and nickel. While naturally occurring within the lakebed, these heavy metals have been rendered airborne after the lake was drained and the lakebed exposed, posing significant risks to human health (see Piper 2006:4). Having entered the body, the very finest of the dust particles “are so minute that they can pass through the lungs into the blood stream ... just like the essential oxygen molecules we need to survive” (American Lung Association n.d.). In turn, essentially mistaken by the body for oxygen molecules, this ultrafine dust is proactively shuttled into the body’s metabolic pathways, which constitute an active interface of exchange between the organism and environment situated not at the body’s surface but distributed deep within it (see Landecker 2011, 2013; Solomon 2016). By perverting these processes, the dust can thus catalyze a transformation in both the composition and configuration of not only the lungs but also the liver, heart, and other internal organs (see Schulz 2006). Over time, pathology may develop, including but not limited to asthma, cancer, and cardiovascular disease. Ultimately, death is possible. According to the World Health Organization, “small particulate matter pollution [has] has health effects even at very low concentrations. Indeed, no threshold has been identified below which no damage to health occurs” (see World Health Organization 2016).

In one survey of Owens Valley residents, self-reported symptoms attributed to the dust included allergies and asthma, aggravated sinus problems, headaches, runny noses, burning eyes, ear infections, sore throats, and “a general

feeling of fatigue” (Kittle 2000). “Many people reported never having any symptoms until moving to this area,” the study declares. “There have been several reports stating that when they leave the valley, their symptoms go away.” Yet despite repeated reference to the damaging health effects of the dust, no formal epidemiological studies have been carried out to confirm or refute “anecdotal” connections of the dust to disease, thus opening up a zone of intense uncertainty and contestation.

Until recently, for example, the LADWP continued to deny that the dust posed any problem to human health, claiming that it only affected visibility “a little” (see Piper *ibid.*:21). They questioned the validity of anecdotal accounts, deferring to scientific knowledge that did not yet exist—a pattern replicated across other social contexts (e.g. Das 1995:137; Petryna 2004). According to some commentators, while publicly calling for epidemiological studies investigating the link between dust and disease, the LADWP in fact actively discouraged such formal studies from being undertaken (see Piper *ibid.*:11). All the while, Owens Valley residents like Sue continue to gesture to the evidentiary potential of their own physical bodies as incontrovertible proof of the dust’s toxic possibilities (Weston 2017:105-134). “When we see that white cloud headed down through the pass, the ER and doctors’ offices fill up with people who suddenly got worse. It’s a pretty straightforward cause and effect,” reports Dr. Bruce Parker of Ridgecrest Community Hospital, located about seventy miles due south of Keeler (quoted in Piper *ibid.*:2-3).

Thanks to California’s convergent climate crises, reports of dust-aggravated illness are on the rise elsewhere in the state.⁶³ Seventy miles to the west of Keeler, for example, the small community of mostly migrant farmworkers in East Porterville (population: 7,331) has been repeatedly identified by reporters as the “epicenter” (Glenza 2015) and “ground zero” (Castillo 2016) of the state’s historic drought. Beginning in the summer of 2014, the town’s wells began drying up one by one, leaving many people without access to running water and struggling for over two years now to shower, cook, clean, and otherwise carry out their everyday lives amidst a desiccated landscape. In response, emergency public showers have been set up in a church parking lot, where a local nonprofit organization staffs a drought resource center and hands out bottled water by the case. Last year, plenty of people were eager to pitch in and help out, says Dr. Lopez, a physician from a nearby hospital. But after the drought dragged on and the novelty wore off, most

⁶³ We have already encountered such dust storms at the Salton Sea, which in many ways is the inverse of the Owens Lake—a lake created, not disappeared, following the construction of another large-scale waterworks (the Imperial Valley irrigation system).

volunteers left. Nowadays, Dr. Lopez spends much of her time treating people with asthma, allergies, and other respiratory disorders, she tells me during a short visit to East Porterville. “It’s out of control. Even patients who didn’t have any airway issues before, they’re becoming hyper-reactive to everything... It’s as if the air itself is becoming an allergen.”

It’s as if the air itself is becoming an allergen. With this statement, Dr. Lopez expresses something of a conundrum. As metabolic beings, human bodies must remain open to their surrounding environments; at the same time, however, this porosity carries with it the risk of harm. Talking of the multiple vulnerabilities associated with a rapidly changing climate, for example, former U.S. President Barack Obama articulates the problem like so: “All of our families are going to be vulnerable. You can’t cordon yourself off from air or from climate” (Whitehouse 2015). In turn, Dr. Lopez’s image of the allergenized and pathogenic *air itself* that emerges in the wake of California’s drought and the dust storms it incites captures this double bind in clear terms, not only as a biological or a philosophical problem but as a social and pragmatic one: the problem of maintaining a life in the face of an environment that simultaneously nourishes and depletes it (cf. Berlant 2007a; 2011).

In his recent ethnography of obesity and metabolic illness in contemporary Mumbai, the anthropologist Harris Solomon (2016:9) calls an “anthropology of metabolic living” one that attends to the multiple ways in which “people endure ... the porosity that all life entails.” Although a fundamental condition of life, however, Solomon reminds us that porosity as both a physical and social condition does not just emerge *sui generis*. Rather, it requires work: “work by persons who open up to or refuse materials like food, and work entailed in moving materials across uncertain boundaries” (ibid.). In this way, an anthropology of metabolic living along the lines proposed by Solomon calls attention to the everyday modes of labor involved in complicating, dissipating, or reinforcing boundaries both across and within bodies and their environments. As mentioned, Solomon’s ethnographic focus is eating and obesity. In what follows, I will examine the ways in which, in the wake of illness, Sue directs renewed attention to *atmospheric* flows, transfers, and attunements across the borders of her body and home. As I will show, a “metabolic” approach to the Owens Valley dust storms complicates the Euclidean, linear spatial and temporal assumptions that underpin the ways in which ecological crises tend to be imagined and responded to (cf. Hinchcliffe et al. 2013).

Toxic Intimacies: The Inescapable Ecologies of the Twenty-First Century

When Sue came down with a bad case of the flu in December 1999, it took her several weeks to get over it. Even after it had shifted, she still felt winded doing her daily chores. At night, she noticed it was easier to breathe and sleep when propped up a little bit. A few weeks later, she caught another cough that this time she simply “couldn’t shift.” One day that cough became so violent that it bruised her ribs. At that point, Sue’s daughter, Annie, rushed her to the emergency room. After a month or two of tests, Sue was finally diagnosed by her physician with adult-onset asthma.

I was absolutely dumbfounded. I’d never had problems with breathing. Nor does anyone in my family. I’d always thought asthma was something that you are born with. I had no idea you could develop it later on in life. At first, I was distraught. I felt helpless and depressed. I still thought of myself as fit and healthy. I remember watching a documentary on the television about a group of friends hiking the Pacific Coast Trail. It devastated me at the time: the thought that I would never be able to do anything like that again in my life.

As she describes them, Sue’s symptoms most often include wheezing and coughing fits, as well as “that annoying feeling that when you take a breath, it doesn’t catch.” Full-blown asthma attacks may be triggered by illness like a cold or the flu, airborne irritants like cigarette smoke, dust, or synthetic cleaning products, or by physical exertion. A keen hiker in her youth, Sue always thought of herself as an “outdoors person.” But a combination of illness and old age has forced Sue to rethink the risks associated with pastimes like hiking and camping. She still likes to walk, Sue tells me, but never too far from home and always accompanied by a friend. In this way, the onset of chronic illness has compelled Sue to recalibrate her self-image to the new reality of her somatic existence, whilst also setting in motion a practical project of transformation worked upon the habits and routines of her everyday life.

In this way, the depression and devastation that Sue initially felt after being diagnosed with adult-onset asthma has gradually mutated into a hard-fought sense of determination—to not just “cope” but “still enjoy life”—that takes the shape of an ongoing practice of adjustment and adaptation. Nowadays, for example, Sue takes a long list of medications to help manage her asthma. As we converse, she arranges the various inhalers and pill packets in a neat line between

us on the kitchen table where we are sat—sounding out their brand names as she does so. Some of these drugs are for relief during an attack, while others she must take each day in order to keep her symptoms in check. Thus, Sue not only attempts to recalibrate her home (see below) or habits to the new reality of her illness; with these medications, she also attempts to artificially fine-tune the internal physiological spaces of her body. After a long and frustrating process of trial and error, Sue has finally found a regimen that works well for her. For this she is happy. Nevertheless, her illness is by its very nature erratic; she experiences continual ups and downs. Although full-blown asthma attacks now occur far less frequently than they once did, the very real threat of an acute episode still casts a long shadow over Sue's everyday life. "Because an attack can happen any time and any place, I have to take my medicines with me everywhere I go," says Sue.

In addition to her asthma, Sue also suffers from what she describes as a kind of indistinct malaise that shifts in and out of focus depending on the weather as well as a wide range of other environmental conditions. The symptoms include not only difficulty with breathing but also feeling generally sluggish in both her body and her mind. Notably, a sudden change in the weather can trigger such a response. "I know what the weather will be like before I even draw the curtains in the morning, Sue once told me. "It all depends on how well I slept. If it's been a rough night, then forget about it, it's going to be a tough day too... If it was cold, then it's going to be hot. And if it was raining, then we're in for a dry spell." It is not only the weather that can trigger such responses. Upon entering an unfamiliar building, Sue also describes to me how she can tell whether animals live within—she has also identified the dander of cats and dogs as a trigger. How does it feel, I ask? First her chest grows tight; then her breathing doesn't catch. "[At its worst,] it's like someone's holding a pillow over your face." At first, these new feelings were illegible to Sue—she struggled to make sense of them and their significance. Over time, however, she has slowly learnt to decipher the meanings encoded within her strained breathing. "You're constantly aware of, you know, how you are breathing and the air around you," she tells me.

While asthma is commonly conceived of in terms of "the attack," then, Sue's narrates the experience of illness not only as a spontaneous explosion of debility but also as an ongoing experience of "atmospheric attunement" often operating well below the threshold of a visible medical event (e.g. see Stewart 2011; Shapiro 2015). Making a similar point, the sociologist Gaylene Becker (1999:12-13) has observed how "[p]eople who have asthma perennially 'listen' to their bodies, anticipating as well as monitoring the symptoms of the illness, wheezing or shortness of breath." In a sense, however, Sue is not only "listening"

to her body but also to the particular landscapes that her body inhabits and moves through. Put differently, the sluggish feelings and strained breathing that Sue experiences to a greater or lesser degree all the time are infused with a “revelatory power” (Shapiro *ibid.*:370) which guides her movements through the world, breaking it up into a checkerboard of relatively safe or dangerous zones to be navigated if not avoided. While Sue is “constantly aware” of herself as a breathing being, this awareness is not a uniform experience: it shifts in response to the material world around her. Stripped of any taken-for granted quality as sites in which her trust can be unhesitantly placed, Sue’s body, home, and the everyday activities that bring them into close association have in turn been rendered uncanny—neither fully strange nor familiar—as a potential source of danger (e.g. see Leder 1990).

As such, Sue’s story reminds us something important about the nature of air and the atmosphere. In the everyday life of the average American, air very often exists “unnoticed, unconsidered, and unseen” (Kenner 2013; also see Irigaray 1999). By contrast, however, Sue’s sluggish feelings and strained breathing inscribe on a visceral register a material fact: that the local aircapes of “late industrialism” are thoroughly and unevenly substantive, forming one critical channel for the flow across space and time of environmental in/justice (see Fortun 2012; Choy & Zee 2016). Amidst the anthropogenic aircapes of late industrialism, the human body in turn becomes a powerful apparatus for gauging the nature of the wider world that both envelops and penetrates it. Everyday life in the shadows of the Owens Valley dust storms in this way carries with it the potential to engender novel forms of biopolitical subjectivity as local residents—sometimes alone, sometimes collectively—come to experience both the environment and politics not only as things that surround them and act upon them from without, but also as constitutive threads within the intricate weave of their lives and bodies (cf. Weston 2017:21). As Sue tells me, for example, until she was diagnosed with asthma she had never even heard of the term “particulate matter”; now she knows in micrograms what the federal air quality standards are for this kind of pollution.

While rerouted through contemporary concerns, however, it is important to note here that such a vision of the body—as embedded and unbounded—is not new. In *Inescapable Ecologies*, for example, the environmental historian Linda Nash (2006:6) has shown how “understandings of the body as porous and vulnerable shaped early responses to the Californian landscape.” For these nineteenth century explorers and settlers, Nash argues, the apprehension engendered by the unfamiliar landscapes of California became literally embodied in human ill health in the form of such conditions as miasma, dysentery, and bilious fever. In turn, the

ailing bodies of these pioneers were recruited by the medical and military establishment as potent sites for investigating the noxious qualities and effects over time of such alien environments.

At work in such accounts is an image of the body not as an enclosed object bounded by the skin, but as a fundamentally “ecological” entity characterised by its close interdependence on the surrounding environment and near-constant exchange of inside and outside (Nash *ibid.*:11-12).⁶⁴ Accordingly, health was understood not so much as a specific property or quality that an individual body “has.” Rather, good health denoted a condition of harmony or balance between the human body and its surroundings. By introducing a significantly more limited definition of health (as the absence of disease) as well as the hermetic conception of the human body as separated more-or-less entirely by the skin from its external environment, bacteriological theories of disease supposedly displaced such “ecological” notions of the body and health. From the vantage point of Sue, however, we can detect very clear continuities between late nineteenth and early twenty-first century experiences of the relationship between the body and its environment: Owens Valley residents must still wrestle with the inescapable ecology of person and place described by Nash and others (e.g. see Valencius 2004; Murphy 2006). In turn, we can say that pathology resides neither squarely within the body nor in the environment but in the nature of their imbrication—what for the purposes of this chapter I am calling *toxic intimacies* (Weston 2017:78-79).

Focusing on what British cultural theorist Raymond Williams (1983:238) long ago called the “close living substance” of the local, phenomenological theories of place often ignore the long-range interrelationships that lend experiential shape and content to the intimate geographies of everyday life. In this section, I have described how histories of environmental change and crisis become inscribed upon the very intimate spheres of daily experience—body and place—rendering both hyperpresent within everyday life as physical things that must be actively and consciously negotiated (Leder 1990). When responding to the biographical disruption brought about by the onset of a chronic illness or disability, anthropologists have tended to emphasise the ways in which the telling and retelling of experience offers people both the opportunity and the means to make sense of their situation, to construct a revised sense of self and others, and also to open up paths for future action (e.g. see Becker 1999; Mattingly & Garro 2000). To

⁶⁴ In *Flexible Bodies*, Emily Martin (1994) tracks the displacement in the late 1980s of the metaphor of the body as a fortress by the cybernetic notion of the body as an open system within U.S. public culture. On the interdependence of the body and its environment, also see Alaimo 2010, Murphy 2000, 2006, Houser 2014, and Weston 2017.

be clear, I don't deny the profound importance of narrative in coping with the onset of chronic illness and disability. By contrast, however, the rest of this chapter will examine the ways in which Sue responds to the altered reality of her physical existence, not only through narrative, but also through physical acts of practical engagement with the spaces and surfaces of her home—a topic which, in a different context, I will return to in the next chapter.

Uncanny Ecologies: Dust, Domesticity, and the Borders of Being

A striking contrast to the generalized scene of dilapidation that frames it, Sue's house is clearly well cared for both inside and out. Decades of sun and salt have worn its wooden, turquoise exterior to a pleasant weathered hue. A pack of several ceramic jackrabbits "chase" one another across her yard, bordered by a knee-high turquoise picket fence. A wooden birdhouse, again turquoise, has been nailed to the side of the house. At the entrance, a doormat announces a faded "WELCOME"—the greeting also worn down by many years of coming and going. Inside, Sue shows me around. As she does so, she points out countless photographs arranged haphazardly on the windowsills, a mantelpiece, and more-or-less any available surface: Mark kitted out in combat gear; Annie at her graduation; Sue's two grandchildren playing happily in the yard.

