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“HOMESICK FOR SOMETHING THAT’S NEVER GOING TO BE AGAIN”:
REDEFINING IDENTITY AND COMMUNITY AFTER THE CAMP FIRE

BY

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Bachelor of Science, Northland College, 2014

THESIS

Submitted to the University of New Hampshire
in Partial Fulfillment of
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in
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This thesis was examined and approved in partial fulfillment of the requirements for the degree of MA in Sociology by:

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On April 16, 2020

Approval signatures are on file with the University of New Hampshire Graduate School.

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TABLE OF CONTENTS

ACKNOWLEDGMENTS.....	iii
LIST OF TABLES.....	v
ABSTRACT.....	vi
CHAPTER	PAGE
INTRODUCTION.....	1
METHODS.....	4
IMPACTS ON RESIDENTS' PHYSICAL LANDSCAPES.....	7
1. Anomie, Natural Cues, and the Physical Structure of Social Life.....	7
a. Literature Review.....	7
b. During the Fire.....	8
2. Landmarks, Cognitive Maps, and the Navigation of Physical Spaces.....	14
a. Literature Review.....	14
b. After the Fire.....	16
3. Place-based Identity and Environmental Change.....	22
a. Literature Review.....	22
b. Looking Ahead.....	24
IMPACTS ON RESIDENTS' SOCIAL LANDSCAPES.....	32
1. Anomie, Authority, and Reliance on Strangers.....	32
a. Literature Review.....	32
b. During the Fire.....	35
2. Social Capital, Weak Ties, and Network Disruptions.....	38
a. Literature Review.....	38
b. After the Fire.....	41
3. Threats to Community Identity.....	48
a. Literature Review.....	48
b. Looking Ahead.....	51
DISCUSSION.....	59
CONCLUSION.....	61
LIST OF REFERENCES.....	64

LIST OF TABLES

Table 1. Demographic information for Paradise town, California.....	2
Table 2. Descriptive statistics for sample.....	6

ABSTRACT

“HOMESICK FOR SOMETHING THAT’S NEVER GOING TO BE AGAIN”:
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by
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In the context of rapid environmental change and more frequent and severe natural disasters, it is imperative that we understand the impact these disasters have on affected communities, particularly the effects they have on residents’ relationships to both their physical and social worlds. To do this, I conducted twenty-four in-depth qualitative interviews with residents of Paradise and surrounding impacted communities following the 2018 Camp Fire, which destroyed roughly 95% of the town and was California’s most destructive wildfire to date. I present findings from these interviews in three stages: during the fire itself, during the short-term response, and finally looking toward long-term recovery. Throughout all of these stages, there is a disruption of norms and expectations that causes a sense of disorientation and dislocation among residents. The loss of physical space interferes with their ability to engage in social life and access critical social resources. Because physical places themselves are socially constructed, the end of these social uses also means a loss of the symbolic meanings once ascribed to them, thus inevitably transforming them. This impacts people’s place-based and community identities in important ways. As such, changes to survivors’ physical and social worlds do not occur on their own; rather, they interact with each other throughout the recovery process.

INTRODUCTION

On November 8, 2018, just before daylight, a wildfire broke out in the hills above Paradise, California. Within hours, the flames started to spread across the town; by the end of the week, the Camp Fire had become the deadliest and most destructive fire in the state's history. In the end, it burned more than 150,000 acres and 18,000 structures, more than 14,000 of which were residential. It destroyed more than 90% of the town and killed at least eighty-six people (Alexander 2019; Boghani 2019). One year later, many are still waiting to see what will happen. Building permits are being issued at a slow but steady pace, and the town is abuzz during the daytime with dump trucks and recovery crews still clearing out debris. But at night it falls silent again, the town's few remaining residents left alone on the ridge. Plagued by concerns about toxic water and soil, drug use and crime, and potential over-development by outsiders, many residents have left to start over somewhere new. This leaves Paradisians, regardless of whether they have gone or stayed, feeling adrift at the sudden and unexpected loss of their community. Here I will be exploring how the fire has shaped this experience of loss for residents and what challenges it presents as they attempt to reconstruct their lives.

Paradise is a rural town in the foothills of the Sierra Nevada mountains in Northern California, about ninety miles north of Sacramento and fifteen miles from the popular college town of Chico. In July 2018 (about four months before the fire), the U.S. Census estimated a population of 26,800 people. Paradise was known in the region as a popular spot for retirees; about one-quarter of that population was over the age of sixty-five, significantly higher than the national rate of 16% (U.S. Census Bureau 2018). For a more detailed summary of Paradise's demographics prior to the Camp Fire, see Table 1.

TABLE 1: Demographic information for Paradise town, California (U.S. Census Bureau 2018)

<i>Population (est. July 1, 2018)</i>	26,800
Under 5 years:	4.1% (National: 6.1%)
Under 18 years:	17.5% (National: 22.4%)
65 years and over:	25.1% (National: 16.0%)
<i>Race and Hispanic Origin</i>	
White alone:	92.8% (National: 76.5%)
White alone, not Hispanic or Latino:	88.3% (National: 60.4%)
<i>Education</i>	
High school graduate or higher, for persons age 25 years+, 2013-2017:	91.4% (National: 87.3%)
Bachelor's degree or higher, for persons age 25 years+, 2013-2017:	25.2% (National: 30.9%)
<i>Income and Poverty</i>	
Median household income (in 2017 dollars), 2013-2017	\$48,831 (National: \$57,652)
Persons in poverty:	13.7% (National: 11.8%)

The impacts of disasters like the Camp Fire are increasingly relevant in the context of destructive environmental change. While there is abundant literature about the environmental impact of these changes, as well as the political and economic implications, there is a gap in our understanding of the human consequences. This research seeks to address this gap, using Paradise as a case study for disasters that are likely to become more frequent.

It is critical that we consider the ways in which identity is influenced by the local natural environment, and how this relationship—along with the relationship to others who share that environment—changes in the aftermath of disaster. The sheer magnitude of the Camp Fire, and its near-total destruction of the town of Paradise, provides an opportunity to explore the ways in which these losses play out across a community. Additionally, this research can help us to better understand the role that both natural places and social connections play in resilience and recovery. Thus, my research here is guided by the question: how do disasters like the Camp Fire impact individuals' understanding of their own identity and of their community? Additionally, what challenges and opportunities to do these changes present throughout the recovery process?

Here I will address the ways in which the Camp Fire has affected residents' relationships to both their physical and social worlds at three different points in the disaster experience.

Beginning with the fire event itself, I will address disruptions to the natural order and the loss of social norms. Moving on to the short-term response—those weeks and months immediately following the fire—I will consider the loss of both physical and social infrastructure. This includes important landmarks that structure social life, as well as the relationships and experiences that ascribe meaning to particular places. Finally, each section will consider the fire's long-term impacts on individual and community identity. This refers to the ways in which people define and understand themselves and their relationships to those around them. The people in these pages are grappling with who they are without this place, but also with what it means to be a person from Paradise. Because of the inductive nature of this research, and because of the various spheres of life that are affected by such a disaster, this work draws upon a number of different literatures. These include sociological theory, cognitive psychology and network analysis, among others. Rather than presenting these distinct frameworks as a single body of scholarship, I present them only as they become relevant to my analysis. Each section of analysis will thus be preceded by a review of the relevant literature.