At her favorite photographs, Sue pauses for a moment to share a story with me before shaking herself free of the memory and continuing with our tour. As we move from room to room, she points out the adjustments and adaptations she has made to the house in the twenty years or so following her first asthma attack. After installing double-paned windows throughout, for example, Sue put in an expensive air filter and bought a high-performance vacuum cleaner. Now she cleans her home with vinegar instead of synthetic cleaning products or bleach, avoids lighting candles at home, and removed all houseplants—over time she has identified each of these as a potential trigger for her asthma. In addition, she removed all her rugs, covered the couch with bedsheets, and hung new curtains to block the dust from creeping in the windows.

Sue runs her index finger across the windowsill and holds it up; despite the double-paned windows, curtains, air filter, and vacuum cleaner, a smudge of off-white dust still coats the tip of her finger. "I only cleaned this three days ago," she shrugs. On average, Sue tells me, she tries to clean the house completely "from top to bottom" about once every week or so. In this way, the fine dust commands a near-constant attention to the nooks, crannies, cracks, and crevices of her home, generating a new level of intimacy with its spaces and surfaces. "Wooden floors are by far the best if you have asthma," Sue teaches me. "They may require more

cleaning—but that’s because you can actually see when they are dirty. Carpets are good at hiding the dust and germs and all kinds of nasties. Even the thought of it makes me shudder.” Her house has changed a lot in recent years, Sue says. Saddest of all, she has had to give up her faithful chocolate-colored Labrador, Charlie, to a nearby friend to look after. “Sometimes I barely recognize it,” Sue once told me, although at that point it was not clear to me whether she was talking about Keeler, her home, or her daily life—each had been swept along in a set of partially overlapping transformations. “I think all the photographs are to help me remember,” she said.

Earlier that day, when I arrived at the Sue’s house, Bryoni, aged 7, and Jacob, aged 5—Sue’s two grandchildren—had rushed towards me to say hello. Excitedly, Bryoni waves a stuffed animal at me before disappearing into the sitting room dragging her brother Jacob behind her. The two children are visiting with their mother, Annie, from Pomona, 200 miles to the south of Keeler and outside the range of the dust storms. Whilst chatting, Sue points to Bryoni and says that she is worried her granddaughter might also be developing asthma: “Whenever she runs, she starts coughing.” At this point, I ask Annie whether she has taken her daughter to the doctor for a check up. “I’ve taken her,” Annie responds. “She did some tests and said it might be. But she doesn’t want to make it definite yet. We have to make some lifestyle changes first to see if that helps... To be honest, that’s part of the reason we moved [from the Owens Valley to Pomona]. To get away from all this dust.” Given the profound toll the dust has taken on both her self and her loved ones, I then ask Sue whether she has ever considered moving, perhaps also to Pomona with Annie and the grandkids? “I keep telling her she should,” Annie interjects. “Of course I’ve thought about it,” Sue replies. “But I could never do that... This place is my home. *It’s a part of who I am.*” Amidst this place that is also a part of Sue, then, a version of “cruel optimism” (Berlant 2011) therefore persists—a cluster of affective attachments that simultaneously offer up and withhold the promise for comfort and wellbeing.

By recounting this scene I wish to demonstrate how Sue responds to her chronic illness by enlisting particular technologies of enclosure in an attempt to buttress the boundaries of her home against the incursion of the dust. Surrounded by a wider world of environmental instability that she is unwilling to leave and unable to control, Sue’s sights thus turn inwards towards the spaces, surfaces, and objects of her home. Through the combination of adjustments and adaptations to her home and the everyday labors of housework described here, Sue attempts to carve out for herself a “safe space” (Murphy 2000) of security and self-mastery, purging the house of dust and other irritants like bleach, candles, and plants—and

in turn reinventing it as a powerful therapeutic tool (also see Anagnost 2013). If pathology resides neither in the body nor in the environment but in their “toxic intimacy,” we can say that good health is not the sole property of human bodies *per se* but of particular sets of arrangements and interrelations between bodies, spaces, and objects: what historian of science Michelle Murphy (ibid.:100) terms “body-ecologies.” Yet Sue’s desire to create a hermetically sealed and utterly dust-free domestic sphere ultimately proves an unrealistic one (cf. Kaika 2005). In the context of the considerable energy and resources invested in doing just that, however, the irruption of dust within her home arouses in Sue what she describes as a shudder.

Let’s pause for a moment to dwell on Sue’s shudder. As a physical response, I suggest that we can detect in Sue’s shudder a visceral encounter with the *abject* and *uncanny* qualities of the household dust. According to the French philosopher Julie Kristeva (1984), what is “abject” is whatever is cast off in the subject’s attempts to define and defend its psychical borders. While jettisoned, however, what is abjected is never totally expelled. Thus, it “keeps harrying the ego incessantly from where it has been cast out” (Navaro-Yashin 2009:6). Neither fully object nor subject, the abject is in this way both Other and yet never totally so—oscillating uncannily between the strange and the familiar. As Kristeva (ibid.:4) observes, “it is not lack of cleanliness or health that causes abjection.” Rather, the abject denotes that which “disturbs identity, system, [and] order. What does not respect borders, positions, rules. The in-between, the ambiguous, the composite.” Importantly, the abject corresponds not to specific objects or materials but to “the structure of the unassimilable to which the subject is nevertheless bound” (Brinkema 2014:138)—a border that fuses the subject to the very site of its physical and psychical limits as well as its potential undoing (see Navaro-Yashin 2012:148).

Alongside vomit, filth, and the rotting corpse, household dust may seem like a rather tame candidate for the abject. Yet, as the philosopher Michael Marder (2014) notes, “Due to its high mobility and its smallness, [dust] can penetrate our bodies. Dust does not limit itself to the surfaces of the things it covers; in fact, it knows no distinction between the inside and the outside.” As described above, dust therefore dislocates the notion of a discrete and bounded human subject and so can be placed within the conceptual terrain of abjection. Along these lines, then, I argue that we can discern within Sue’s shudder a kind of prereflexive or extralinguistic—an affective—response to the threat posed by this dust to the

sanctity of the borders of her body and self as well as her home.⁶⁵ Much more than simply the “anti-system” (Navaro-Yashin 2012:151) against which the order, identity, and boundaries of Sue’s self and domestic space are organized, however, I hope to have shown how the dust storms detailed here traffic with them toxic possibilities rooted in the precise qualities and effects of their material properties, which are inescapably linked to the entangled natural and social histories that in turn have unsettled the turbulent terrain of the Owens Valley.

The Embodiment of Catastrophe

What, then, might it mean to “embody” catastrophe? In their influential essay on the embodiment of history and memory in the wake of China’s Cultural Revolution, the anthropologists Arthur Kleinman and Joan Kleinman (1994:716-717) have argued that: “Bodies transformed by political processes not only represent those processes, they experience them as the lived memory of transformed worlds. The experience is of memory processes sedimented in gait, posture, movement, and all the other corporal components.” In this way, episodes of social upheaval can become etched into bodily forms, processes, and habits (also see Shaw 2002:5-6; Fassin 2007). As I hope to have shown, however, such “sedimentation” does not readily confine itself to the body’s external surfaces, its habits, or indeed its forms, but can also work its way deep into the body’s internal physiological spaces and environments (also see Walker 2010:70, 2015).

It should be noted here that I’m not the first to draw a link between history, dust, and disease. Writing on archives, dust, and the French historian Jules Michelet, literary theorist Carolyn Steedman (2001:1171) argues that with each breath taken in the dusty interiors of the nineteenth-century’s archival spaces, Michelet was also inhaling a “lungful of the past”—the “by-product of all the filthy trades that have ... deposited their end-products in the archives”—not only in terms that are metaphorical but also as a physiological process. In turn, Steedman attributes the French historiographer’s famous migraines to the very real possibility of disease—anthrax meningitis—carried into his body by the dust.

⁶⁵ However, as Yael Navaro-Yashin (2012:164) argues, “Objects are not involved in relations with human beings in a linguistically or symbolically neutral arena.” Rather, encounters with abjected objects like dust, dirt, and filth are qualified by history and language as well as sensory and interpretative regimes or habits. With this in mind, I argue that Sue’s shudder references a site or zone where human bodies, symbolic systems, and physical objects all converge and interact.

Following Jacques Derrida, Steedman describes this as an instance of “Archive Fever Proper” (ibid.:1172).⁶⁶

Whilst speculative, I find Steedman’s essay illuminating for the case at hand. Along similar lines, I argue that the dust that embeds itself in Sue’s lungs literally remembers or “calls to mind” the turbulent social and environmental history of the Owens Valley (Steedman 2001; Marder 2014). While the Owens Valley dust storms blow much less frequently and ferociously than they once did—although they still do—their legacy therefore lives on in the aggravated and ailing physical bodies of Owens Valley residents, like Sue, as well as in the reinvented sense of the ordinary that Sue has now fashioned in response to her chronic respiratory illness (Das 2006; Berlant 2011). Put differently, in her attempts to protect herself from the catastrophic landscape of the Owens Valley and the dust it emits, Sue has in a sense folded an enduring image of disaster into the spaces, rhythms, and recesses of her everyday life—including in terms of her reconfigured house, the medicines she must carry with her at all times, and the new bodily sensitivities and habits she has cultivated.⁶⁷

From such a claim follows a question about the locatedness of crisis in both space and time. As anthropologist Chelsey Kivland (2016) asks with reference to the 2010 Haiti earthquake, “If the recovered life embodies all the anxiety and risk of a quivering ground, I wonder, can the disaster even be located?” At one point during negotiations with local pollution control authorities, a LADWP official publicly stated that, “This dust [mitigation] project is going to cost so much, we can just give everyone in Keeler a million dollars... They can just move. They can just go away.”⁶⁸ In response, this statement caused an uproar among local residents and within the local press. While such a suggestion might make good economic sense for the City of Los Angeles, these critics said, it both significantly underestimates and belies a deep insensitivity towards the deep symbolic and affective connections that people have formed over time with the local landscape—not despite its turbulent history but because of it. In addition, other critics questioned the way in which the official drew the boundaries of catastrophe and response. As a reporter at the *Los Angeles Times* (Cone 1996) puts it, “The city’s

⁶⁶ In a related argument, the environmental historian Brett Walker (2015) has described the onset of respiratory disorders following the inhalation of dust amongst first responders in the aftermath of the 9/11 terrorist attacks in New York City. “When the fabricated world turned to mist,” writes Walker (ibid.:792), “[the] first responders breathed ... history deeply, into the deepest corners of their lungs. ... In the end, the destruction of the built environment metastasized into real physiological changes: this history proved overwhelming once in their bodies.”

⁶⁷ In a recent article, Gisli Palsson and Heather Swanson (2016) propose the term “geosocialities” to denote such relations between geology, biology, and biography.

⁶⁸ See thereitistakeit.org

attitude infuriates many of the 40,000 people from Lone Pine to Ridgecrest who periodically choke on the eye-stinging, throat-burning grit that blows off the playa.” Is, Sue asked me sarcastically, the LADWP going to give each of them one million dollars too?

To be sure, each of these criticisms is indeed well placed. In addition to being insensitive and misguided in these regards, however, I argue this city official’s proposal also reveals a much deeper and much more fundamental misconception regarding not only the spatial *extent* but also the spatial *nature* of the problem at hand. In this way, we can detect in the comment an unstated theory of place that is “sedentarist,” whilst also relying on Euclidean, linear spatialities of encompassment and similarly straightforward notions of danger and its dispersal (cf. Hinchcliffe et al 2013). From this perspective, the locatedness of the disaster is straightforward. In the phrasing with which I introduced this chapter, in other words, for this official it is places that sit more-or-less still and people that move either within, between, or indeed “away” from them—in this case, the further the better. Yet from the vantage point of Sue and others like her, one can see that attachments to place are not only symbolic and affective but also physical, etched upon the body and carried with it wherever it goes, and that the knotted tangle between person, place, and catastrophe is at least from this perspective much harder to untie.

Conclusion

This chapter has tracked the transformation of the Owens Valley’s physical and social landscape following the construction of the first Los Angeles Aqueduct at the beginning of the twentieth century: both a herculean act of hydrological engineering and a historic act of infrastructural violence the myriad ramifications of which are still being felt today. When faced with the region’s turbulent social history, its convulsive physical terrain, and the ferocious dust storms that have engulfed them both, anthropological theories of place as a timeless social medium or enduring “repository” for cultural identity, memory, and meaning lose much of their purchase (cf. Basso 1996:63; Feld & Basso 1996; Fennell 2011:59). In this way, California’s convergent climate crises both reveal and demand a sense of place that is—very much like the ordinary itself—“fragile, irredeemably provisional, [and] always vulnerable to history’s storms” (Nixon 2011:89).

In examining the dizzying scale and rapidity of environmental change in the Owens Valley, I have focused primarily on the life and times of a single individual, Sue, a lifelong resident of the Owens Valley who has developed a

chronic and debilitating illness after many years of living and breathing amidst the everpresent dust. By foregrounding the material interpenetration and recursive relations of person and place, this chapter moves close to Tim Ingold's (2000:87) claim that the relationship of history to nature might be better understood not as one of *inscription* but as one of *incorporation* (cf. Basso 1996). As Ingold (ibid.) puts it, "human actions are built or enfolded into the forms of the landscape and its living inhabitants." And in turn, he continues, "through conception, birth, or long-term residence a person incorporates the essence of locality into his or her own being" (ibid.:141). Like Solomon's (2016) notion of "metabolic living," the image of incorporation calls attention to the ways in which "the environment" does not sit still nor readily confine itself to spaces beyond the body's surface, but penetrates deep within it. In doing so, it also reveals how histories specific to places can become lodged in the bodies of those that inhabit them and, in turn, forces us to rethink the linear spatiotemporal assumptions that often underpin imaginaries of—as well as responses to—environmental crisis.

Very clearly, an aspect of the Owens Valley environment has indeed been incorporated into Sue's physical being as well as her sense of self. As a number of other scholars have noted, however, Ingold's Heideggerian "dwelling perspective" (2000:5) is in the end confounded by an overly romantic notion of landscape as the ultimate site of authentic belonging, which in turn is "best delivered within intimate, stable, locals sets of relations" (Cloke & Jones 2001:661; also see Massey 2006:41). In this chapter, I hope to have shown that what counts as "dwelling" in certain cases might be characterized not (only) by a sense of comfort and security but also by a set of "toxic intimacies" shaped by relations that are located both far away from as well as proximate to one's immediate locus of attention, action, and experience. At times, such comfort and toxicity might also mix together to produce a version of what Lauren Berlant (2011) describes as "cruel optimism." By tracking the movements of dust through the anthropogenic airdscapes of contemporary California, I have therefore given an account of "incorporation" not only as brute fact of analysis but also as an unwanted physical, affective, and social condition against which particular technologies of enclosure and practices of "detachment" are marshaled—albeit with only partial success (cf. Candea et al. 2015).

Everyday practices that take as their telos detachment from the wider world of substance and energy are not the only responses to conditions of environmental instability and uncertainty, however. While conditions of crisis can expose people to sometimes fatal risks, they can also be liberating and generative. In the next chapter, I further explore the ways in which Californians respond to drought by engaging the surfaces, spaces, infrastructures, and aesthetic properties

of their homes—what I call the ecologies of everyday life—as a system of not only practical but also ethical experimentation.