While this approach is untraditional, here it serves the purpose of tying together these otherwise disparate literatures to describe the residents' movement through disaster response and recovery. Disruptions that occur during the fire persist and take new form weeks and months later. As such, no single body of scholarship can thoroughly explain this process. Still, they maintain a common thread of disruption and uncertainty that impacts residents at every stage. At each point in this study, residents experience a shift from the familiar to the foreign. In bringing together these different areas of research, I aim to illustrate that this experience plays out at multiple levels, but also that they build on each other in important ways.

Throughout the course of people's lives, place plays a critical role in individuals' understanding of themselves and relationships with others. This matters here not only because this identity was challenged by the destruction wrought by the Camp Fire, but also because of the various ways people are now attempting to reconstruct these identities as they move forward. Ultimately, we see that throughout this process, physical and social environments intersect and act on one another.

METHODS

For this study, I conducted twenty-four in-depth interviews with residents living in Paradise and nearby areas impacted by the Camp Fire. I recruited participants by posting online in various Facebook groups for survivors of the Camp Fire. Individuals over the age of eighteen who were living in or near Paradise during the time of the fire, who wanted to participate, were asked to contact me through either email or Facebook messenger. Most of the people in this study (67%, n=16) were recruited this way. The remaining eight (33%) contacted me after being referred by other participants following our interview.

I conducted interviews with participants between May and August 2019. Residents were given the option to do the interview over the phone or a video chat on Zoom or Facebook messenger, or in-person if possible. Nine of the interviews were conducted online and six over the phone. In July I drove to Paradise for two days, where I saw the town for the first time since the fire and performed in-person interviews with four participants in Paradise, Magalia, and Chico. The remaining five interviews were done in a location of the interviewees' choice—either their homes, a study room in the public library, or a local coffee shop—in towns where the participants had relocated. As one might expect, in-person interviews tended to last a bit longer than those conducted over the phone or online, though this was not always the case. When

visiting participants' homes, there were often physical things that they wanted to show me, such as an object that survived the fire, a piece of artwork, or the view from the back deck of their new home. Aside from this, there were no noticeable differences in the kinds of information residents shared, based on the way the interview was conducted.

Individuals were informed ahead of time that our conversation would be audio recorded. This project was approved by the University of New Hampshire Institutional Review Board, and those participants who I met with in-person signed an informed consent prior to the interview. The others had their verbal consent audio recorded at the start of our conversation. Interviews lasted between thirty-nine minutes and two hours forty-one minutes, averaging about eighty minutes each. All participants were given the option to have their actual first names used or to be assigned a pseudonym.

Participants in this study ranged in age from twenty-five to eighty-years-old, with an average age of fifty-seven years. While my participants did tend to comprise mostly older adults, this is also somewhat representative of the population of Paradise, which had a significantly higher proportion of people over the age of sixty-five than the general population (25.1% and 16%, respectively) (U.S. Census Bureau 2018). My sample was also overwhelmingly female. Likely due to dominant gender norms around the processing of traumatic events, recruiting men for this study proved difficult. Of the four who ended up in the sample, two of them were recruited through snowball sampling by a female acquaintance in the study. Overall, this sample was relatively wealthy, with an average (mean and median) annual income around \$81,000—significantly higher than that of the town of Paradise prior to the fire. Still, this group represents a diversity of incomes ranging from \$12,000 to \$240,000 annually. It also includes a range of education levels, from a high school diploma (8%, n=2) to a Master's degree (21%, n=5). The

bulk of participants (58%, n=14) had either some college (no degree) or an Associate's degree. I did not formally record participants' race or ethnicity, although the sample appears generally representative of Paradise's non-Hispanic, white population.

It is also important to acknowledge residents' time spent in Paradise, as this undoubtedly impacted their feelings about and connections to their community. Participants averaged twenty-eight years of residence in Paradise or Magalia (and one in nearby Durham). Seven of them had lived there since childhood, sometimes leaving temporarily and returning later on in adulthood. Finally, three-quarters of the people in my sample lost their homes in the Camp Fire. More than a year later, it is still too soon to know how many of them will return to Paradise. As we will see, this question is still met with uncertainty by many of the individuals in these pages. For more detailed demographic information of the sample, see Table 2.

TABLE 2: Descriptive statistics for sample

<i>Age</i>	
Mean:	57 years
Range:	25 to 80 years
<i>Gender</i>	
Women:	83% (20)
Men:	17% (4)
<i>Annual Household Income (before fire)</i>	
Mean:	\$81,947
Median:	\$81,000
Range:	\$12,000 to \$240,000
*3 participants declined to answer	
*29% (7) reported significant decline in income after fire	
<i>Education level</i>	
High school diploma:	8% (2)
Some college (no degree):	29% (7)
Associate's degree:	29% (7)
Bachelor's degree:	8% (2)
Master's degree:	21% (5)
No response:	4% (1)
<i>Length of residence</i>	
Mean:	28 years
Range:	5 to 60 years
<i>House survived</i>	
Yes:	25% (6)
No:	75% (18)

Once interviews were completed, I transcribed each one verbatim. I then performed inductive, open coding, reading through each interview and indicating themes that emerged from the qualitative data. For this I returned to my original research question and focused on the changes residents noticed in their social worlds, as well as the impacts on the ways they experienced their physical worlds. I asked participants about the ways in which they engaged with their community prior to the fire, what they miss about Paradise, what their relationships with other Paradisians look like now, and how they have adapted to their new social environments. I also asked them to share stories with me from during the fire and when they first returned to Paradise, and about their vision for the future of that community. This inductive storytelling approach allowed me to better understand those parts of the process that were most salient for residents—an appropriate method given the unprecedented nature of this particular case. While there are many questions this study cannot answer, it highlights some important experiences and challenges that will be critical for future research.

Through these interviews, a story emerged with a particular order: residents' experiences were shaped by the traumatic experiences from the fire itself, of course, but also by the necessary reshaping and reorientation of their lives during the short-term response and long-term recovery. This paper outlines these various stages, and the ways in which participants' relationships to their physical and social landscapes have changed throughout that process.

IMPACTS ON RESIDENTS' PHYSICAL LANDSCAPES

Anomie, Natural Cues, and the Physical Structure of Social Life

Literature Review

In his framing of anomie, Emile Durkheim (1897) describes circumstances in which a lack of regulation disrupts the social order. In this state of normlessness, individuals feel

disconnected from those around them. The impact can be disorienting; people in this context may feel uncertain of where they fit and what to expect. This instability breaks down the ties between individuals and their social worlds, imposing a sense of detachment because “the future is less certain. One cannot be strongly restrained by a chain which may be broken on one side or the other at any moment. One cannot help looking beyond one’s own position when the ground underfoot does not feel secure” (Durkheim 1897:271). People’s understanding of themselves is embedded within both a material and a social world which provides definition and regulation.