Chapter 5.

Ethical Experiments in the Ecologies of Everyday Life

Visiting my high desert hometown Joshua Tree from a nearby middle class suburban neighborhood in California's Riverside County, industrial lighting contractor James and his wife Madeline and I first met at a public workshop on "drought tolerant landscaping"—organized by the Morongo Basin Conservation Association, about which we learned in Chapter 2. After the workshop had finished, the three of us lingered in the cool, air-conditioned interior of the Joshua Tree Community Center and, over a cup of coffee, they told me how they had watched their beautiful bright green lawn turn over time to a parched, brittle brown—a consequence of California's historic drought. "It was like a pile of hay," Maddie said. "It was so depressing." But what could they do? James described to me how they had weighed up their various options. Like many of their neighbors were doing, they could replace their turfgrass lawn with an artificial alternative. But at \$5 to \$20 per square foot, that would stretch their budget to well beyond breaking point. Other neighbors were spraypainting the lawns in their yard a bright, cheery green. While a more affordable option, however, that's only a temporary fix; most companies estimate the paint job will last for about 3 to 6 months.

"Plus—it felt like cheating," Maddie said. "Like putting a band aid on the drought without addressing its root cause." So about two years ago, they decided to replace their lawn with a popular drought-tolerant turfgrass alternative, *Dymondia margaretae*, also known as "silver carpet," a hardy flowering plant endemic to the Western Cape of South Africa. "Less water. No mowing. Easy call," said Jack. But even the *Dymondia* struggled, ebbing and flowing between Riverside's extremely hot, dry summer and its much cooler winter. Disappointed with its performance, they decided to make yet another change, replacing the *Dymondia* with a garden of rocks, mixed succulents like agave, aloe vera, and yuccas, and native Southern Californian wildflowers like poppies and lilacs—the distinctive aesthetic of so-called "drought-tolerant landscaping."

At first, they were reluctant to let go of their lawn. "It's so engrained," Maddie told me. "A family home should have a nice, big green lawn." But when the couple learnt about a statewide rebate scheme designed to help with the cost of lawn replacement, they decided to make the change. "Now I just love the way it looks," Maddie says. "Granted," James admits to me, "the impact on water consumption is negligible. But it's a start. If everyone does their bit, we can get through this drought together—and whatever comes next." Nowadays, James and

Maddie like to begin their summer days with breakfast in their new front yard. For the last two months, they've had guests: butterflies, crickets, bees, and—Maddie's favorite—the luminous red-and-green Anna's hummingbirds (*Calypte anna*), famous for their dramatic aerial displays and friendly disposition. James and Maddie hadn't considered these guests when planning their new garden; they were mostly concerned with conserving water amidst a scene of unfolding change and uncertainty, whilst also maintaining a good-looking backyard they could show off to friends, family, and neighbors. But they're clearly a welcome side effect of the new wildflowers. "They fly right up to us to say hello," says Maddie, an ear-to-ear smile lighting up her entire face. "It's a real kick."

Now entering its fifth year, California's historic drought inaugurates a shock or perturbation into the "ongoingness" of the ordinary (see Berlant & Greenwald 2012:272). Inhabiting a state of flux, both social and material, Jack and Maddie are called upon to reassess what is best for them and their home: the color, texture, and shape of their vision of the good life begins to change. Taking place amidst a number of overlapping or competing concerns, this in part involves an intellectual task of moral reasoning. But much more than this, it also constitutes a project of improvisation and experimentation carried out on the material, practical, and symbolic substance of everyday life. California's convergent climate crises might in this way set in motion a rearticulated or else intensified sense of one's moral sensibilities, as well as the cultivation of new virtues. More importantly for this chapter, however, it can also "precipitate efforts to transform not only oneself but also the social and material spaces in which one lives" (Mattingly 2014:5; also see Pandian 2009).

Such ethical experiments involve significant risk; but they can also generate moments of welcome serendipity. Very often, they take place in the absence of a well-demarcated *telos* or "systematic end" (cf. Faubion 2012:73; cf. Ringel 2012). When routed through the overlapping contingencies of everyday life, such experiments must rub up against the stubbornness of the ordinary, like the limits of domestic budgets, the constraints of climatic conditions, or the relative inelasticity of one's own habitus. Importantly, however, these contingencies constitute the conditions of possibility for ethical experimentation as well as circumscribing the limits of its transformative efficacies. In Chapters 3 and 4, I focused on both the attrition and the resilience of the ordinary amidst scenes of social abandonment, environmental degradation, and infrastructural injury, whilst

also demonstrating how the past constitutes an intimate, visceral, and sometimes toxic presence in people's everyday lives. By contrast, this chapter foregrounds the more affirmative and future-orientated aspects of California's convergent climate crises.

James and Maddie are not the only family to embark on projects of practical and, at times, ethical experimentation that take as their substrate the surfaces, spaces, and objects of the home. While a great many Californians are ripping up their lawns, for example, many others are replacing their thirsty flush toilets with drought-friendly "dry" or "composting" alternatives. By focusing on the aesthetic practices through which the yard and bathroom are being arranged and rearranged, this chapter examines these troubled times of uncertainty and unpredictability as a space of moral work. Following other scholars of the ordinary, however, I will not distinguish "ordinary action and its norm-governed morality from something that could properly be called a deliberative ethical moment" (Mattingly *ibid.*:26; also see Das 2006, 2010, 2012; Lambek 2010; but cf. Zigon 2007, 2008, 2011). Instead, I will describe projects of what I call *ordinary environmentalism* that take the ecologies of everyday life as their site of ethical engagement, experimentation, *and* transformation.

In turn, this chapter hopes to contribute to a broader anthropological understanding of the house and home in times of change, uncertainty, and crisis. More often than not, the house is theorized by anthropologists as a powerful means or machine through which the "generative schemes" of social organisation become embodied and reproduced (Bourdieu 1977:89). Alternatively, others have approached the home as an external expression of a pre-existing inner state, condition, or character: a process of turning the inside out whereby "the internal (what is within persons) has been literalized [or externalized] as [...] (residential) space" (Strathern 1992:103; also see Miller 2009). Rather than reproducing or expressing what already exists, however, this chapter thinks domestic space, its material arrangements, and the activities it facilitates as an active assemblage through which residents can enact a process of transformation simultaneously on the external world of matter and energy *and* the inner space of their ethical selves. In this way, the house takes shape as a kind of *experimental system*.

With the phrase "experimental system," I wish here to signal a debt to the work of the historian and philosopher of the biological sciences Hans-Jörg Rheinberger (1997, 1998). For Rheinberger, the "experimental system" is the fundamental working unit of science. A model organism like the *Drosophila* fly can be adopted as an experimental system, for example, as can a particular scientific methodology and/or piece of equipment, like the polymerase chain reaction (e.g.

see Kohler 1994; Rabinow 1996; Rabinow & Dan-Cohen 2005). According to Rheinberger, the foundational trait of the experimental system is that it combines stability and reproducibility with the capacity to generate moments of instability, difference, and excess (also see Fischer 2007). The experimental system, Rheinberger (1998:287) writes, “forces one to move by means of checking out, of groping, of *tatonnement*. The development of such a system depends on eliciting differences without destroying its reproductive coherence. Together, this makes up its differential reproduction.” An experimental system, then, is a “device that not only generates answers; at the same time, and as a prerequisite, it shapes the questions to be answered” (ibid.:288).

Quoting the French biologist Francois Jacob (1995:9), Rheinberger (ibid.:288) thus dubs the experimental system a “machine for making the future.” While the contemporary North American home might seem like an unlikely candidate for such a machine (cf. Mattingly 2014:64; also see Murphy 2000; Anagnost 2013), this chapter argues that the home also partakes in “differential reproduction”: both promoting the continuity of life and the reproduction of the self over time whilst simultaneously generating moments of excess and difference which may—but may not—congeal into a situation of genuine emergence. Before doing so, however, the chapter first re-presents the physical and social context of California’s “historic” drought and its second order ramifications.

Living Through Dry Times: Re-Locating the Ordinary Crisis

On April 1st, 2015, California State Governor Edmund Gerald “Jerry” Brown Jr. addressed his constituents from a mountaintop. “Today we are standing on dry grass where there should be five feet of snow,” he declared. “This historic drought demands unprecedented action. Therefore I’m issuing an executive order mandating substantial water reductions. As Californians we must save water in every way possible” (Sifferlin 2015). The location of this political performance was well chosen (cf. Lakoff 2016:237). Pointing to an otherwise unremarkable patch of parched grass high up in the majestic Sierra Nevada, Governor Brown was standing at the site of the state’s annual snowpack survey, a public ritual of scientific measurement that in recent years had tracked the onset and intensification of a catastrophe unfolding in “slow motion” (Lochhead 2015). As California entered its fourth year of this historic drought, the 2015 survey had revealed an alarmingly low snowpack: just 5% of its yeartime average. Without its waters, there would be little lifeblood to sustain Southern California’s population (22 million people and counting) nor Central Valley’s \$17 billion per year

agricultural industry (Lakoff *ibid.*). In its absence, the Sierra Nevada snowpack had emerged as potent symbolic object of not only regional but also national concern: a powerful proxy for a changing climate (see Diemberger et al. 2012).

Along with epic wild fires, immense dust storms, and rapidly subsiding land in the Central Valley, to name only the most prominent physical impacts of the state's drought, the vanished snowpack had joined California's "ecology of extreme events" (Bodenhorn 2013:134), which in turn had coalesced among many residents into a palpable sense of "fragility" with respect to their immediate physical environment (Connolly 2013)—of local weather worlds acting "out of bounds" (see Hastrup 2013b:275). In turn, a cascading language of urgency, emergency, and rupture entered into even the most level-headed assessments of the threat posed by the drought and climate change to the state and its inhabitants. "The Golden State may recover, but it won't be the same place," announced one reporter, for example, while another proclaims a "relentless new reality whose dimensions are just beginning to come into view" (see Egan 2015; Lochhead 2015).⁶⁹

It was against the shifting contours of California's convulsive physical landscape that Governor Brown ordered the state's first-ever mandatory restrictions on urban water use, leading some to announce a new age of "climate austerity" (Aronoff 2015).⁷⁰ In both word and deed, Brown is attempting to cultivate a collective sense of historical purpose amongst his constituency, positioning California itself as a historic actor on the precipice of an epochal transformation. Following in the wake of a "State of Emergency," declared in January 2014, this executive order was then updated in May 2016—making many although not all of its temporary provisions and prohibitions a permanent part of state water policy. "Californians stepped up during this drought and saved more water than ever before," Brown's office declared (see Mettler 2016). "But now we know that drought is becoming a regular occurrence and water conservation must become a part of our everyday life."

Taken together, Governor Brown's executive orders chart in especially clear terms the making of an ordinary crisis: what begins as a state of emergency and exception gradually hardens into a permanent feature of everyday life. Even as California's drought is transforming some of the state's most iconic landscapes, then, it is also insinuating itself into some of the most intimate spheres of daily life, forging new hydrological subjectivities and intimacies along the way. This is the

⁶⁹ According to one recent poll, public concern over the drought is "extremely high and intensifying" (Notley 2015). Another poll finds that 81% of Californians view global climate change as a serious threat to the future of their state (Kordus 2017).

⁷⁰ The order directed the State Water Resources Board to cut water use by 25%.

topic of what follows. Rather than merely “reveal[ing] the deeper social grammar of a people that lies behind their day-to-day behaviour” (Hoffman & Oliver-Smith 2002:10), California’s convergent climate crises are thus actively reworking that grammar into inchoate and currently still unstable configurations. In doing so, it reveals itself as something approaching a “total social fact” of catastrophe (cf. Mauss 1990; Orlove & Caton 2010:402).

As described in the introduction to this thesis, crises are often imagined as singular, spectacular events concentrated both in space and time (e.g. Matthewman 2015:166; but cf. Erikson 1994; Nixon 2011). As such, the anthropologist Henrik Vigh (2008:8) writes that: “We have been accustomed to thinking about crisis as a rupture in the order of things; an intermediary moment of chaos where social and societal processes collapse upon themselves only to come back to life after the crisis is overcome.” Yet in situations of protracted, ordinary, or “chronic” crisis, Vigh continues, this intermediary moment of chaos can shift from a singular event to an ongoing experience and in doing so gain an “oxymoronic permanence” (ibid.:9) as a constitutive aspect of the social field—one to which people must attempt to recalibrate the material, practical, and symbolic content of their everyday lives (also see Roitman 2013; Berlant 2007a, 2008, 2011). In this way, “tentative orderings of disorder” (ibid.:11) may emerge. According to Vigh, the notion of a chronic crisis entails freeing or at least loosening the term “crisis” from its “temporal confines” (ibid.:9). Instead of “placing a given instance of crisis in context” (ibid.:8), then, the anthropological challenge therefore becomes to understand crisis as itself a kind of context: a terrain upon which new relational forms are improvised and enacted.

All this calls to mind what Lauren Berlant (2008:8) calls the “reinvention of life” in situations of social flux, which she argues takes place first and foremost from within the shifting scene of ordinary life through the improvisation of new intuitions, rhythms of being, and corporeal gestures. Importantly, however, such improvisation is indeterminate in its outcomes: while new rhythms of being may congeal into new forms of life that endure beyond the moment of their initial invention, they may just as easily stir, condense for a moment, but then drift off again (Berlant 2011:9). Might we think these processes of improvisation, experimentation, and reinvention in ethical terms? How? To explore these questions, I will now turn to my ethnography: an examination of the ways in which domestic surfaces, spaces, and practices, the primal scene of the ordinary, are being actively engaged and reassembled in response to conditions of ongoing water scarcity.

Lawn and Order

Among other things, Governor Jerry Brown's "unprecedented" executive order requires campuses, cemeteries, golf courses, and other large-scale landscapes to make significant cuts to their water budgets, whilst also prohibiting wasteful practices among homeowners—such as hosing off sidewalks and watering lawns in a manner that causes runoff. By singling out the otherwise mundane spaces of everyday life as the primary targets of intervention and conservation amidst a situation of unfolding change, Governor Brown has infused these spaces with historical if not truly epochal significance. In recent months, the humble urban and suburban Californian lawn has emerged as a flashpoint of especially fervent controversy and conflict—as I will describe below. In order fully grasp the passions at stake in these conflicts, however, we must briefly explore the lawn not simply as a material surface of everyday life, but also as an "aesthetic, ideological, and technological contrivance" (Veder 2000:344).

In America, the well-tended turfgrass lawn has become synonymous with a particular vision of the suburban good life (e.g. Stewart 2007:56). Originally designed to connect suburban homes even as they also separate and demarcate them, lawns were intended by early Anglo-American landscape designers to aesthetically, functionally, and ideologically strike a balance between a strident celebration of private property and utopian visions of suburban community (Teyssot 1999; cf. Bormann et al. 2001). Whether by law or by fiat (see P. Robbins 2007), lawns were in this way marked from the outset by ambivalence if not paradox: an important site in and through which one may perform a sense of mastery over one's private space ("my home is my castle") whilst simultaneously displaying publicly a concern for the social order. As such, the everyday rituals of caring for one's lawn like mowing, weeding, and watering are transformed into important civic duties, preventing the encroachment of natural *and* social disorder, whilst also providing individuals with the daily opportunity to cultivate and communicate a sense of themselves as civic beings in a way that is intrinsically bound up with Anglo-American pastoral sensibilities (Teyssot *ibid.*). Yet, as human geographer Paul Robbins (2007) has convincingly excavated, this particular pastoral aesthetic is in fact underwritten by a hugely intensive chemical-industrial complex.