The physical environment is one source of order that helps to guide behavior. Researchers in diverse fields ranging from occupational therapy to urban planning have noted the ways in which the physical environment structures human behavior. Workplace design features, such as open-plan offices, spatial density, and noise impact workers’ attitudes, satisfaction and productivity (Ashkanasy, Ayoko and Jehn 2014). These environment-behavior effects also play out at the neighborhood level, as the physical features of a community influence public health (Perdue, Stone and Gostin 2003), physical activity, psychological well-being (Dannenberg et al. 2003), and social relationships. Positive physical features like front porches and sidewalks encourage interaction and increase trust and reciprocity among neighbors, indicating that social and material spheres are inextricable (Wilkerson et al. 2012). Considering these myriad ways that the physical environment structures human behavior, it follows that the sudden disruption of that environment may have impacts that extend into social life.

During the Fire

People use natural cues every day to navigate spatial and temporal spaces. Disruption of these cues and of expectations of the physical world during the Camp Fire lead to a disorientation that parallels Durkheim’s concept of anomie. Lack of regulation disrupts the social

order in ways that cause people to feel disconnected from those around them and uncertain of where they fit and what to expect, thus breaking down the ties between individuals and their social worlds. So, too, may sudden and unexpected changes in the environment erode the ties between individuals and their physical worlds. Although Durkheim (1897) refers particularly to the ways in which the social world provides necessary restraints on individuals, we can also imagine the ways in which the physical world itself is constraining. It offers a material structure to our everyday lives: the rise and fall of the sun tells us when to work and when to sleep, just as the change in season dictates the ways we move and dress. The built environment, too, exerts control: roads dictate where and how we travel, and the actual distance between our dwellings often defines social distance among neighbors. Where we settle and how we live is largely determined by our ability to either adapt to or control the local physical landscape. These various landscapes are layered and interact with one another. The natural world provides the context for which the built environment is constructed, and the social landscape is nested within each of these. As such, an interruption in one part of the environment has ripple effects throughout.

For residents of Paradise, the sudden disruption of the expected physical world produced feelings of fear and uncertainty. Suddenly, it became difficult to discern day from night, inhibiting residents' ability to locate themselves temporally. Tim, who worked the graveyard shift at the hospital the night before, at first did not believe his teenage granddaughter when she woke him up that morning and told him it was 7:30. "It's hard to describe the way it looked," he tried. "The dark that it was, but it's supposed—it's a really strange feeling when it's nine o'clock in the morning and you would swear it was midnight. It's like, wait a minute. How can it be this dark? And then you look over behind you and all you can see in the background behind the trees is just this orange wall." Others were also struck by the distinct red-orange glow of the

sky against everything else that was shrouded in darkness. Marsha was confused at first, believing the strange glow was sunlight through fog, before she remembered they do not typically get fog at that elevation. “My room is like this orange copper color. I had never seen that color before, ever.” Tammy also recalled “the light dusky yellow turned the color of a manila envelope.” As residents started to leave town, they turned on their headlights. For some, the smoke was so thick they couldn’t see the car in front of them. “We could tell the fire was overtaking us,” remembers Sarah. “We couldn’t see through the smoke, but we could see the grass was burning on either side of the road and you could see this growing trail of embers down the pavement. You couldn’t see where the lines on the road were or where the road really went, but you could see the embers.”

The disorientation caused by rapid changes to the physical environment is perhaps best summed up by a conversation Tamara had with her two young daughters that morning: “My kids came to me and said, ‘Mommy, is it daytime or nighttime?’ And I looked outside and said, ‘I can see why you’re not sure about that!’ Because it was dark, you could see a giant—it wasn’t a cloud. There was no cloud. It was just dark. And then they said, ‘Is it snowing, Mommy? And I said, ‘Honey, that’s ash.’” Tamara’s children were not the only ones confused by the ash. Pam also noticed that “it looked like it had snowed on all the trees, the ash was so heavy.” Tony’s sixteen-year-old daughter went outside and *felt* the “charcoal that had just gotten really cold and was dropping on you, and it felt like rain.” And when Denise went outside to get her newspaper, shortly before seven o’ clock that morning, she thought, “Oh my gosh, it’s raining. They didn’t forecast rain,” before realizing that she was in fact *hearing* the ashes hit the ground. All of these experiences tricked the senses, confusing people about the time of day and the time of year, trying to comprehend what these sudden changes meant for their safety.

As the morning progressed, people started noticing tree branches and other larger debris falling from the sky, further solidifying the feelings of un-reality. Jo remembers that “it was just raining down big huge pieces of bark on fire.” Others remember the first thing they saw fall that indicated to them that this time was different. Tony watched “a footlong piece of cedar bark that was scorched that fell down.” Colleen remembers “an ember that—basically, it was a stick—it looked like a pencil, but it was glowing and red.” And Tim recalls watching “this big chunk of bark and leaf with a little twig on it fall out of the sky and land on the deck, and it’s smoking and it’s got an ember on it.” All of these memories point to moments in which residents recognized that the natural environment was changing around them in ways that were unpredictable and threatened their safety.

These feelings of insecurity were made worse by the challenges people faced in figuring out where the fire was and how it was moving. Many residents were initially reassured when they learned that the fire was in Pulga, a small town about twenty miles east of Paradise, across the Feather River canyon. But this reassurance quickly turned to confusion, as it did not match with the smoke, debris and flames that they were witnessing closer to home. It simply did not make sense to them that this fire could have moved so quickly and decidedly toward their town. When Jill saw a fire and called her husband that morning, he looked it up online and told her the fire was in Pulga.

And I’m like, are we sure it’s there? Because this looks like it’s a whole lot closer than Pulga, and there’s so much smoke [...] At that moment, the road crew guys [who I was standing at the overlook with] looked and they’re like, ‘Oh my god! Sawmill Peak is on fire!’ And that is right on top of us. I mean, that is like, right on top of Paradise and Magalia. And I looked out, and I’m like, you know, you have your ‘oh shit’ moment—pardon my French—but it’s like, oh shit! It’s at Sawmill Peak and literally blowing it to Magalia and Paradise. And I’m like, why does he think it’s in Pulga?

Tamara was similarly confused, recalling, “We had no idea. Because for there to be that much smoke, it had to have been coming from Pence and upper Paradise, but last I heard it was in Pulga, which was by [Highway] 70, so I could not understand. The path of the fire made no sense.” Additionally, spot fires arrived in town and across the canyon from the primary fire, causing further confusion. This led Tamara to conclude, as they drove out, “Everything’s on fire. Ok. I get it now. Everything’s on fire.” For residents like Jill, Tamara and others that morning, their long-standing knowledge of the area’s geography and expectations of wildfire behavior were upended by this new reality.