"When smiling lawns begin to embellish a country, we know that order and culture are established," writes the influential nineteenth-century American landscape designer, writer, and horticulturalist Andrew Jackson Downing (quoted in Nicolaidis & Wiese 2006:18). But while well-tended lawns can and do function

as an important “common ground” (Teyssot 1999:12) that connects neighbors in a powerful if often unspoken social contract, they can (because of this) also act as sites of social contestation via which struggles over order and decency spill over into the visible realm—sometimes in a surprisingly intense and spectacular fashion (e.g. see P. Robbins 2007:xii). Here writing with Julie Sharp, Robbins (2003:956) notes that “there is no question that the lawn is a deeply cultural and psychologically complex landscape system.” Given the range and intensity of meanings associated with the lawn, it is perhaps unsurprising how transgressive lawncare practices can incite such social anxiety.

In Southern California, the ideological aspects of the American lawn and the anxieties these can incite have once again been thrown into sharp relief by the onset of the state’s historic drought—although with a significant twist. In recent months, for example, Californians have adopted social media platforms to identify and publicly denounce what they perceive to be profligate waterwasters in their neighborhoods, cities, and other social spaces. As such, searching Twitter for the hashtags #droughtshaming and #droughtshame will now reveal hundreds upon hundreds of images and videos of individuals washing cars and watering plants under the midday sun, or of water overflowing lawns and emptying along sidewalks and into storm drains. Often, these posts are also accompanied by addresses or geotagged maps, presumably denoting the offender’s whereabouts. Going one step further, Santa Monica real estate agent Dan Estes has even created a specialized smartphone app, DroughtShameApp, to help users “more easily capture geotagged photo proof of disregard for California’s water restrictions” (see Towner 2015). In addition, municipalities in California have long used the internet, geotagging technologies, and social media platforms to help residents report concerns and complaints within their neighborhoods—fallen branches, potholes, and noisy neighbors, for example—and these are today also being adopted with renewed vigor as instruments of crowdsourced civil surveillance.

Despite Governor Brown’s insistence that Californians “are all in this [i.e. the drought] together” (see Brown 2015), then, the digital practices of #droughtshaming therefore reveal deep-seated discontinuities both within and between communities, which perhaps unsurprisingly tend to unfurl along pre-existing social faultlines. While some do seize upon #droughtshaming to accuse specific individuals of wasting water, many others target municipalities, corporations, and California’s multiple landscapes of exclusion for accusation: including its innumerable golf courses, country clubs, and gated communities. In particular, so-called celebrity #droughtshaming has materialized as a virulent subgenre. In perhaps one of the most high profile “cases” to date, for example, the

actor Tom Selleck was sued in July 2015 by a Ventura County water district after a private investigator discovered a tanker truck, bound for the expansive turfgrass lawns and private avocado paddocks of Selleck's 60-acre mansion, was regularly filling up at a public fire hydrant. A massive and relentless surge of #droughtshaming ensued.

Much could be said about all this. But for the purposes of this chapter I am most interested in the what the digital practices of #droughtshaming might suggest about how California's convergent climate crises (and particularly its drought) are transforming the dominant arrangement of aesthetics, ethics, and affect that characterizes the North American home and yard. While #droughtshaming is in many ways simply an extension and intensification of the connection between lawncare, ideology, and affective investment outlined above, it has also seemingly inverted the precise cultural aesthetics of civic virtue, individual prosperity, and good neighborliness. Thus, the bright green of a verdant, well-tended lawn has now come for many (but by no means all) Southern Californians to signify not virtue but vice: selfishness, wastefulness, and civic disregard. In turn, a parched, brown, brittle lawn can be worn with honor as a badge of pride. As a billboard posted along California's Interstate 10 articulates this aesthetic inversion: "Let it Go. Brown is the New Green" (see Figure 22).

It should be noted here that anti-lawn sentiment has simmered under the surface of urban and suburban U.S. public culture for many years, occasionally erupting into the mainstream imaginary. For example, the outspoken environmental activist Lorrie Otto, founder of the national anti-lawn movement known as *Wild Ones*, has long condemned the lawn as "sterile," "monotonous," "flagrantly wasteful," and at the final reckoning "evil" (quoted in Kolbert 2008). By tracing the path of pesticides throughout an industrialized North American environment, Rachel Carson's (1962) influential *Silent Spring* also repeatedly implicated the suburban backyard as an everyday scene of ecological violence. Undeniably, however, the drought has catapulted such sentiment much more completely into mainstream public culture. Thus, in April 2015, Governor Jerry Brown identified the lawn as an aesthetic marker of a specific historical epoch that has now encountered an immovable and unsurpassable ecological limit, declaring: "People should realize we're in a new era. The idea of your nice little green grass getting lots of water every day, that's going to be a thing of the past. We're not going to change everything overnight but we are in a transition period" (Kaplan & Kirkpatrick 2015).

Putting its money where its mouth is, Brown's administration has made available millions of dollars in a landmark "cash for grass" turf rebate program,

which pays Californians by the foot to replace their water-intensive turfgrass lawns with a less thirsty “drought tolerant” alternative. If judged by the number of applicants and the amount of funds redistributed to ordinary Californians like James and Maddie, this rebate scheme has been hugely successful. According to the Metropolitan Water District of Southern California, for example, up to five thousand residential lawns are removed *each month*. “What we’re really trying to do is change people’s hearts and minds,” water district general manager Jeffrey Kightlinger recently explained to the press and public (quoted in Vercammen 2015). “We really want people to shift how they think about outdoor water usage, their garden, and their lifestyle.”

In this way, as I will examine in more depth below, the case of #droughtshaming and the shifting lawncare ideologies and practices it signals demonstrates one way in which aspects of “the ordinary” may become newly problematized as sites of collective deliberation and experimentation (see Foucault 1984; Zigon 2007; but cf. Laidlaw 2013:116).⁷¹ Rather than taking place outside of the flow of everyday life, however, it is my argument that these new deliberative and experimental practices are inescapably embedded within the ordinary’s material, practical, and imaginative contours (see Das 2006, 2010, 2012; Lambek 2010).

Located at the intersection of multiple overlapping historical trajectories, many Southern Californians are therefore foregoing this staple of postwar “suburban iconography” (Huq 2013:6) in favour of a more varied range of projects carried out in their homes and yards: ranging from drought-tolerant landscapes to water-efficient vegetable gardens. While some might hire professional landscapers to do the work, others are “rolling up their shirtsleeves and doing it themselves”—as one employee for the Palms Springs turf rebate program put it to me. In interviews and casual conversations with Southern Californian homeowners, the reasons I was given for choosing the latter tended to cluster around one or more of three primary points of explanation: a desire to foster a greater level of intimacy with the yard as an ecological entity; an economic imperative to do it one’s self; or to perform the kind of self-reliance and practical can-do competency which many people believe is appropriate to what they see as a contemporary iteration of

⁷¹ The adoption of Foucault’s notion of “problematization” within the anthropology of ethics has emerged as a recent point of debate. For example, Jarrett Zigon (2008:164) claims a kinship between “problematization” and what he describes as “moral breakdown”: a happening which interrupts the normal ongoingness of everyday life and thereby wrenches the subject from a moral to a properly ethical mode. However, Laidlaw (2013:118) argues that “problematization [for Foucault] is not the same as distinct episodes or events” but, rather, is “an inherent dimension of all human conduct”—and thus ordinary in the same sense used by Das (2006, 2010, 2012) and Lambek (2010).

“frontier life.” Each of these reasons may or may not be couched in explicitly ethical as well as practical terms; indeed, a vigorously pragmatic orientation to the present was often cultivated and explicitly celebrated among my interlocutors as itself a moral virtue. Further, accompanying these projects of domestic transformation is a lively culture of display, demonstration, and exchange in which people eagerly invite each other to tour their new yards, exchange anecdotes and offer advice, swap seeds and plant cuttings, and gift homegrown vegetables to their visitors—thereby turning the private space of the yard into a workshop or laboratory for the production of not only new ideas but also a shared sense of purpose. It is these ethnographic examples to which I will now turn.



Figure 22. "BROWN is the new GREEN." Spotted in San Francisco, September 2015.



Figure 23. During fieldwork, this satirical image was forwarded to me via email by a friend.

Ordinary Environmentalisms: Transforming Terrains of Sensibility in Times of Crisis

A friend of a friend, Palm Springs resident Jackie had invited me to visit her home after hearing about my interest in the Southern Californian lawn. Jackie and her husband, George, both now retired, had very recently replaced their thirsty turfgrass lawn with a stretch of artificial turf, roughly 15 feet by 15 feet, bordered on each of its sides by a meandering channel of pebbles, a sprinkling of larger boulders, and an array of pleasantly arranged evergreen trees, flowering bushes, and so-called “succulents” like agave and yucca. It is early April—now a fortnight or so after the first spring’s rain—and the bright purple, bell-shaped bloom of the Texas Ranger (*Leucophyllum frutescens*) frames the entire scene. During our conversation, Jackie and I sit on lawn chairs, sheltered from the sun by a large fabric gazebo. I ask her why she had decided to opt for artificial turf over other available alternatives.

The house had grass throughout the front yard and also in the back yard. And it was just sucking up water. And George never did enjoy mowing it or anything like that. Our neighbors across the street had put in drought-tolerant landscaping and we thought that it looked good. But we have two dogs, and needed a place for them to play. So we decided to put down a patch of artificial turf for the dogs and grandchildren, and put in native landscaping all around that ... It’s absolutely the responsible thing to do.

Before I know it, Jackie is inviting me to take off my socks and shoes and give it the “toe test.” “Go on! Give it a try. I bet you can’t feel the difference [from natural turfgrass]. The dogs certainly can’t. The only thing I would change is the color. It’s *too* bright. It really took some getting used to. At first I had the feeling that I should spray paint all the plants to make them look as good as the lawn does.” Clearly, the look and feel of her yard—its “everyday aesthetics” (see Saito 2010)—are important to Jackie. But so is the prospect of conserving water in a time of crisis. In this way, Jackie weaves together the practical, the ethical, *and* the aesthetic into one seamless account of her actions, situating her desire to do the right thing amidst the everyday challenges of catering for the corporeal desires and dispositions of husband, dogs, and grandkids.

Although many Californians celebrate the artificial lawn as an easy, water-efficient alternative to natural turfgrass, however, just as many others criticize it for creating ecological dead zones, amplifying the “heat island” effect of

California's urban and suburban built environment (Yaghoobian et al. 2009), and contributing to pollution as a side effect of their production and disposal—environmental burdens that may well outweigh any benefits gained in terms of water conservation. Indeed, despite her enthusiasm for the artificial lawn, Jackie admits that it's far from a “perfect” solution. “If there hadn't been a drought, I don't think I would have gone for it. But there is and we don't know how long it will go on. So this is just our humble way of doing our bit.”

By their own admission, Jackie and George are relatively “well off.” Thus, their response to the Californian drought is underwritten by significant economic resources. Unsurprisingly, others have to make do with much less. In 2009, for example, Joshua Tree resident Lorraine lost her job as a secretary. Her finances strained, she decided to supplement her weekly grocery shop with homegrown vegetables, also swapping them with a neighbour for freshly laid eggs. “At first it was a way to save some money and give me something productive to do,” Lorraine said. As California's drought intensified, however, what started out of necessity became a way to do her part. Having never gardened before, the learning curve was steep. So Lorraine joined an online forum for “high desert gardeners” to ask for tips and advice. As she gained experience and confidence, she began to post her own answers to inquiries. And although she is now working full time, Lorraine continues to garden enthusiastically.

As we've seen, the appeal of the well-tended turfgrass lawn is shaped by powerful ideologies of citizenship, community, and private property. But in times of crisis, citizens may be prompted by the state or forced through necessity to transform their yards from a set of unproductive surfaces into a productive and useful space. During World War II, for example, the U.S. government urged homeowners to plant “victory gardens” alongside or instead of their lawns in order to help feed themselves and thereby reduce pressure on the public food supply, much of which was being shipped to Great Britain (Miller 2003). In this way, the government infused the victory garden (also called “war gardens” or “food gardens for defense”) with an important role in national defense, refashioning it into a site of personal sacrifice and, in turn, a space in which to perform publicly one's patriotism.

Along related lines, both private and communal vegetable gardens (much like Lorraine's own) proliferated across North America in the social aftermath of the 2007/8 economic crisis—offering people valuable opportunities to provide for themselves, regain a sense of control in unsettled times, and (perhaps just as importantly) reclaim and rework the spaces of civic identity and collective belonging (see Nettle 2016; also see Lawson 2005). Taken together, these two

examples demonstrate how the widespread promotion of vegetable gardens in the U.S. retains a close relationship with periods of crisis. In turn, this close relationship reveals one way in which the aesthetic experience of domestic space and everyday life—what anthropologist Kathleen Stewart (2007:52) calls “the synaesthesia of being at home”—is powerfully shaped by the broader social and historical context in which it is embedded. While vegetable gardens are not being adopted in contemporary California with as much intensity or the same meaning as during World War II or in the immediate aftermath of the economic crisis, these examples offer us a helpful context of comparison for understanding the projects of practical and ethical experimentation described here.

Like others I interviewed, Lorraine preaches a DIY ethic of hard work and experimentation that she believes is historically and geographically appropriate to life on the American frontier. “Don’t believe everything you hear about things *not* growing in the high desert,” she tells me. “With the right balance of care, knowhow, hard work, and a bit of luck, things can do really well.” To help prevent water loss, for example, Lorraine has dug her vegetable bed deep into the earth. She also uses fallen leaves, old newspapers, and compost as “mulch”—a layer of organic material applied directly to the surface of the soil to further reduce evaporation and help improve the quality of the soil over time. “I’ve seen a definite improvement,” Lorraine tells me. Last year, Lorraine even installed a makeshift rainwater harvesting system, which captures rain from her rooftop, channels it into a 55-gallon barrel, and delivers it as a slow drip directly to the vegetables—although she admits that she sometimes has to “cheat” by using the garden hose. “But anyway,” she says, “even if my garden uses the same amount of water as the lawn did, if I bought an eggplant from the store, the water footprint of that crop would be much higher than mine right here. So overall I am saving water. Plus, they might not look as glossy, but they do taste much better.”

As we tour her garden, Lorraine points out basil, okra, peppers, eggplants, and kale—each thriving—encouraging me to navigate them by smell, touch, and taste. “These tomatoes didn’t turn out so well,” Lorraine tells me, picking a fruit from the plant. “See this leathery spot on the bottom here? Next year I’ll try planting them earlier on in the spring and giving them shade. If that doesn’t work I’ll replace them with something else.” Against the ordered spectacle of Jackie’s yard, Lorraine’s own garden makes for a much more ramshackle scene: peppered with the discarded garden tools and piles of soil that signify it as a space of labor and productivity. But, as I hope to have shown here, Lorraine’s focus on the garden as productive space does not preclude a concern with aesthetics. On the contrary, Lorraine is clearly invested in the sensory dimension of her garden,

which functions as both a source of great pleasure *and* a cluster of signs and symptoms indicating the health and wellbeing (or otherwise) of her produce—to be diagnosed, deciphered, and then folded back into future practice.

The importance of the aesthetic aspects of these shifting lawncare practices and their social significance was articulated to me most clearly and forcefully by Palm Springs resident Barbara, a member of the Desert Horticultural Society. Formed in 2005, the society's membership now totals almost 500; according to Barbara, approximately 50 of these members show up regularly for monthly meetings. One of the "perks" of membership is the monthly newsletter—*The Chuparosa*—named after a flowering shrub (*Justicia californica*) native to the deserts of Southern California. Each year, the society organizes a tour of Palm Springs gardens.⁷² People gather at the Wellness Park on the corner of Via Miraleste and Tachevah, fanning out from there via car, golf cart, bicycle, or foot. They stroll leisurely through the front and back yards, ranging in scale from small balcony gardens to large landscape-level conversions led by homeowners associations, caressing the cacti and sounding out the luxuriant Latin names of their favorite species. In 2015, I attended the tour, which focused on the theme of drought-tolerant landscapes. After the tour, I caught up with Barbara for an interview. She told me:

Though California has always been a dry place, it's reached crisis levels. We must adapt our own thinking to accept the reality of drought as the new normal ... Desert gardening is an experiment. Most of our members hail from elsewhere, so we have to figure it out together. We're not telling people what their aesthetic should be. We're showing a range of beauty. But people aren't going to move towards something they can't visualize.

However, not everyone is quite ready to "adapt their thinking" in this way. During the tour, my movements happened to synchronize with a middle-aged lady whom I call Joan. Visibly disdainful of what others seemed to engage with wide-eyed admiration, Joan's presence on the tour peaked my interest; I decided to say hello.

After introducing myself and my research, Joan took me to one side with a conspiratorial whisper: "You must understand, though, not everyone approves of all this." Pointing her finger in no particular direction, Joan continued: "Not everyone wants to feel like they are living in a barren desert landscape surrounded by prickly cactuses and shrubs that belong in Death Valley." In much of North

⁷² Similarly, the Morongo Basin Conservation Association also holds an annual "desert-wise landscape tour."

American public culture, the harsh and inhospitable landscape of Death Valley (and the desert more broadly) still tends to signify austerity and lifelessness rather than beauty: the limit not only of agrarian potential but also of human survival itself. Through reference to it, Joan is evoking “culture’s” other.⁷³ As such, we can see that Barbara and company are facing an uphill struggle—working against the full force of an aesthetic habitus that still beholds the well-tended turfgrass lawn as a key marker of civilization’s comforts in contrast to the perceived harshness and inhospitability of the desert’s arid landscape (see Teyssot 1999:10; see Figure 23).

Obviously, there is a great deal that separates these cases. But they also have a great deal in common. First and foremost, for example, each case reveals a clear preoccupation with the aesthetic aspects of the home and yard—not only as a mode of distanced cognition or contemplation but also as an active and embodied process of inhabiting the world. From the taste of homegrown eggplant to the feel of artificial turf between one’s bare toes, such aesthetics include “the whole of our sensate life ... the business of [our] affections and aversions, of how the world strikes the body on its sensory surfaces, of that which takes root in the gaze and the guts and all that arises from our most banal, biological insertion into the world” (Eagleton 1990:13; also see Saito 2010; Dawdy 2016:16-17). In this passage, the literary theorist Terry Eagleton emphasises the human body as a *substrate* of sense: as that which is acted upon. For the purposes of this chapter, however, I would like to foreground the human body as itself an aesthetic agent that engages in “actions that envision, manipulate, produce, and transform terrains of sensibility”—what the anthropologist Eli Elinoff (2016:3) calls *aesthetic practices*. Much more than simply symbols or tools for ethical expression (cf. Strathern 1992:101-102), the active arrangement and rearrangement of domestic space thus becomes a powerful means for taking action in an uncertain and unpredictable world, as well as one important way in which California’s convergent climate crises become woven into the color, texture, shape, and recesses of everyday life.

In this way, Jackie and Lorraine both describe their aims and actions in terms of what I will call a practical ethic of “ordinary environmentalism,” which, I argue, can be thought of as *ordinary* in two primary senses (e.g. see Das 2006, 2010, 2012; Lambek 2010).

First, although clearly not tacit or unthinking (cf. Lambek 2010:2), a practical ethic of ordinary environmentalism takes shape neither as a self-

⁷³ In this way, deserts thus occupy the lowest rung of what sociologist Valerie Kuletz (1998:254) calls a symbolic “hierarchy of ecosystems.” According to anthropologist David McDermott Hughes (2014:268), this sentiment is in turn shaped by the “deep historical association” of Western thought and culture with moist temperate biomes.

contained project of detached moral deliberation nor of probing self-examination. Rather, it is first and foremost a practical endeavor firmly embedded within the messy realm of everyday encounters, and must therefore be administered amidst overlapping or competing practical challenges as well a range of more-or-less resistant historical and material circumstances. As they have here, such circumstances might range from the precise qualities and properties of local soils to the demands of household pets to one's own "engrained" (as Maddie put it above) habits of domestic desire—all of which may be cultivated and transformed but never totally nor determinately so. In this sense, as James Laidlaw (2013:127) also notes, ethical life "is not a puzzle to which there can be a solution. The essential perplexity will always have to be lived with." An ethic of ordinary environmentalism as I envision it therefore embraces and operates within the affordances and perplexities of everyday life rather than attempting to transcend them entirely.

Second, despite differing radically in form and outcome, Jackie and Larraine both discuss their domestic experiments in terms of a desire to do the responsible or right thing without ever appealing to a transcendental or abstracted environmental figure—whether of "Nature" or of "Wilderness" (Nash 1965; Cronon 1996). Here, then, we have another meaning of the term ordinary: immanent to the concrete world of matter, energy, and events (see Lambek 2010:3). Put differently, what matters is not the totality of the environment in some abstracted sense—both everywhere and therefore, paradoxically, nowhere—but the specific sensory features and ecological wellbeing of *my* or perhaps even (more collectively) *our* environment.

What might account for the turn to the ordinary in this second sense? Given the turbulent nature of the overlapping, cascading ecological crises that constitute the context for their actions, the notion of an autonomous, self-regulating, and beneficent domain called "Nature" (see Merchant 2015)—although still a key locus of desire within many quarters of North American environmental discourse and activism—here functions only poorly as either a compass to guide action or as an arbiter of what ecological good practice might look like.⁷⁴ In addition to this, however, ethical experiments in the ecologies of everyday life can also over time foster a heightened awareness of one's own intimate participation in the flows of matter and energy that constitute whatever counts as "the environment," against which the figure of a transcendental Nature further unravels (Weston 2017:8). In turn, what are commonly framed according to a logic of obligation, abnegation,

⁷⁴ For a range of texts from across disciplines on environmental thought and practice without the concept of "Nature," see Morton 2009, Loftus 2012, Lorimer 2015, and Shotwell 2016.

and self-sacrifice (Maniates & Meyer 2010)—everyday environmental ethics—become re-realized as expansive acts through which one is made conscious of the self as a thoroughly and inextricably ecological entity. Here, the emphasis is not so much on self-denial as on developing new ways of inhabiting and experiencing the “inescapable ecology” of person and place (cf. Nash 2006). Turning from perhaps the most public to the most private of domestic spaces (the yard to the bathroom), I will now explore this point with regards to yet another form of ordinary environmentalism: emergent excremental encounters in drought-stricken California.

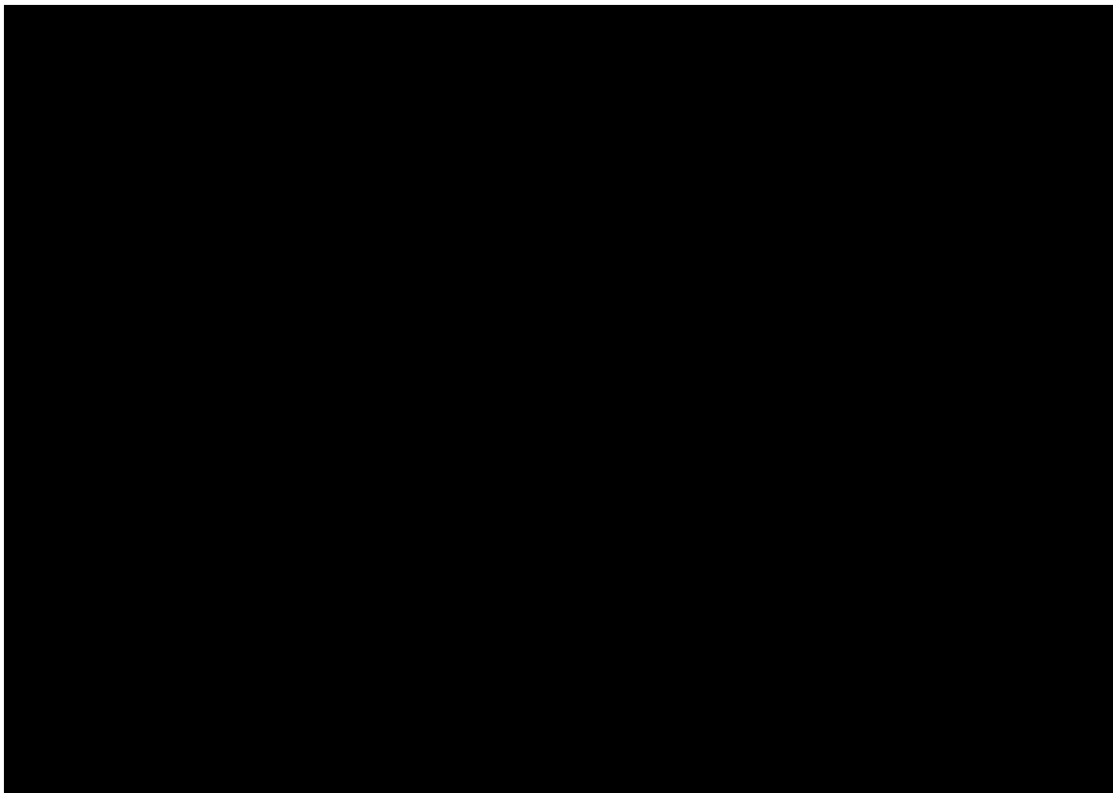


Figure 24. In the Morongo Basin, the local water district keeps a “water wise demonstration garden” where members of the public can come for advice and inspiration. Here we can get a sense of the prevalent aesthetic of so-called “drought tolerant landscaping.”

Opening the Black Box: Engaging the Hidden Hydraulic Infrastructures of Everyday Life

Like the well-tended turfgrass lawn, the modern flush toilet is also bound up in North American public culture with notions of order, decency, and the distinction between the private and the public realms. More often than not, scholarly, technical, and popular accounts of human excreta are each shaped by a modernist teleology in which the technoscientific management of waste becomes a pivotal

moment in the transition from “incivility” to “civility” (see Chalfin 2014:93; also see Laporte 2002; Poovey 1995; Osborne 1996). “According to this shared frame,” writes anthropologist Brenda Chalfin (ibid.) in her insightful study of infrastructure and excremental politics in Ghana, “the natural disorder of human waste is expected to give way to the political administration of excreta and the eventual sequestering of shit and shitting as base substance and private act.” In *History of Shit*, Dominique Laporte (2002) has shown how such accounts naturalize the paired emergence of the private citizen and the modern state. Despite transpiring within a specific time and place, however, this model of “human scatological evolution” (Chalfin ibid.) remains a guiding principle across a wide range of social contexts within the arenas of urban planning, international development, and public health—each of which tends to view public defecation through what Chalfin describes as an “optic of inadequacy.”

While such an “optic of inadequacy” may fail to capture the historical and political singularities of sanitation in the postcolonial Global South, for example, it nevertheless is a social fact that mass plumbing in the postwar United States has made separation from one’s own excreta today’s norm. In this way, undergirded by a robust faith in the efficacies of public infrastructure, the majority of people living in contemporary industrial and postindustrial cities have only very limited responsibilities when it comes to the practical management of their own excreta—so long as these public infrastructures continue to function as intended (see Kawa 2016). In *The Unbearable Lightness of Being*, Milan Kundera seizes satirically upon this point when he writes: “Even though the sewer pipelines reach far into our houses with their tentacles, they are carefully hidden from view, and we are happily ignorant of the invisible Venice of shit underlying our bathrooms, bedrooms, dance halls, and parliaments” (quoted in Kawa ibid.).

While often celebrated as a considerable technological achievement—which it undoubtedly is—public waste infrastructure has also had a significant impact on both ideas and experiences of intimacy, subjectivity, and embodiment beyond its purely technical functioning (cf. Larkin 2013). With complex, heterogeneous origins, the “modern hygienic imagination” (Hawkins 2006:58) and its distinctive “economy of senses” (ibid.) cannot be attributed solely to the rise of the private domestic bathroom and modern flush toilet. Yet there is no question that such a rise is deeply implicated in the everyday inscription upon an intimate, visceral register of the public-private distinction, whilst also facilitating the separation of self from excreta upon which ideas of the modern individual and the sanctity of its borders in part depends. As Gay Hawkins (ibid.:57) has argued, for example,

“plumbing has [in this way] altered the discipline of bodies, the ways that we manage and map them, and how we experience them as clean.”

What, then, can this tell us about the infrastructures of everyday life? In an influential argument, Susan Leigh Star (1999) notes that infrastructures like municipal sanitation and water supply systems are “by definition invisible,” only becoming visible in moments of breakdown (also see Kaika 2005; but cf. Larkin 2013). As California’s drought drags on, however, a wide array attempts to both visualize and manipulate the otherwise hidden hydraulic infrastructures of everyday life are today taking shape. This shows how it is not only “breakdown” in the strict functional sense of that term which may thrust infrastructures into the limelight of collective contemplation. For the most part, these attempts are focused on (although are not limited to) one of everyday life’s most familiar “black boxes”: the toilet.⁷⁵ Given the relations mediated by the toilet and the many meanings it is invested with, such experiments also involve improvising with ideas about civility, privacy, and space.

Take Danny, for example. Born and raised in the town of Joshua Tree, at the age of 18 Danny hitchhiked to Eugene, Oregon, to visit a close friend. Eager to leave the Mojave Desert behind him, he decided after only a short visit to move his life to the Pacific Northwest. In all, he lived there for 9 years, spending his time mostly in Eugene and nearby Portland, supporting himself as a musician and gardener and by working in restaurants. While in Portland, he met his partner: Maya. When Maya became pregnant with their son, Oliver, the couple decided to return to Joshua Tree to be near Danny’s parents—who offered to buy them a house across the road from their own. But as Maya told me: “It was on a busy road. It was big, with a chain link fence around the yard and brand new carpet. It didn’t need any love, so we passed.” Instead, they opted for a foreclosed and deteriorated property in a more remote part of Joshua Tree and set about fixing it up—living out of a trailer parked on their land while doing so. Having become attuned in Oregon to the practical arts of living sustainably, Danny “began a process of translating the knowledge [he] had gained in the drippy, wet Pacific Northwest to its polar opposite—the dry, prickly, and starkly beautiful desert.” Whilst Danny’s overarching goal is not to unplug from “the grid” entirely, he does wish to provide for as many of his family’s needs as possible from within what he defines as the social and ecological borders of Joshua Tree—using the productive potential of his home as a crucial means of achieving this aim.

⁷⁵ Often using more than a quarter of the average household’s total water supply, flush toilets are the single largest consumers of water in the home (Dimpfl & Moran 2014:733).

As I have argued so far, a practical ethic of ordinary environmentalism can precipitate efforts to transform not only oneself, but also the social and material spaces in which one lives (Pandian 2009; Mattingly 2014). From afar, Danny's house looks like any other in the area. Upon closer inspection, however, it has been clearly transformed by an array of ecological experiments which are—in many ways quite literally—woven into the spaces, surfaces, and objects of his domestic space. Two years on, for example, Danny has dug a series of artificial contours and depressions into the earth to help capture, channel, and otherwise manage the flow of rainwater across his two acres; along these, a row of pistachio trees have been planted. In addition, his rooftop is covered in photovoltaic solar panels. Like Larraine, Danny has also installed a rainwater harvesting system, as well as a more complicated greywater recycling system to pump wastewater from his washing machine into his yard. The normative modern North American home is designed to foster feelings of separation: inside from outside and self from nature (see Kaika 2005:51-78). By contrast, Danny's house is instead fashioned to optimize its “architectural involvement” (Vannini & Taggart 2014:53) within the external world of matter and energy, pulling the outdoors inside (e.g. solar energy) whilst also pushing the indoors outside (e.g. greywater). Notably, this active engagement with the external world in all its uncertainty and unpredictability stands in stark contrast to Sue's efforts (described in the last chapter) to buttress the border's of her home against the incursion of the outside (in the form of dust). But above all, Danny says, his real passion is the toilet.