Because of these changes, even blue skies—once indicative of ease and safety—were deceptive, as residents were uncertain whether they had made it out, or if they ever would. JD described this uncertainty as he tried to evacuate: “I thought I got through it once I got past everything and I got to Clark, but no, Clark Road’s on fire [...] Once I made it through that roadblock, even before I got to Sawmill, it was blue skies. You would get random patches of blue skies and I’m like, ok! I’m through! And then you keep going and more houses are on fire [...] I saw the fire coming down both hills.” Here, JD was uncertain what blue skies represented in this new and unfamiliar context. This undermined his feelings of safety, instilled a sense of hopelessness, and challenged his ability to accurately read his natural environment. For others, the near-total lack of visibility provoked these feelings of insecurity. As Jo explained about her family’s evacuation, “We drove through the fire, and it was really, really scary. It was really scary. We couldn’t see and we didn’t know if we were headed to safety or really if we were headed into the abyss.” In all of these examples, we see that a sudden sense of uncertainty increased residents’ sense of risk. Although they were in the same place, geographically, that

they had known for years—for some of them, their whole lives—it became foreign with the loss of familiar symbols, knowledge, and expectations.

By guiding our daily behaviors, the natural order provides a universal, though often unnoticed, authority. This includes those things already mentioned, such as being able to locate oneself spatially and temporally within a particular environment and navigate it. During the Camp Fire, Paradisians experienced a breakdown in this natural order which mirrored Durkheim's (1897) recognition of the breakdown in collective authority. Ultimately, structure provides authority here, and "normlessness" refers not just to the loss of social norms, but also physical ones which together create a sense of certainty and security for people. Without this higher authority to guide them, residents had to rely instead on a more primitive, instinctual knowledge to navigate their way to safety. Many noted having a vague feeling that something was different, even before they saw flames or received official evacuation orders, despite the fact that wildfires were common to the area and many had experienced them several times before. Tony remembers this feeling simply: "You kind of just feel a different energy coming up about nine o' clock." This energy indicated to him that it was time to gather his family and get out. Similarly, Colleen explains how she got a sudden and overwhelming feeling of wrongness and called her friend to tell her to evacuate immediately with her young grandchildren. "She says, 'What do you know?' I go, 'I don't know anything.' I hadn't turned on the TV, I hadn't gotten any alerts or anything, it was just that something was different." Residents' attachment to the physical environment was quickly diminished, and they could no longer rely on the natural cues that normally helped to guide behavior.

Landmarks, Cognitive Maps, and the Navigation of Physical Spaces

Literature Review

In addition to natural cues, as mentioned in the previous section, people also rely on the physical structure of a place to orient themselves and comprehend their environment. Physical landmarks are critical for navigation (Tom and Denis 2004 and 2012; Denis et al. 2014). Put simply, landmarks are “point references” which serve as guides when navigating a particular environment (Lynch 1960:78). They serve as markers that help organize physical spaces, as well as allow individuals to locate themselves within their physical environment. Denis et al. (2014) give an example of explorers in sparse, barren environments; when these places do not have sufficient physical landmarks to aid in navigation, explorers create their own through the construction of rock cairns that help mark their movements through the landscape. In built environments, these landmarks are typically already in place and people rely on them to find their way, especially when they are in familiar environments and encounter them frequently. Landmarks become particularly recognizable when they are unique and prominent, located at critical junctures in navigation, and have attached meanings and experiences (Lynch 1960).

In studying the ways people navigate physical spaces, landmarks are found to be more efficient than street names. Landmarks are more easily recalled and more accurately recognized than street names, likely because the former describe spaces whereas the latter merely label them (Tom and Denis 2004). This is especially true in visually rich and interesting environments, where researchers have found individuals are better able to provide vivid descriptions, access specific memories of the route, and recall temporal ordering of various landmarks, when compared to more sparse environments (Tom and Denis 2012; Denis et al. 2014).

In addition to the structural features of landmarks themselves, places are also made memorable through individuals' interactions with them (Denis et al. 2014). This ongoing process leads to the construction of a cognitive map, or "one's internal representation of the external world" (Golledge 1999:30). Most people build cognitive maps using incidental knowledge that we acquire through everyday activities. While this knowledge may be prone to error, it is usually good enough, as most people, most of the time, inhabit and move through familiar environments. Physical understandings of the environment, behaviors and abilities of individuals to navigate that environment, and the sociocultural meanings ascribed to these places all coalesce to make environments legible to their inhabitants (Golledge 1999). Often these meanings are developed through experience and memory. Michael Mayerfeld Bell (1997) offers the concept of "ghosts of place" to describe the ways in which social and physical worlds meet at the intersection of memory; places retain particular meanings even after the context—associated people and experiences—has changed. In this way, "place" is defined by more than just its tangible features.

Because of the inextricability of physical places from their social meanings, they may be transformed into sites of secondary trauma following a disaster. Trauma reminders are cues that represent past traumatic experiences and cause distress, often embedded in the physical environment (Layne et al. 2006). These may be visual (situational), auditory, or olfactory, and they apply to wide range of traumatic contexts over a long period of time. In Belan, Russia, three years after a violent school hostage situation, children were most likely to report situational reminders like memorials and the ruins of their old school. Greater exposure to these reminders was correlated with higher levels of distress and a greater number of symptoms of post-traumatic stress disorder (Scrimin et al. 2011). Similarly, adolescents who survived the Utoya Island Massacre in Norway in 2011 still reported frequent auditory and situational reminders fifteen

months after the event, and these triggered PTSD symptoms (Glad et al. 2015). Following earthquakes in both Greece and Armenia, frequent exposure to trauma reminders like loud sounds and physical destruction were the best predictor of PTSD severity among survivors (Goenjian et al. 2011; Pynoos et al. 1993). The direction of this relationship is not entirely clear. It may be that individuals with more serious PTSD symptoms are more likely to recognize and be impacted by trauma reminders, or that frequent exposure to trauma reminders worsen the symptoms of PTSD (Glad et al. 2015; Goenjian et al. 2011). Either way, it is clear that the physical environment plays a critical role in the experience of traumatic events and recovery.

After the Fire

Upon returning to Paradise for the first time, residents encountered a new and unfamiliar landscape. This left them feeling disoriented and produced feelings of fear and uncertainty. With trees and houses gone from the fire, they suddenly felt exposed and vulnerable in realizing how closely they perched on the edge of the canyon. Heidi, who had lived on the ridge for most of her life, recalled how “you drive on the road but you never knew before, there is a cliff! But when you drove [before the fire], there was this safety because you had all these trees. You didn’t think about it [but] you can see everything now.” Security was particularly undermined for those whose homes survived the fire, who were now faced with returning to the gutted remains of their community. These residents were scared by what they encountered and overwhelmed by new sights and smells—of debris, dead animals, and leaking septic tanks—especially as they moved deeper into winter. Multiple residents described it as a “warzone” in which they felt alone and vulnerable. The lack of familiarity exacerbated these feelings.

The loss of familiar landmarks made navigation of the town difficult, even for residents who had lived there for decades. People struggled to recognize their houses and neighborhoods

in photos and videos posted online in the weeks following the fire, as they tried to determine whether or not their homes had survived. Tamara, who evacuated that morning with her two young daughters, explained how “people were posting all their videos as they were up there doing work [...] but you’d have to, like, guess because you weren’t quite sure. And you’d be pausing, ‘I think that’s my house?’” The confusion only grew worse once people were allowed back in town that December, several weeks after the fire. Over the years, residents had subconsciously come to rely on various landmarks to navigate the physical environment. With those suddenly absent, multiple residents drove by their own homes and other meaningful places. You can’t recognize it anymore,” explained JD who had lived in or near Paradise his entire life.