Tall, stick-thin, friendly, with dirt caked under his fingernails and smeared across the knees of his blue jeans, Danny and I first met at a monthly meeting for Transition Joshua Tree—part of the international “Transition Network.” According to its founder, Rob Hopkins, the Transition Network is a grassroots “relocalisation” movement which aims to help connect communities interested in working towards a less globalized and fossil fuel-dependent existence (e.g. see Hopkins 2008, 2011). With its roots in the energy scarcity anxieties of the 2000s, early Transition activists adopted the spectre of “peak oil” as a general metaphor for the loss of local control in the wake of globalization as well as its concrete occasion to experiment with the spatial and material organization of everyday life. Substituting the vision of *sustainability* with that of *resilience*, today the movement emphasises the cultivation of a community's capacity to respond in real-time to shocks visited upon it from beyond.

To achieve this goal, common interventions in the United Kingdom, North America, and beyond include the development of community-lead renewable energy initiatives, the introduction of local currencies and trading schemes, and

the cultivation of nonindustrial food supply systems—each aiming to increase local sovereignty by unplugging “the community” in its all social and material aspects from a specific set of infrastructural vulnerabilities. In this way, “the local” and “the local community” are actively fashioned and celebrated as the proper object and horizon of social, economic, and moral practice. Although sometimes trending towards middle class isolationism and a politics of self-enclosure, Transition Towns come in all shapes and sizes and do not argue against connection *per se*. Rather, Transition advocates on the whole argue against the celebration of infrastructural connection as always and everywhere a positive thing—a key trend in postenlightenment thinking (Larkin 2013:332).

In 2010, led by the artist and teacher Christie and four friends, Joshua Tree signed up as the 96th U.S. Transition Town. Since then, Christie tells me, local participation has grown from strength to strength, now numbering over 50 members engaged in wide variety of socioecological projects. As Christie explains, many of these projects revolve around the figure of aridity. “The desert is undoubtedly a harsh place to live,” she tells me. “It takes grit to make. But it’s also a great place to work with the elements—to harvest the rain and sun and work with what we do have. As the planet’s climate changes, we believe it will become more and more important to share what we learn here in the desert with the rest of the world ... We’re the pioneers for a much hotter, drier climate to come.” In this way, Transition Joshua Tree anticipates a future in which escalating climate crises will force a return to precisely the kinds of localized self-sufficiency that in turn evoke an idealized frontier past, thereby infusing the banal scenes of everyday life in the desert with a grand, quasi-cosmological relevance that is equal degrees apocalyptic, utopian, and ordinary in its constitution.

Today’s monthly Transition Joshua Tree meeting takes place in a local bar. It’s 6pm. Two young men are playing pool, stepping outside for a cigarette at regular intervals. Others are watching basketball on the big screen; a group of campers from the Joshua Tree National Park has sat down for a meal of hamburgers, fries, and cold beers. Huddled in a quiet corner, away from all the others, a dozen or so people listen intently to Danny discussing the very intimate details of his life: his personal toilet habits.

On a daily basis, we turn a pristine resource—drinking water—into something dangerous—sewage. Whether or not you know it, by law we have to put drinking water in our toilets, and by law we have to crap into that drinking water. So when I came upon this realization, my sphincter totally froze up, and I became painfully constipated for some time. Because

I did not want to contribute to that paradigm of turning precious drinking water into dirty sewage. The composting toilet really freed me up, I got rid of that constipation, and you'll be glad to know that I've been regular ever since.

Behind Danny, a large clipboard holds a piece of paper featuring two hand-drawn diagrams of the "human nutrient cycle." One says "broken" and shows human excreta being carried off as "waste and pollution"—it is flanked by an icon of sad face. Depicting the seamless cycle of "eat, excrete, compost, grow," the other diagram is marked as "intact" and encircled in a heart shape. Beside him sits a wooden cube with a plastic toilet seat built into it. There are many types of composting toilets, Danny informs us. "I'm a DIY kinda guy and generally short on money, so I have gone the cheap route and made my frame from scrap wood and scrounged pails from a bakery. But I recognize that the world is filled with all varieties of people, so it's important to find what works best for you." With that, Danny sits on his toilet.

OK—so now I'm sitting on my compost toilet. All my human deposits are collected in the pail. I don't flush with drinking water, instead I flush with sawdust, which is from the local wood shop 3 blocks away, and so I'm also turning their waste into a resource. After this pail has filled up, we replace it with another empty pail, and let this one compost for at least a full year.

He continues:

And then once everything is safe we put it under the fruit tree. Now my waste is generating tasty fruit, and I love that, because on a daily basis I'm reconnected to the nutrient cycle. There's no waste cycle here, like there is with a flush toilet, because nothing is wasted—nothing is shunted off—everything is recycled back into the system to generate more resources.

Having finished his explanation, Danny walks over to a grey backpack, unzips it, and removes a medium sized glass jar. It's full of a brown, soil-like substance. With exaggerated motions, smiling into his audience, he slowly unscrews the lid. "Here we have an example of the finished product," says Danny, handing the jar to Christie. Clearly enjoying the theatrics, a ripple of laughter washes over the crowd. Slowly, the jam jar of thoroughly composted human excrement makes its way around the table. Some dip their crinkled noses towards the jar, sniffing gingerly.

It's a rich, woody smell—almost sweet—not bad at all. Feeling emboldened by Danny's own confident performance, others even run the crumbly compost through their fingers. Smiling at each other politely, still others hand the jar off to their neighbour as quickly as possible. Located at the intersection of everyday aesthetics, entrenched modes of corporeal discipline and appraisal, and unsettled systems of symbolic order, this Transition Joshua Tree meeting reveals a collective experiment in forms of ordinary environmentalism centered on the ethics of the excremental encounter.

Towards an Ethics of Excremental Encounter

Clearly, forms of “dry” or “composting” toilets have a far deeper history than the modern flush toilet, which has risen to widespread prominence in North America only in the mid to late twentieth century (Bray 2000). Further, excremental countercultures have long existed in the United States, perhaps most notably with the 1970s “back to the land” movement—which was itself prominent in California (e.g. see Brown 2011). Yet in both California and beyond, recent years have seen a wide range of experiments with alternatives to the flush toilet materialize across a spectrum of scales and situations with renewed and resignified intensity (Pickering 2010; Dimpfl & Moran 2014; Vannini & Taggart 2014, 2016). In the context of contemporary ecological crises, these experiments are currently being invested with utopian potential, prompting more than one commentator to celebrate the composting toilet as no less than “the toilet of the future” (Fisher 2009).

The basic premise of composting toilet is simple (see Jenkins 2006). The toilets are not plugged into domestic freshwater supply and wastewater removal systems. Instead of relying on water for waste removal, a combination of heat and aerobic microbes break down the feces and urine *in situ*, thus producing a pathogen-free, nutrient-rich material: the compost. To help facilitate the aerobic microbial process, absorb liquid, and mitigate against unpleasant odors, the waste is usually mixed with an organic bulking agent such as straw, sawdust, or peat moss—depending on one's own personal preference and/or whatever's to hand. Each geared towards this common goal, however, a wide array of alternative toilet types nevertheless exists, ranging from expensive commercial models to a toilet seat clipped onto a 55-gallon barrel.

As technologies, each option is accompanied by a specific cluster of promises and bundle of affordances, which in turn work to shape the excremental encounter in specific ways. Costing up to \$1,500, for example, many commercial models require relatively limited interaction with one's excreta, automatically

diverting the waste to a processing barrel or basin immediately below the toilet's bowl or in a subfloor space. Gravity and mechanical rotation help to break down the excreta; a heating element is often used to facilitate the dehydration process. The finished compost is then channeled outdoors or else removed via a small door in the front of the toilet. Having recently installed a commercial composting toilet, Natasha, a 33 year old nurse from Joshua Tree, told me: "I'm a single mom and have just started dating again. I would like to invite people over for dinner, and so the hands-off nature of the toilet appealed to me, compared to some of the more 'rustic' models I've seen."

At the other end of the spectrum, 47 year-old construction worker Timothy, his partner Jill, and their two children have substituted their flush toilet for a simple system of buckets (see Figure 25). When the bucket in one of their two bathrooms is full, either Tim or Jill cover it, carry it to the backyard, and leave it to compost for a full two years; they then take that compost and spread it on their family vegetable garden. In an interview, Timothy tells me: "We've tried various types now and I think this is the best composting toilet system I've seen for ease of use. We've tried a couple different commercial composting toilets previously, but this system is so much simpler. A bonus for us is that in the event of a power failure or breakage, nothing changes."

Whatever the type, however, all composting toilets demand, as a matter of daily routine, considerably more vigilance over and intimacy with one's own excreta than the modern flush toilet, as well as at least some fundamental knowledge of the composting process—as we shall see below. Indeed, for many this is an important aspect of the composting toilet's utopian potential. In this way, my research revealed how composting toilets exert effects that reach beyond any straightforward benefits in terms of *the environment, conservation, or sustainability*. Put differently, changing habits of excremental encounter can also have transformative effects upon on the self, revealing how "corporeal disciplines and symbolic systems intersect" (Hawkins 2003:51) and how these sites of intersection might be hijacked, worked upon, and actively manipulated to forge a different ethics of waste.

During fieldwork, these shifting ethics of waste were very often articulated to me in terms of what political theorist William Connolly (1999:27) has called "visceral modes of appraisal"—affective or pre-representational intensities from which "conscious thoughts, feelings, and discursive judgments draw part of their sustenance" (ibid.). While at first finding the idea of composting toilets "revolting," for example, one middle-aged woman described to me how she had come to love the smell of her own compost, while a young man told me (perhaps only half

jokingly) how he had begun to feel an uncontrollable jolt of guilt in response to the sound of a flushing toilet—both emphasizing the sensory density of the excremental encounter. Like with the shifting lawncare ideologies and practices described above, these brief examples again attest to the importance of the aesthetic dimension in the ethical experiments I am detailing here. In addition, they demonstrate how an ethics of excremental encounter emerges not only as an intellectual or deliberative ethical commitment to environmental sustainability as an abstract moral good, but also as the (sometimes risky) act of making oneself available to be affected by the sensory qualities of one's own excreta (cf. Latour 2004; Lorimer 2015).

With that said, however, the moral logic of the composting toilet does have a clear normative dimension: the cycling of organic material should never be interrupted. Like Danny's own hand-drawn diagrams, composting toilet manuals (of which there are many) regularly depict the human subject woven into food and waste cycles using images of human bodies, composting toilets, and the ecological arena of the yard bound together in one seamless, harmonious cycle. Further, the moral force of the unbroken cycle encompasses much more than the flows and transformations of human excrement; the need in composting toilets for bulking agents like straw, sawdust, or peat moss, for example, requires that users must also explore and exploit other waste streams—ideally in their “community”—drawing people into emergent webs of exchange and relation. Thus, as we've already seen, Danny acquires sawdust from a nearby wood shop, thereby “turning their waste into a resource.” Importantly, this particular wood shop is owned and managed by Emmett, another Joshua Tree resident, with whom Danny has subsequently developed a close friendship. In an interview, Danny described to me their friendship in terms of a set of overlapping and intersecting flows:

If it wasn't for the composting toilet, I may never have met Emmett. Now we're great friends; our kids play together all the time. I've also turned him on to composting toilets. So [by recycling our waste] we're also generating more joy and creating a much more loving community. Whether it's a garden or a community, sawdust or information, it's all the flows cycling in it that make it work.

Here Danny express a view that borders on the cosmological. According to him, much more than merely matter can flow, be transformed, and transform; so can multiple forms of social energy, including but not limited to *joy, love, or community*. Notably, Danny makes very little distinction in his account between what might be

called “the natural” or “the social” or else between matter, energy, and information. Simply to flow is good. In this way, Danny’s changing habits, rhythms, and routines of excremental encounter have set in motion a process by which he has come to re-conceptualize his world as “ecological” in a thick sense. Rather than standing above or outside of this ecology as a set of independent, self-contained selves, Danny, his family, and his friends are all perceived to exist within it as a set of temporary conduits or “waypoints” (cf. Kohn 2013:75): their bodies are unavoidably implicated in the organic functioning of the universe and its contents (Ingold 2000). Upon death, for example, Danny tells me how he wants to be buried on his land in a burlap bag with a sapling mesquite tree planted on top. He describes how, as he decomposes, he will nourish the tree, which in turn will nourish the world around it—calling to mind once again Harris Solomon’s (2016) notion of “metabolic living.” To be clear, I am not suggesting that all composting toilet users come to see the world or themselves as Danny does; by his own admission, he’s an idiosyncratic case. But more importantly, such ordinary environmentalisms are never determinate in the transformative effects they set in motion. As I explore below, new rhythms of being may congeal into new forms of life and senses of self, but they also may not (see Berlant 2011:9). That said, Danny does constitute a good example of how ethical experiments in the ecologies of everyday life can bind together both self and world in a moment of immanent transformation.

Once again, then, ethical experiments in the ecologies of everyday life must be administered amidst overlapping or competing practical challenges as well as more-or-less resistant historical and material circumstances. Rather than attempting to leave the ordinary behind, they instead “descend” into it, at once embracing and cultivating it (Das 2006; Mattingly 2014:208). Given the wide range of alternative toilet types available, an emphasis is placed on finding “what works best for you,” signaling a good fit between the composting toilet and one’s own everyday circumstances. A culture of improvisation and information sharing prevails. One is never alone; today’s internet is awash with reviews of particular toilets, instructions for their use and maintenance, and a great many forums dedicated to crowdsourced troubleshooting. Using these forums for advice and information—as many of my informants did—means releasing the very intimate details of one’s private life into a public space. For example, one recurrent genre of enquiry might begin with a quote much like this one:

I’m new to composting toilets and have begun using a bucket toilet with a urine diverter with dry sawdust as the cover material. Most of the time

there is no odor but sometimes there is. It's not offensive but it's not exactly desirable either (and its hard to describe). I'm going to try to experiment with this ... [but] any advice would be greatly appreciated.⁷⁶

In response to this enquiry, others users offer advice on what works best as bulking agent; a heated discussion about how best to deal with urine (whether or not to exclude it from the compost) then ensues. As evidence, these posts are very often accompanied by detailed narratives of experimentation and one's own trial-and-error troubleshooting experiences. One response encourages the originator of the thread to be more specific about the precise nature of the smell: "Putrid smells are a sure sign of compost going wrong ... Each smell means something different: alcoholic or fruity smells can mean too much starch or simple sugar, ammonia is sign of too little carbon, and hydrogen sulfide (rotten egg smell) is a sign of too little air." As with Lorraine's vegetable garden, then, the everyday aesthetics of composting toilets are therefore important not only or primarily as external expressions of the internal ethical self—a process of "turning the inside out" (cf. Strathern 1992:101-102)—but as a constellation of signs and symptoms which must be actively identified, diagnosed, responded to, and folded back into changing regimes of excremental practice. As one popular online composting toilet manual puts it (Sutcliffe n.d.), "Remember that you are dealing with and responsible for a living system. It needs care to survive just like a plant or garden. An unhappy composting toilet will let you know of problems in potentially unpleasant ways."

When troubleshooting the various issues that seem to invariably arise with composting toilets, individuals are compelled to consider anything and everything that may influence its normal operation—sources of malfunction might be located within or outside of the human body. For example, questions have been raised about how different medicines might affect the microbial processes taking place within these toilets. As such, one member of Transition Joshua Tree tells me: "A friend of mine had a bucket system [like Timothy's] at her herb farm and shop. That worked well for a while but she stopped using it for a couple of reasons. One main reason was that she's a herbalist who treats cancer patients and apparently chemo[therapy] can be passed along [in the nutrient cycle]. Yikes! She doesn't want to put radioactive waste in the pile." Another man, whom I'll call Jim, described how his antibiotic regimen killed critical microbes in his composting toilet, turning it anaerobic, as indexed by the onset of an intense rotten egg smell. After struggling on for several weeks, Jim decided to "give up and return to [his] old

⁷⁶ See permies.com/t/27641/Sawdust-toilet-smells-slightly. Accessed April 10, 2017

ways”—the flush toilet. As geographers Mike Dimpfl and Sharon Moran (2014:731-732) have also noted, such anecdotes expose a critical difference between flush toilets and their composting counterparts: “Composting toilets are organic technologies, actively responding to the bodies using them.” Thus, while the flush toilet is “relatively insensitive to such biological specificities,” these composting toilets place “qualitative demands on the microbial contents of bodily waste to function effectively” (ibid.). For Jim, then, doctor’s orders mark out the limits of “the ordinary” as a scene of ethical experimentation by rendering the practical demands of composting toilets impossible for him to fulfill.

In Chapters 3 and 4, I examined the shifting nature of day-to-day life in what I called the “shadows” or socioecological side effects of two large-scale waterworks: the Imperial Valley irrigation system (Chapter 3) and the Los Angeles Aqueduct (Chapter 4). By contrast, the preceding sections have investigated the ways in which people actively engage and transform the often-hidden hydrological infrastructures of the everyday in response to California’s convergent climate crises. In doing so, I have shown human waste is being released from the back box of the flush toilet and rerouted through a range of experimental practices that both reanimate and resignify its everyday aesthetics. As a matter of necessity, daily use of a composting toilet demands an ongoing interrogation of the intimacies that bind together person and place. In turn, new arrangements of domestic space can give rise to new, sometimes unexpected routines, habits, and bodily sensoriums. As ethical projects—but never only this—these changing practices of excremental encounter are firmly rooted in the pragmatic concerns of everyday life, which constitute the conditions of their possibility whilst also shaping the thrust of their trajectories and circumscribing the limits of their transformative potential.



Figure 25. A popular composting toilet set-up. The bucket to the right of the picture contains sawdust for “flushing.”

Conclusion

Now entering its fifth year, California’s so-called “historic” drought inaugurates a shock or perturbation into the “ongoingness” of the ordinary among many Southern Californians (see Berlant & Greenwald 2012:27). Building on the themes introduced in the last chapter—the body, the home, and intimacy—this chapter has examined the ways in which the ecologies of the everyday life constitute a platform from which to improvise and articulate new relational forms amidst this scene of unfolding change. Rather than simply “reproducing” (Bourdieu 1977) or “expressing” (Strathern 1992) what already exists, then, this chapter has presented an image of the home as an “experimental system” (Rheinberger 1997, 1998). As an experimental system, the surfaces, spaces, objects, and practices of the home both promote the continuity of life and the reproduction of the self over time, whilst simultaneously generating moments of excess and difference which may—but also may not—congeal into a situation of genuine emergence. In turn, this demonstrates how “everyday practice can have the potential not to be a mere repetition or [a] reproduction of a habitus but also a space of [...] moments of experimentation and revolution” (Mattingly 2014:207). Sure enough, routine, repetition, and a certain degree of orderliness are in many cases characteristic of

what is often taken to be “everyday life.” Yet these do not always add up to either unreflexive action or reproduction of what was (see Das 2010, 2012). As Nanny Munn (1992:101-102) observes, for example, repetition and difference are not necessarily mutually exclusive modalities of time or action; indeed, the former may in some cases constitute the very terrain across which the latter unfolds (also see Rheinberger 1998; Deleuze 2004).

As described at the beginning of this chapter, the historian and philosopher of the biological science Hans-Jörg Rheinberger (1998:287-288) argues that “the experimental system forces one to move by means of checking out, of groping, of *tatonnement*. The development of such a system depends on eliciting differences without destroying its reproductive coherence. Together, this makes up its differential reproduction.” According to anthropologist Kim Fortun (2003:186), the experimental system therefore “provides orientation, without determining where the system itself, or those that use it, [will] go.” Along the same lines, experiments in the ecologies of everyday life often occur according to a logic of iteration and recursion in which transformative effects accrete, amplify, and snowball often in the absence of a well-defined blueprint or *telos* (cf. Ringel 2012). This is a kind of “presentism” that is actively embraced rather than merely “enforced” from the outside (cf. Guyer 2007). About his own domestic experiment, for example, Danny often said to me: “We don’t know what’s possible and what isn’t until we try. Who knows exactly what will happen.”

Anthropological theories of social change often posit a political ontology of the creative act in which imagination precedes action as an “autonomous domain out of which new ways of living can and will emerge” (Cooper 2013:12; also see Graeber 2011; but cf. McLean 2009; Ingold 2010). In her compelling ethnography of queer activism in contemporary India, for instance, Naisargi Dave (2012:12) has defined the work of “affective activism” according to the following trajectory: “problematization of norms, the imaginative invention of new possibilities, and the attempted practice of new relational forms.” The logic is clear: “change the virtual limits of the possible in order to affect the actual world” (Ringel 2014:62). By contrast, however, the ordinary environmentalisms I have described here invert the temporal relation between the imaginative labors of inventing new possibilities and the practical labors of bringing those possibilities into being. Put differently, it is through differently forged ways of doing domestic space that everyday life can come to be imagined otherwise.

What springs forth, then, is the figure of an alternative, inchoate kind of everydayness from the ground of the old. When emergent practices and sensibilities confront residual or dominant modes of acting, feeling, and being, the

“critical proximity” (Cooper *ibid.*:9) of the new and the old can produce an affective friction (see Williams 1977; Heiman 2015).⁷⁷ Through this friction, otherwise familiar routines, habits, and objects can take on a rearticulated quality. A simple instance of this is the figure of “the guest,” who in the accounts offered to me by my interlocutors very often literally embodied the old and now outmoded ways of doing things (cf. Candea & Da Col 2012). In the case of composting toilets, for example, many people expressed concerns over how visitors to their home might respond to the unconventional technology. Natasha, for example, described to me how some people are “turned off” by her composting toilet; thus, she tries to “feel out” how “compost friendly” a potential guest might be before inviting them over. Such frictions require that we take account of the braided nature of continuity, change, and rupture in everyday life during situations of ongoing crisis, uncertainty, and unpredictability, a point to which I will return in the following chapter of this thesis—its conclusion.

⁷⁷ On the admixture of dominant, residual, and emergent elements in cultural life, see Williams 1977.

Chapter 6.

Conclusion: Ordinary Life in Extraordinary Times

At the heart of this thesis features a devastating convergence of climate crises in the arid lands of Central and Southern California. During fieldwork and whilst writing up, media coverage of California's contemporary "ecology of fear" (Davis 1999) captivated national and global audiences. Perhaps unsurprisingly, this media coverage tended to focus on the most spectacular and photogenic aspects of these crises: images of empty reservoirs, fallowed farmland, parched earth, "biblical" wild fires, and immense dust storms proliferated with great intensity throughout the circuits of public culture both within California and beyond its borders. Accompanying these images, a cascading language of urgency, emergency, and rupture entered into even the most level-headed assessments of the threat posed by the drought and climate change. Among my interlocutors, this coverage created something akin to an affective feedback loop, which in turn contributed to a widespread atmosphere of uncertainty, unpredictability, and crisis with regards to their immediate physical environment: their home. Historically, California has been no stranger to severe and long-lasting droughts, making it hard to say whether the current one is a temporary "extreme weather event" or else the emergence of a "new normal" (see Lovett 2016). Certainly, projections indicate that climate change will increase the risk of such droughts in the future, leading some scientists to announce a new age of the "megadrought" across an already arid American Southwest (see Williams et al. 2015). Whatever the drought portends for the future of California and the United States, however, what is beyond dispute is the considerable social, economic, and environmental toll of the crisis and its second order ramifications in the present.

Energized at least in part by a changing climate, California's convergent climate crises have come into being at a very particular historic juncture, dovetailing also with a period of profound social and political unrest in the United States. As I sit down to write this conclusion in early 2017, for example, Donald Trump has been elected as the United States president, winning the Electoral College comfortably even as he lost the popular vote by a landslide to Hilary Clinton. Having vowed to pursue an "America first" energy policy that will open up new frontiers in domestic coal, oil, and gas extraction whilst also eviscerating national and international efforts to combat global warming, the election of climate change "skeptic" Donald Trump has prompted an intense surge of concern for the wellbeing of the planetary environment. In response, for example, Michael Brune, executive director of the *Sierra Club*, an influential environmental

nongovernmental organization, said, “The world has been turned upside down and it feels like basic science is up for debate... Will we now have to debate whether gravity exists too?” (see Milman 2016). My friend Danny (whom we met in the last chapter) likes to capture this image of a world upended with the phrase “global weirding,” which he uses to articulate a more-or-less all-encompassing condition of unpredictability unfolding along multiple axes at once: a diagnostic category elastic and expansive enough to include the 2007/8 economic crisis, the Californian drought, *and* the recent election of Donald Trump.⁷⁸

Danny is not the only actor to diagnose the contemporary moment as one of unprecedented uncertainty. Along similar lines, for example, a range of scholars across multiple disciplines have identified the inauguration of what Ziauddin Sardar calls “postnormal times” or the “postnormal condition”: an “in-between period where old orthodoxies are dying, new ones have yet to be born, and very few things seem to make sense” (Sardar 2010:436, 2015; Sardar & Sweeney 2016). In this postnormal moment, argues Sardar, complexity, chaos, and contradiction have each emerged as the preeminent categories of collective experience—an idea familiar in its broad strokes from the writings of Ulrich Beck (1992) and Anthony Giddens (1990). Like all claims to world-historical change, however, this form of epochal boundary-marking entails a simultaneous invocation and rejection of an altogether different mode of being in the world—a time when things presumably did “seem to make sense”—which invites close scrutiny (see below). Even so, the image of a postnormal moment does resonate well with the popular discourses of social description that obtain among many of my friends, informant, and interlocutors at this time.

In July 2016, Governor Edmund “Jerry” Brown Jr. also joined the chorus of replies to Trump’s recurrent “denial” of global warming as scientific consensus. In his address at the Democratic National Convention (DNC), Brown announced climate change as no less than the “existential threat of our time,” one that is “subject to irreversible tipping points and vast unknowns” and that demands a “heroic” response from both institutions and individuals (see Brown 2016). “We know something about this in California,” he continued (*ibid.*). “We have solar, wind, zero-emission cars, energy efficiency, and yes, a price on carbon... We’re proving that even with the toughest climate laws in the country, our economy is growing faster than almost any nation in the world.” In this way, Brown’s comments portray climate change as a threat to the future survival of humanity to

⁷⁸ The phrase “global weirding” first emerged in North America in the mid-2000s as a popular alternative to “global warming” in order to signify the wide range of abrupt and unpredictable changes (and not simply a homogenous “warming”) one might expect as a result of rising average global temperatures.

be met heroically and ultimately transcended through technological progress, a recurrent refrain in contemporary “eco-modernist” strains of climate change discourse (e.g. see Shellenberger & Nordhaus 2011; but cf. Hamilton 2016). In a comment posted under a Youtube video of Governor Brown’s DNC speech, however, we find an alternative take of the golden state’s present socioecological predicament. “Personally I find it quite Biblical that as California keeps passing laws that go against God they experience more and more calamities,” writes one user. “Looks like California is reaping what it has sowed. I pray that they demand that those ruling over them repent soon and turn back to God or else it’s just going to keep getting worse.”⁷⁹

Whether God or Progress, both Brown’s speech and this response can be read as “grand gestures in the realm of the transcendent” (Das 2006:7). By contrast, this thesis has examined the often quiet and sometimes oblique ways in which California’s convergent climate crises have begun to percolate into the very intimate spheres of daily life, like the body and the home, blending with them and transforming them in myriad ways. In doing so, I have argued that the ethnographic material contained within these pages suggests a much greater degree of intimacy between the event and the everyday than is often acknowledged in the social theory of disasters. Rather than post-disaster “recovery,” then, I have offered an account of the imbrication and “mutual absorption” (Das *ibid.*) of the event and the ordinary amidst a scene of unfolding change—introjecting the conditions of the one into the experience of the other, in both directions (cf. Ries 2002:731). In turn, the metaphor of absorption raises the question of the resilience of the ordinary, its capacity to absorb shocks within its contours and endure in some or another recognizable format. Such a question is as much a matter of the duration of the shock as its intensity. At the time that I left California in July 2015, the drought was still in full swing and this question remained for many of my friends an open one.

The Chapters in Retrospect

What, then, does it mean to live an ordinary life in extraordinary times? Each chapter in this thesis has tracked from a different vantage point the multiple ways in which people are experimenting with the material, practical, and imaginative

⁷⁹ In 2014, a nationwide poll conducted by the Public Religion Research Institute found that almost one half of Americans—a staggering 49%—attribute the “severity of recent natural disasters to the biblical end times” (Cox et al. 2014). This number has increased from the 36% found by the same poll in 2012 (Cox et al. 2012).

elements of their everyday lives in response to California's convergent climate crises.

In Chapter 1, I presented the arid landscape of the American Southwest as a space in which multiple histories, myths, and affects circulate and converge. First, I described a conflict between competing impulses towards either exploitation or conservation in Southern California's "public" lands, which in this era of climate change, drought, development, and other anthropogenic influences has once again been thrust into the limelight. I then situated this present-day conflict within a long genealogy of the desert as both a thing and an idea, demonstrating how its rugged terrain has undergone multiple phases of enlistment in what Lauren Berlant (1991) has called the National Symbolic. In this way, I argued that the physical landscape embodies a social history, which in turn maps out a field of possibilities with regard to collectively conceiving of and responding to the concrete reality of these climate crises.

As such, places can invoke a wide array of imagined pasts which may in turn either "offer escape from the gloomy present or ... provide terrifying analogies that intensify anxiety" (see Stewart, unpublished manuscript). Building on Chapter 1, Chapter 2 explored the ways in which Californians call upon the histories embedded in their physical landscape in order to construct, contest, and respond to a sense of crisis. The point of empirical focus was conflict over the socioecological costs and benefits of solar energy megaprojects in the currently undeveloped high desert spaces of Southern California. While most ostensibly about the fate of space and place, then, I demonstrated how these conflicts can also be productively interrogated in terms of a cultural politics of competing "chronotopes": disjunctive temporal qualities mapped into the same geography. In doing so, I excavated two of the key chronotopes associated with the California desert, *gold rushing* and *deep time*, which work to give the temporal politics of California's solar energy economy its distinctive shape.

Continuing with the themes of temporality, materiality, and place, Chapter 3 shifted locations from the undeveloped high desert to the so-called Salton Sea, a once popular tourist destination which today sits largely abandoned on the precipice of total social and ecological collapse. Amidst the scene of decay, debris, and pollution, however, a hardy few remain—caught though in a state of social abandonment and historical suspension captured with the phrase "the meantime." Like both deep time and gold rushing, the meantime is a distinctive cluster of temporal qualities mapped onto a particular physical space: a chronotope. Within the socially and politically marginalized spacetime of the Salton Sea, I showed how the region's few remaining residents mobilize a range of everyday activities like

playing checkers, collecting abandoned artifacts, and fishing in the Salton Sea's polluted waters as techniques of temporal agency, which enable them to not only engage but also manipulate the flow of everyday time whilst simultaneously reshaping their relationship to the past, present, and future.