You used to know, I didn’t have to look, I’d be like, ok I’m here. I can go turn down this road and that’s going to take me to wherever, but everything we used to use to know where we are is gone. Like, when I went to the house I was living at, I drove past it twice, you know? [...] They [close friends and roommates] had lived in that house off and on since I was in like junior high. Christmases are there, you know, like that’s the house. And I passed it twice, because the whole area is just so unrecognizable.

Doreen expressed a similar sense of strangeness at

all the landmarks being gone, driving down a road and not knowing where you’re at on that road anymore. You know, the main way in an out of town, Skyway, driving down Skyway and having no idea where I was in Paradise. That’s what struck me probably is just that whole, where am I in this eerie place that used to be so familiar? Because I drove that road five days a week and now all of a sudden I don’t know exactly where I’m at on that road. Where am I at in Paradise? [...] I just had no idea. That was really weird.

In both of these cases, people struggled not just to comprehend the physical environment itself, but also to locate themselves within that environment. Additionally, this disorientation disrupted their personal histories, making this different than being lost in a new and unfamiliar environment. Rather, these places were tied to important memories, routines and relationships—all parts of the social context that gives meaning to place. The cognitive maps constructed by

individuals are also shared by their local social networks, meaning that it is not just the question of how to get from point A to point B, but also who that journey includes and what it means.

Indeed, home communities include various “ghosts of place” for all their residents. Following the Camp Fire, these old ghosts were forced to coexist along new ones in a drastically altered environment. For many, the sights of debris and ash were infused with memories of what once existed there. For Tamara, “Just seeing my town, that was really hard [crying], because that was our life. I mean, it’s where you go every day and where you see all your people, and everything’s gone.” Tammy, whose home survived, had similar memories attached to destroyed places: “That’s our neighbors’ dreams and their lives. You envision the little kids coming up the road, because you always bought their Girl Scout cookies.” Even after the physical infrastructure of these memories is lost, their social meanings guide the ways people relate to their environment. After the fire, though, these places were inhabited by new ghosts, especially for those people who experienced traumatic evacuations on November 8th. As residents pass through town, they see “cars on the side of the road that were burnt, and wondering, did they make it out?” Others pass by debris and “wonder how many pets died there. You have divots in the road where you know a car was on fire because it ruined the asphalt.” For Tim, who had to talk his wife out of stopping during the evacuation to help someone who had crashed their motorcycle (and ultimately survived with a broken leg), he noticed her visible reaction to the crash site as they drove back through town for the first time:

We’re driving along and I look over and [she] is just visibly kind of shaking and she’s crying. I thought she was upset about the town and so I reached over and took her hand. And she said, ‘There’s the motorcycle.’ And the motorcycle was still on the side of the road, completely burnt, but still laying on the side of the road. [...] Every time we drove in there for the next month—that motorcycle laid there for two months!—and every time we would drive by it, I would see [her] just look at it and you could tell she was reliving that moment. And that was hard for her, it really really was.

For Tim's wife and many others, traumatic memories from the fire and evacuation were inextricably tied to particular places in their new physical landscape.

Trauma that occurs in a particular place thus becomes embedded in that physical landscape, forcing some residents to restructure the ways in which they navigate the space—avoiding certain roads or limiting their participation in activities that take place in certain parts of town. For others, confronting the physical space is too overwhelming, and so they avoid Paradise entirely. JD, who drove through flames and believed at one point that he might perish in the fire, describes returning to Paradise as “reliving the trauma. When I go up there, I get that overwhelming feeling, that overwhelmed, like, ‘This is it’ feeling. [Long pause] Yeah, and you know the magnitude, it just feels like a lot of things kind of just come over me at once [...] It takes me back to that day every time I have gone up there.” Although he has the opportunity to return to that property, which is owned by his friends and previous roommates, he has chosen for now to stay in his trailer in a nearby town instead.

Helene, an eighty-year-old woman who lives by herself in Paradise in a home that survived the fire, was forced to abandon her car that morning as the flames crossed the highway. With several others, she sat in the parking lot of a local bar until six o' clock that evening, while buildings exploded all around them and firefighters maintained a border of defensible space around the group. While she has tried to adjust to the new physical reality of Paradise since returning to her home, she still must avoid the route from that morning. When she decided to try driving it one day on her way out of town, she quickly realized

That was a huge mistake [...] I had a panic attack. I mean, that's all I could call it, because I couldn't remember my friends and what I was doing, where I was going. I had to pull off the road and just sit and breathe and get back into sync, into gear. And then I was able to go on, but I didn't feel good the whole rest of the day. And I thought, well, I'm not going to do that again. I'm not going to do that to myself [...] Don't look right or

left, and you're going to be ok. But if I get to looking around too much, you know, that was an awful thing the other day, the panic thing. I don't want to go through that again.

For Helene and others, their altered relationship to the physical environment imposes serious constraints on their navigation of day-to-day life. Similarly, Doreen who used to travel several days a week to take classes at the California State University campus at Chico, stopped attending only two days into the January semester. "I decided I couldn't drive through the devastation every day like I was doing," she explained. On the one hand, avoiding upsetting sights and memories shields residents from unpleasant, sometimes traumatizing experiences. On the other hand, though, this avoidance places a major constraint on their ability to return to normalcy. Their trauma constantly reproduces itself in the physical environment, limiting their ability to move freely through their community and causing them to miss out on potentially positive, experiences and opportunities that could be useful in their recovery.

Still, despite all this, several people were able to find hope in the physical landscape of Paradise after the fire. While residents described that first winter after the fire as "depressing", "apocalyptic", and full of "death and destruction", spring offered renewed hope. Seeing nature that had survived or that was returning instilled feelings of optimism. The resilience of the natural landscape influenced residents' perceptions of their own ability to recover, as well as positive feelings about the future of their community. These signs of resilience did not have to be anything extensive. In fact, people often recalled modest things, like the sprouting of green grass through ash, the survival of a rosebush, or wildlife sightings. Brenda recalls one such encounter that gave her hope shortly after returning to Paradise after the fire:

Let me tell you something. This is profound. I was up there [at the Paradise property], I think the second time, and I was by myself, my mom wasn't there. And I was standing there with tears running down my face, and all of a sudden, this big bird—it was black with a red breast, beautiful bird—landed on a tree branch next to me, and he started looking at me. And he started chirping, beautiful singing, and I told him, I said 'You

really need to go to a better place.’ And he just stayed there, and he was chirping and singing [...]. There are no squirrels around. Paradise was full of squirrels, but there’s no life whatsoever. You could hear a pin drop, but here comes this bird. I’ll never forget it. It’s like, how did this bird know to come and sit there and sing to me? So it was a sign of, I guess, life. It’s like, ok, there will be life here. There is still life [...] a hopeful sign. Like, somehow that bird was sent to me by somebody—somebody, I don’t know who—but somebody up there sent that bird.