Travelling approximately 300 miles northeast from the Salton Sea to yet another ruined landscape, the Owens Valley, Chapter 4 enquired into the shifting textures of everyday life within the shadows of the first Los Angeles Aqueduct and immense dust storms it generated. In particular, the chapter paid close attention to the movements of dust through the home and body of Sue, an elderly Owens Valley resident who has developed adult-onset asthma after living all her life within the valley's desiccated and turbulent landscape. In doing so, I argued that histories of infrastructural harm specific to particular geographies can become lodged in the physical and psychical spaces of those that dwell within them, thus forcing us to radically rethink the linear spatial and temporal assumptions that often underpin ideas of, as well as responses to, conditions of environmental crisis and catastrophe.

In this way, Chapters 1 to 4 coalesce into an argument about the "thickening" of time as a site of social practice in situations of uncertainty, unpredictability, and crisis. In these chapters, time thus takes shape not merely as an empty, homogenous, linear, and "resolutely disenchanted" (Wirtz 2016:345) dimension along which the action of life and history unfolds, but, rather, as an animated and animating force in the topographies of daily experience. Even as time takes on a palpable physicality in everyday life, however, these chapters also show how space, place, and the environment are stripped of their status a stable referent in which one can unhesitantly place their trust.

Returning to my own home in the high desert town of Joshua Tree and the surrounding settlements, Chapter 5 reorientated our temporal perspective from the past to the future. In it, I explored the ways in which people innovate responses to California's convergent climate crises by marshaling and transforming the material, aesthetic, and symbolic properties of domestic space, including via such seemingly simple acts as replacing their turfgrass lawn with a vegetable garden or changing their flush toilet for a composting alternative, for example. In this way, the chapter showed how the house may in times of crisis become an important system of not only practical but also ethical experimentation: a system which participates in the generation of moments of difference, excess, and emergence. Notably, the ecology of this chapter's title (like that of the thesis) refers not to the usual targets or practices of North American environmentalism—such as "wilderness," "national parks," or "endangered species"—but to the ecologies of

everyday life in which a range of embodied encounters like eating, breathing, sleeping, and defecating are enacted (see Loftus 2012). Thus, part of the aim of this thesis has been to expand what counts both ethnographically and analytically as “the environment.”

Taken together, then, these chapters examine the ways in which the familiar objects, spaces, and rhythms of everyday life can in times of profound instability and uncertainty become infused with a new sensory density or rearticulated quality as the world shifts around them. Anne Allison (2013:2) observes how the convergence of catastrophic events in contemporary Japan has resulted in what she calls “the collapse of mundane everydayness.” However, as I hope to have shown, crisis does not always entirely extinguish the efficacy of the ordinary as a platform for action. Rather, in the context of California’s convergent climate crises, the habits and textures of the ordinary have themselves been rendered potent vectors of improvisation and experimentation as people are attempting to recalibrate the trajectory of their day-to-day life amidst a scene of unfolding change. This recalibration is akin to what Berlant (2011:2) calls the “drama of adjustment,” the labors of which are at once practical and affective and very often occur below the threshold of full eventfulness (see Povinelli 2011).

In turn, however, I hope to have shown how these dramas involve a reshuffling of not only space but also time: “incorporating ‘traces’ of the past and figments of a not-yet future to retemporalize [the] present” in which one is swept along (Allison *ibid.*:117). The effect is not unlike one of auteur Alfred Hitchcock’s signature cinematic techniques, the so-called “Vertigo Effect.” As ecocritic Timothy Morton (2013:9) explains, “By simultaneously zooming in and pulling away, we appear to be in the same place, yet the place seems to distort beyond our control. The two contradictory motions don’t cancel one another out.” Rather, Morton continues, they reestablish the manner in which we experience the ‘here and now’ in a way that is neither fully strange nor fully familiar (cf. Freud 2003). During a casual conversation about the everyday effects of drought and climate change on the city, for example, Joe, a long-time Los Angeles resident, told me: “When I’m walking my dog and I cross the aqueduct, where water used to flow through, there’s nothing there now. It’s kinda frightening, because when you walk through these landscapes you automatically think there is going to be water—as there is supposed to be—and there’s absolutely nothing. It’s a jarring sight.” Notably, here it is through the sensorial juxtaposition of one’s everyday activities and expectations with the partially reformatted landscape (rather than the abandonment of those activities, expectations, or landscapes entirely) that the jarring sight of the crisis materializes as a lived experience.

Post-Holocene Affects

As such, this thesis seeks to contribute to a broader anthropological understanding of the convergent climate crises of the historical present that is not necessarily tethered to an analytics of rupture, revelation, and recovery. With very few exceptions (Nixon 2011; Erikson 1994), most studies of environmental catastrophes or disasters derive from research focused on singular, spectacular events like hurricanes (Adams 2013), earthquakes (Oliver-Smith 1986), or tsunamis (F. Hastrup 2011) and conducted after the event is over—thereby having to focus on the reassembly of life in its immediate aftermath (often framed in terms of “recovery”). Alternatively, some studies widen the horizons of their analysis by either tracing the event’s effects forward in time (Doughty 1999) or retrospectively excavating the pattern of social relations which shape the onset and outcome of ostensibly “natural” catastrophes (Oliver-Smith 1994). The ethnographic context of California’s convergent climate crises and their second order ramifications poses novel theoretical questions to this particular body of research. As I have argued throughout this thesis, the difference here is that the “situation” as such is ongoing and that its precise status as an “event” is uncertain. As Berlant (2011:64) would say, its ultimate shape remains uncertain, unfinished, and “enigmatic.”

In turn, a view of environmental crisis or catastrophe that moves away from what is singular and spectacular reveals how the very distinction between the ordinary and the extraordinary can in conditions of chronic crisis collapse (see Vigh 2008). Rather than the oppositional relationship between “the event” and “the ordinary,” then, I have attended in real time to their imbrication and mutual absorption (Das 2006:1). This mixture is not merely mechanical in nature. Rather, seemingly erratic, unprecedented events mingle with the familiar and the predictable to produce an overarching dissonance that infuses many aspects of everyday life (cf. Calis 2017:66). Both the event and the ordinary become differently inflected by their close proximity; the effect is an uncanny sense of living in a time that is marked both by rupture *and* continuity. What, if anything, can this uncanny feeling tell us about the broader historical moment in which it is embedded?

Today, many scientists argue that the planet has entered a novel geological epoch, the Anthropocene, in which human activity⁸⁰ is reformatting the spaces and

⁸⁰ As prefigured by Karl Marx (2000:423), one problem with the conception of “the human” at the heart the idea of the Anthropocene is that it presupposes “an internal, dumb generality which naturally unites ... many individuals” as opposed to a historical conception of humanity as internally differentiated along faultlines of social and economic formation. Thus, critics claim, the so-called “age of the

systems of the global environment at an unprecedented rate and scale.⁸¹ Among other things, scientists say, this new geological epoch is defined by the accumulation of carbon in the atmosphere; phosphorous, nitrogen, and radionuclides in the planet's soils; and plastic in the ocean—as well as a mass extinction of species of the sort not seen for many of millions of years (see Kolbert 2014). First coined by the biologist Eugene Stoermer and atmospheric chemist Paul Crutzen (see Stoermer & Crutzen 2000), the term “the Anthropocene” has now burst the bounds of scientific debate to enter the collective vocabularies of social theorists, historians, policy makers, and the public, accompanied by a growing awareness that there are few places or processes on planet Earth that are now unaffected by human activity. In this way, the notion of the Anthropocene builds upon a deeper narrative about “the end of nature” (McKibben 1989). Yet, as Jamie Lorimer (2015:1) notes, this is not the triumph of Progress or Reason: “Nature has not finally been known, tamed, and rationally ordered.” Far from it, the Anthropocene reveals the global weather world as a highly complex and oftentimes convulsive system of feedback loops, tipping points, and state shifts which on the whole exceeds our predictive capacities to foretell its future (e.g. Connolly 2013).

The Anthropocene is far from an uncontested concept. Even those scientists who subscribe to the idea in its broad strokes cannot agree on precisely what criteria should be used to date its starting-point (Ellis et al. 2016).⁸² While these geologists may debate the exact moment of its onset, however, they nonetheless subscribe to a chronotopic logic which imagines the start of the Anthropocene as an irruption of discontinuity in time *and* space. Indeed, their epistemic culture demands that they do (see Davis 2008). As the global media reports, a team of scientists from the International Union of Geological Sciences (IUGS) is currently searching for the so-called “golden spike,” a rupture or break in the stratigraphic record which signals the occurrence of a worldwide event and marks the transition from the Holocene to the Anthropocene (Ellis et al. *ibid.*). The authors of an influential piece in *Nature* (Lewis & Maslin 2015) caution that changes to the

human” works to flatten the uneven distribution of risks and responsibilities that this historical moment clearly entails (e.g. see J. Moore 2016).

⁸¹ On the notion of “the Anthropocene” in anthropology and cognate disciplines, see, e.g., Tsing 2015:19, Hastrup & Hastrup 2015:2, Haraway 2016, A. Moore 2016, Povinelli 2016:9.

⁸² For example, some scientists identify the beginning of the Anthropocene with the advent of agriculture. Others tether it to the Industrial Revolution. Still others situate the onset of the Anthropocene in the detonation of the first atomic bomb, which not only set in motion a very wide range of environmental effects but also transformed our understanding of earth systems while simultaneously installing a particular idea of catastrophic risk both in U.S. public culture and beyond (Masco 2014:77-113).

earth's systems are heterogeneous, diffuse, and diachronic, "only appearing as instantaneous ... events when viewed from the perspective of millions of years of stratigraphic compression" (Povinelli 2016:13). Even so, as a charismatic object in both scientific and popular culture, the as-yet speculative "golden spike" constitutes a clear concretization of a temporal imaginary that reckons history as a sequence of discontinuous episodes each marked by a stark and totalising transition (see Swanson 2016a, Stewart, unpublished manuscript).

Thus, the Anthropocene "trades in talk of rupture": spatially, temporally, materially, and also conceptually (Mitman, forthcoming; also see Hamilton 2016). As environmental historian Gregg Mitman notes (*ibid.*), "Ruptures allow little place for history; their power lies in unprecedented events."⁸³ But what exactly do we gain from claims about the absolute discontinuity between the past, present, and future? By focusing on the ruptures, rifts, and *events*, might we lose sight of important continuities, connections, and *situations*? How might appeals to the epochal nature of the historic present direct attention away from the dramas of adjustment located inside and not outside of the ordinary? And finally, what theories of history and change are at our disposal to help better make sense of such questions?

Here I am indebted to the insights generated by the work of anthropologists on "post-Fordist affects." Such work takes Fordism not only as distinctive political-economic regime of accumulation but also a specific field of investments and affects which continues to bring forth powerful attachments in the present—"some clamorous, others all-but-untraceable"—often made all the more alluring in the wake of Fordism's ostensible collapse as economic arrangement (see Muehlebach & Shoshan 2012:318; also see Berlant 2007b). In the words of anthropologist Andrea Muehlebach (2012:62), a focus on post-Fordist affects thus allows us to "move beyond well-worn analyses that conceptualize the neoliberal present in terms of a radical historical break and toward considerations of the present as fundamentally intertwined with and even dependent on sensitivities generated in the [Fordist] past." In this way, Muehlebach asserts (*ibid.*), any "analytics of rupture must also be accompanied by an awareness of what remains."

⁸³ It is important to note that the discourse of rupture is itself historically and socially contingent. In *The Practice of Conceptual History*, for example, Reinhart Koselleck (2002:167) has described the emergence within the eighteenth century of an "epochal consciousness" whereby one's own time was experienced as a period of transition between two qualitatively distinct phases. In turn, Olivia Harris (2004) calls for attention to be paid to not only the epistemic but also the political stakes at play in representations of history that present a sharp break in the flow of events.

Analogously, I ask: In place of the Anthropocene as the overarching sign of our ecological times, might the present moment be better understood under the sign of *the post-Holocene*? In this case the prefix *post-* would not signal a “radical historical break” according to objective makers of decline and degradation, but, rather, the recombination of human-environment relations into new sociopolitical, material, and affective forms: not the death of “nature” or the end of “modernity” but one more moment in their ceaseless reinvention (cf. Appiah 1991). This would mean taking ethnographic account of the Holocene not simply as a now-finished geological epoch but also as a “host of attachments, commitments, investments, and aspirations” that continue to exert a “lingering presence” in contemporary social life (Muehlebach & Shoshan *ibid.*). In turn, it would also mean taking ethnographic account of the uneven ways in which the transfigured ecologies of late industrialism seep into and differently inflect the entrenched social, cultural, and corporeal ecologies of everyday life in a way that does not assume they introduce a decisive rupture into the ordinary such that its force necessarily determines the shape of both the present and the future (see Swanson 2016b). As simultaneously the supposed birthplace of the modern American environmental movement (Clarke & Hemphill 2002:161; Righter 2006) and one of the most intensely anthropogenic landscapes on the planet, California offers a privileged place and particularly sharp lens—yet undoubtedly not the only one—through which to pose questions of the post-Holocene.

Coda: The Drought Was Forever, Until It Was No More

“California braces for unending drought,” The New York Times reported in May 2016, citing Governor Jerry Brown’s decision to indefinitely keep in place statewide water conservation measures (Lovett 2016). Brown also ordered state agencies to “prepare for a future made drier by climate change,” the newspaper reported (*ibid.*). After more than five years of the most ferocious and long-lasting drought on record, however, things took a spectacular and unexpected turn in early 2017. In one February weekend, a cluster of intense storms pummeled California, dumping a total of 350 billion gallons of water into the state’s reservoirs and effectively ending the state’s historic drought. Today, most major reservoirs are at or above their normal historic levels and, according to the U.S. Drought Monitor, only 10% of California remained in the category of “severe” drought by March 2016—compared to well over 80% percent of the state a year before.⁸⁴

⁸⁴ See droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?CA. Accessed April 10, 2016.

Thus, after years of drought, California has been inundated with more than twice as much precipitation as “normal” since October 2016. Yet this has done little to avert the generalized sense of catastrophe that has now woven itself into collective perceptions of space and time—if anything compounding it. Seemingly overnight, for example, the photos of parched earth which had emerged during the drought as a staple of media coverage had been replaced with images of flooded cities and immense land slides. In Southern California, one especially strong storm caused power outages and blackouts, whilst a 20-foot sinkhole swallowed up two cars in one neighborhood in Los Angeles—with the drivers still in them. Although these drivers were eventually rescued by firefighters, the storm claimed at least five lives elsewhere in the southern part of the state. “This is now a historically wet year,” reported one official from the California Department of Water Resources. “It’s truly a remarkably wet winter, and that is having a lot of consequences” (Wong & Yuhas 2017).

Once again, then, Californians dwell in an atmosphere of uncertainty. From “historic” drought to “historic” storms, the moments when local weather worlds shift from ground to figure within the little and not-so-little dramas of everyday life are perceived both in the state and beyond it to be occurring at an ever-escalating rate, requiring not a metanarrative of rupture but an ethnographic attention to the changing contours of the ordinary within an unfolding present that is simultaneously a physical force and an enigmatic horizon. Further anthropological investigations are needed to elucidate the uncanny triangulations of space, time, and scale that proliferate within other post-Holocene spaces.

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