Small signs, like the timely songbird in Brenda’s story, were imbued with symbolic meaning in trying times. In some cases, plant life seemed to grow back stronger than ever before, and residents recognized the wildfire as part of a larger regeneration process that plays out in the natural world. This enables them to locate the destruction and loss in a context beyond just their personal experience, offering explanations like: “Without our meddling, Mother Nature will take care of itself” and “I think the nature will recover, because it always does [...] Life will find a way”. In many cases, residents also talk about the wildlife as extensions of their community, as Helene illustrates: “I had two jackrabbits that lived in my yard, and when I’d go out in the morning, they’d be like little rocks just kind of hunched down in the yard and I knew not to bother them. But when the fire happened, they took off. I didn’t think I’d ever see them again, but one came back, and so I have that now.” Others noted the return of resident deer, foxes, and bears—members of their community returning alongside them, also figuring out how to adapt to their new environment.

In these ways, the regeneration of the natural landscape overlays some residents’ attempts to heal their personal and social worlds. With springtime came the return of plants and wildlife, but also of cleanup and construction crews, signifying a return to life. In many ways, the natural world is better equipped to regenerate after a disaster. Indeed, wildfire is not only tolerable but an important piece in a forest’s lifespan. In certain climates, wildfires may actually improve long-term ecosystem health by reducing hazardous fuels (Keane et al. 2008), improving soil

ecology, and enhancing seed germination (Moore 1996). Additionally, some types of animal wildlife are specialized to flourish in burned conditions (Hutto 2008). Thus, residents witnessing this natural recovery in Paradise receive some framework for moving forward with their own rebuilding process. They are able to understand their community—which includes plant and animal life, as well as people—as one in transition, rather than gone forever. Still, this optimism sits alongside other more negative feelings that the post-fire landscape represents, including residual fear and anxiety, grief, and confusion.

Place-based Identity and Environmental Change

Literature Review

The physical environment is an important element in the construction of individual and community identities. People build a “sense of place” through place meanings, attachment and satisfaction. Often these are associated with specific features of the physical environment to which symbolic meanings are ascribed (Stedman 2003). In this way, physical landscapes are socially constructed (Burley et al. 2007; Stedman 2003; Magee et al. 2016). They undergo a process of meaning-making whereby “space becomes place” (Stedman 2003:672). In Bell’s (1997) framework of “ghosts of place”, places are imbued with social meaning through the memories we attach to them, thus providing us with “a deep sense of *belonging* to that place. Just as a place may feel possessed by our own ghost or ghosts, so we may feel that that place is a special possession of ours, through our ghost [...] The place possesses us, and we possess it; we belong to the place, and the place belongs to us” (Bell 1997:824).

Burley et al. (2007) describe this process as the transformation of physical environments into landscapes, or “meaningful subjective phenomena,” which are “reflections of ourselves in that we see place through the characteristics, beliefs, and elements that we see in ourselves”

(350). As a result, natural disasters result in visible, tangible losses like infrastructure, but also intangible ones. These include things like cultural heritage, feelings of safety, sense of belonging, social capital, and identity (Alston, Hargreaves and Hazeleger 2018; Magee et al. 2016). Indeed, the places that people value most are those that they associate with their culture, identity, and community (Blennow, Persson and Persson 2019). In this way, the social and physical worlds act on each other. Places are ascribed meaning through experiences and other attachments; in turn, these places provide residents with a sense of belonging and identity.

Considering the close connection between people and their physical environment, it follows that damage to this relationship has serious implications for well-being, particularly for those in communities that are closely tied to the natural world (Bourque and Willox 2014; Morrissey and Reser 2007). Rural communities are especially vulnerable, as they tend to rely more heavily on natural resources, be isolated, experience repeated exposure to natural events, and have less access to material and social supports (Morrissey and Reser 2007). Glenn Albrecht and colleagues (2007) developed the concept of “solastalgia,” combining solace and nostalgia, to describe “the pain or distress caused by the loss of, or inability to derive solace connected to the negatively perceived state of one’s home environment” (S96). Environmental destruction—caused through either the slow impacts of climate change, damaging extractive industries, or the acute impacts of natural disasters—disrupts the relationship between humans and places, resulting in this “lived experience of the physical desolation of home” (Albrecht et al. 2007: S96).

Similarly, the ecosystem health perspective posits that human health and well-being are inextricably tied to the health of the physical landscape in which they are embedded (Eisenman et al. 2015). In an attempt to quantify the impacts of solastalgia, Higginbotham et al. (2007)

surveyed residents of the Upper Hunter Valley in Australia, where open-cut coal mining has made drastic changes to the environment. They found that those groups who had experienced the highest disturbance also scored highest on their environmental distress scale. This scale includes various measures of solastalgia, including sadness when looking at degraded landscapes, lifestyles threatened by change, and anxiety about the loss of quiet, plants and animals, and other unique aspects of nature. Residents whose area was most impacted were also more likely to report that their sense of belonging within the community was undermined by the changes (Higginbotham et al. 2007).

These impacts also apply to changes that are not manmade. Following the Wallow Fire in Arizona in 2010, residents reported feelings of grief and stress specifically attached to the loss of forest and other natural landscapes, as well as visiting those areas less frequently after the fire (Eisenman et al. 2015). These residents returned to “environments and landscapes that have often been changed vividly from those where they previously sought solace, recreated, or earned a livelihood” and they experienced “grief from loss of forest and a strong desire to be able to reconnect with their landscape” (Eisenman et al. 2015:603). Similarly, following the damaging earthquakes in Christchurch, New Zealand in 2010 and 2011, residents reported significant declines in sense of place, physical and social attachment to their community, and identification with that community. Roughly one year after the earthquakes, they were reconstructing their identities apart from the physical place that had been damaged (Magee et al. 2016).

Looking Ahead

For residents of Paradise, the physical environment is inextricable from both individual and community identities. In describing their community before the Camp Fire, they cite the town’s physical attributes alongside its social characteristics, indicating the ways in which these

two things overlap and influence one another. Paradise's small size, geographic isolation and prevalence of wooded areas coincide with the community's identification as close-knit, independent, laid-back and traditional. Adrienne, a twenty-five-year-old college student who lived in Paradise all her life, described it as "a very quiet and calm town that is just surrounded by trees, lots of wildlife. You will see deer, you'll see foxes, you'll occasionally see bears. You'll hear coyotes down in the canyon at night sometimes. But it was, it's just a very kind of laid-back town [...]. It had that old vibe to it where you could go and just kind of feel relaxed and at peace." Here, the physical environment enables and encourages a slower pace of life and easy way of living. When other participants frequently refer to the "small town vibe" and tight-knit community," they are noting both its geography and the social proximity of its members. Doreen describes it more succinctly, claiming "that's why people love Paradise: it *is* nature."

These physical features influence identity, and so changes to the landscape inevitably impact the ways in which people understand themselves and one another. Heidi explains that "being from the mountains, you become a mountain person." Jeanie also alludes to this when she discusses her struggles to adjust to life in the neighboring college town of Chico: "I don't know what I'm going to be like as a Chico person. I don't feel like a Chico person, but I'm going to have to make myself into a Chico person." Here, place takes on a meaning greater than its location or its physical attributes.

Places take on particular importance when they intersect with individuals' personal histories. Pat, a sixty-one-year-old woman who lived in the same house in Paradise for her entire life, explains how her various memories remain but no longer have any place to land in the physical world. "There's a fondness of all the shit you got away with," she recalls nostalgically. "Those stories, the places we used to go and hang out at the Jolly Cone, and you'd go out behind

there and make out with a boyfriend, all that kind of stuff. All that is destroyed [...]. It's heartbreaking, because all that history is gone." Pam, another lifelong resident, agrees that her memories feel displaced since the fire, realizing that every home she had ever lived in was gone.

As such, these lost places make up an important site where the physical and social intersect. Social experiences ascribe meaning to particular places, and the loss of those places constrain social life in important ways. Physical destruction reproduces itself throughout residents' social worlds. "In Paradise, it wasn't just that you lost your house," explains Denise. "It was like you lost your life, figuratively—all of the choices that led up to you being there, and you know, you knew the butcher, you knew [everyone]—it's very hard." These places were where they met and interacted with friends, raised their children, and built careers. To many, like Idell, drastic changes to this physical environment compare to the death of a friend: "My house was living, and it died. And that was it for me. My town [long pauses, crying], my community, and my people. My life. It's like there's a blackboard and your whole life is written on there, every little thing you've done, everything you're going to do, and someone takes an eraser [to it]."

Not only did these physical characteristics contribute to identity and belonging through their attachment to personal histories, but they also promoted residents' feelings of safety and ease. Being in the forest, Denise "felt like the trees hugged us." Others recalled Paradise as a sort of safe space where they returned to in hard times. Pat described the apple orchard that she lived across the street from for decades, where "growing up, if I had to think, broke up with a boyfriend, all that stuff, that was all spent crying under one of the apple trees." The orchard burnt, along with her house, in the Camp Fire. Others described the peace of mind they found when returning to Paradise after living elsewhere. "I was used to the big city of course, but I had

some things happen when I was down there,” recalls Brenda. “I got involved in some drugs and stuff and got rid of that, but it felt safe to come home. See, that house was always my fortress. When things weren’t going so well down in Sacramento and the city, it was my place to go. My safe place, if you will.” The loss of this “safe place” is only one of many personal coping resources disrupted by the fire.

Residents of Paradise experienced a kind of double-trauma whereby they suffered the loss of their physical landscape along with those natural resources that would otherwise bring them comfort in hard times. For some, this manifested in the loss of physical places, like parks, hiking trails, or “the flumes”—old waterways which were once used to transport lumber and more recently were used as a popular spot for hiking, swimming, and other outdoor recreation. For others, this loss was more abstract. Heidi recalls driving through the Pacific Northwest several months after the fire and feeling anxious about the towering pine trees she once loved and admired because of the potential for fire. Denise shared a similar fear of the trees’ potential for fire danger, making sure “when we bought in [the new town where we relocated], which is a wooded area, we were very specific on not wanting to be in the middle of the forest.” This, despite the fact that being in the middle of the forest was precisely what drew her to Paradise in the first place, more than twenty years ago. Others cited sunsets (that were reminiscent of the fire glow on the morning of November 8th) and wind as sources of stress. Jammie, a forty-year-old mother of two, explains this shift for her and her family:

[Paradise] was beautiful. It was beautiful. Even when I drove [near the small town where I’ve relocated since the fire], like when I’m in those small towns, I’m like [peacefully exhales]. But then as soon as the wind blows or something, I’m like [stressed gasp, hands over her chest]. The trees, you know. So it’s a really calming, good feeling, but not all the time, if that makes any sense. It’s a good thing but then it’s also a trigger at the same time. So the trees were just beautiful, sitting at, we sat out in our backyard [in Paradise] every night and had smores, every day during the summer. We had a pool, I mean...we

were outside. And now we watch movies with the air conditioner on, so it's totally different.

For Jammie and her young family, they lost more than a place. They lost a critical coping resource rooted in the natural world. The comfort and bonding they once found in the outdoors have been replaced by fear and anxiety since the fire. Here too we can see the ways that disrupted physical landscapes, and the associated fear and anxiety they produce, also impact social life. Places provide structure for these interactions. Because natural resources are not only engaged individually, but also collectively—such as with Jammie's family campfires in the backyard—changes to the physical necessitate changes to the ways in which people relate to and interact with one another.

For many people from Paradise, regardless of their current location, this loss left them feeling unmoored. This is particularly salient for long-term residents who had spent a lifetime crafting an identity embedded in the town. Pat described this feeling as being “homesick for something that's never going to be again.” Others question how they can adequately mourn something that no longer exists. This leads to a sort of displacement that extends beyond physical relocation. Idell tries to put words to this in-between state:

Idell: What I'm feeling now is empty, like there's no substance there. Somebody put on there [on Facebook] when a caterpillar goes in a cocoon, it doesn't stay as a caterpillar and grow wings, it actually turns into a liquid state [...] and then it reforms itself, and that's exactly how I feel.

AB: Like you're in that liquid state?

Idell: Yeah! Liquid state. So I'm in that state of nowhere-ness, of the void, of the blackhole, or whatever. It's a place of non-being, and I really am there. You know, you buy furniture and you buy dishes and it's almost like, this isn't my stuff. I'm using somebody else's stuff. I'm living in somebody else's house. I'm using somebody else's dresses. I'm sleeping on somebody else's bed. Nothing feels like mine.

Residents struggle with these feelings of remaining attached to a place that exists only in their memory now, and not in the physical world. Indeed, their “ghosts of place” have been uprooted; both people and their memories are in search of a place to land (Bell 1997). Most residents have come to terms with the fact that “Paradise no longer exists.” But with identities built up around that place, what is less clear is where they stand in a world without Paradise, at least as they once knew it.

Because of this link between place and identity, many residents worry about irreparable damage done to the natural environment. Most notable of these changes is the significant loss of old-growth pine trees. As residents described Paradise, nearly everyone mentioned these trees. “It’s the trees that’s a big part of Paradise, all those pine trees” explained Brenda. “Thousands of them gone [...] That’s one thing people have really got to consider. It’s not going to be the same, it’s going to look totally different.” Idell agrees: “We can plant trees, but we’re not going to have those pine trees. Those are hundreds of years old. So I don’t know, we’ll have elm trees, or we’ll have tall trees, but they won’t be pine trees. That look is gone.” Beyond the fire itself, some worry that contracted companies are now being over-zealous in their removal of surviving trees. As Sarah describes it, “so many of the trees that probably weren’t endangered have been cut and are being cleared indiscriminately. That changes the character of the town for me enormously. I didn’t want to live in a community that had no tree canopy, and that’s going away! [...] That to me was one of the things that was a treasure.” In addition to changes already taking place, some residents express concern that these trees will never fully return, due to large-scale changes to the climate.

Anxiety about changes to the natural environment mirrors concerns that residents have about inevitable changes to the built environment too. Many of the houses that were lost in the

Camp Fire were several decades old, and these older styles will almost certainly not be replicated during the rebuilding process. This threatens the “old town charm,” as well as other changes that will erode its isolated, rural character. Jammie feels certain of the looming changes, insisting that “it’s not going to look the same. Downtown was the only place you had sidewalks, that was it. So it’s definitely going to be different, going to look more like a city I’m sure, once it’s rebuilt. It’s going to have the stucco siding with the tile roofs and tract homes or cookie-cutter homes. That wasn’t Paradise. You didn’t see that in Paradise. Everybody’s house was different.”

Concerns about the built environment are inextricable from those relating to the natural environment. For many, the old houses of Paradise felt more compatible with the surrounding natural landscape, whereas the more modern ones they are anticipating feel at odds with it. They also worry that these changes may actually threaten the remaining plant and animal life. For example, Adrienne agrees that they are “probably going to make it much more modern, far less trees, and so the wildlife probably isn’t going to return then.” Thus, the expected changes are not merely aesthetic, but also threaten those attributes that are most valued by residents. In this way, threats to identity and personal history did not end once the fire was out; rather, they remain prescient for residents as they keep an eye toward the future of their town.

But despite their grief and anxiety, several long-term residents of Paradise also reported feeling since the fire that their community was once again returning to how it was before the development and growth of recent years. These residents recalled the community as it was several years or even decades earlier, before the influx of young families that started to move to the area. Residents like Tony praise how “incredibly quiet and peaceful it really is” on weekends and evenings when clean-up and construction crews leave town. Pat noticed this in the physical landscape upon returning to her property for the first time after the fire.

As I stood there in my driveway, I could see the Sutter Buttes again. I hadn't been able to see that for a long time [...] because as people had moved in, they put up fences and all this [...] I stood there in the driveway and at the time I kind of recognized it. Internally, I had remembered that view from when I was a little, little girl. Because back then there weren't all these other houses going up. And it's like somehow, internally, I was ok with it.

Others expressed similar sentiments, but also expect that these physical changes will overlay shifts in the social environment, back to how Paradise used to be. Here, Idell explains how she expects that a smaller population may translate into that “small town feel” once again:

When I moved up there, it was a much smaller town. Much much smaller. I can't believe how much it changed in forty-five years, mind-boggling. Everybody knew everybody. You couldn't go in the grocery store without seeing the person who owned the feed store, and the person who owned this store, and the person...you know? You visit and you talk to people. It's gotten more commercial over the years, but it's going to go back to that now.

To people like Idell, population growth and commercialization had degraded community cohesion over the past several decades. Her vision for the future of Paradise, then, relies on this nostalgic memory of the past. Colleen, who had lived in Paradise for twenty-two years, also agrees with the favorable changes taking place as a consequence of the fire:

It was getting too big. It's always been a great town, but I've been here for a long time. back in the old days, you could drive down the street and you could wave to your people and you actually knew who they were. It was getting more citified. So sadly, it's going to be really nice because it's not going to be so busy and people are going to know who their neighbors are. We're going to go backwards a little bit [...] For the next ten years, it's going to be kind of nice, quieter and slower. I like that.

For these residents, the change is nostalgic, recalling a time when things were simpler and moved at a slower pace. From this perspective, they are able to frame themselves as survivors—not only of the fire, but of the long, slow process of change and development. While others who are less invested in the future of Paradise may pack up and relocate elsewhere, those who stay will be those who are truly invested in the highly esteemed “small town values.” Later we will more fully address this framing of insiders and outsiders in determining the future of Paradise.

Here we can see how residents of Paradise formed a place-based identity embedded in the physical landscape and attributes of that community. In turn, the destruction of that environment also complicates the ways in which they understand themselves and the way they move through the world. As we'll see, these changes occurred alongside important disruptions in social norms and relationships.

IMPACTS ON RESIDENTS' SOCIAL LANDSCAPES

Of course, when the Camp Fire burned through Paradise, residents faced more than just the physical destruction of their community. These sudden changes also had irreversible impacts on social life. In the previous section, I addressed some of the more abstract ways this has played out: the fire disrupted natural cues, made it difficult for residents to navigate physical spaces, and challenged preexisting identities tied to place. It follows then that these disruptions must also alter the ways in which people relate to one another. In the following sections, I will explore again the three stages considered above: during the fire, the short-term response, and long-term recovery. At each of these points, changes to the physical environment impact the ways people rely on one another, mobilize resources, and understand identity at the community level.

Anomie, Authority, and Reliance on Strangers

Literature Review

In an anomic state, “the scale is upset; but a new scale cannot be immediately improvised. Time is required for the public conscience to reclassify men and things. So long as the social forces thus freed have not regained equilibrium, their respective values are unknown and so all regulation is lacking for a time” (Durkheim 1897:253). In other words, the old rules are gone but there has not yet been time to develop new ones. Traditional forms of authority

from the state or other governing bodies are particularly important in anomic conditions when collective sentiments and expectations are obscured (Durkheim 1897). However, during disasters and other chaotic events, traditional authority itself may be upended, as well as the means of communication between authority figures and the population.

Traditional authority may take a number of different forms. This can include political and other community leaders, as well as mainstream media. Both of these groups are responsible for constructing the public's understanding of and response to incidents. Disaster events undermine order because traditional modes of authority, decision-making and information circulation do not apply. This may overwhelm individuals' capacity for sensemaking and exacerbate an already chaotic situation. Sensemaking refers to individuals' attempts to rationalize and understand their environment (Sellow, Seeger and Ulmer 2002; Weick 1993). Disruptions to sensemaking processes coincide with organizational breakdowns, as is illustrated in Weick's (1993) description of the 1949 Mann Gulch disaster. Here, a crew of thirteen smokejumpers died in a wildfire when they ignored their captain's orders to lay down in the ashes until it was safe to move. Chaotic and uncertain circumstances—what Weick (1993:633) refers to as a “cosmology episode”—eroded their trust in authority and transformed decision-making from a group to an individual process.

Disaster events set off a cycle of confusion whereby people must engage in sensemaking processes in order to understand their new and confusing circumstances, but those processes themselves are undermined. Strong organizational structure and access to relevant and accurate information can enable sensemaking and thus improve resiliency. However, without these things, attempts to make sense of a situation during the “critical period” of a disaster—while it is occurring—may lead to incorrect information and premature response (Stein 2004).

Leaders' attempts to provide certain information to their residents about uncertain circumstances may end up undermining preparedness and contributing to greater levels of damage during disasters. A belief in normalcy is not enough to protect people in abnormal circumstances (Sellow, Seeger and Ulmer 2002). Attempts to address new levels of chaos with outdated informational and communication tools may be particularly dangerous in the context of rapid environmental change, where we are seeing more destructive weather events than ever before; the ways in which we understand and respond to these events will need to quickly adapt to new challenges.

Indeed, informational needs are of utmost importance to people during disasters (Sellow, Seeger and Ulmer 2002; Littlefield and Quenette 2007). As such, the media plays a critical role in bridging the divide between residents and their leaders. Often the media provides the first indication people have that a crisis is taking place, and so it frames the way residents think about the event, their exposure to risk, and how they should respond (Seeger, Sellnow and Ulmer 2003). It also influences the legitimacy people ascribe to other authority figures. In a content analysis of newspaper articles in the week following Hurricane Katrina, Littlefield and Quenette (2007) found that the media served dual functions: legitimizing particular authority figures and identifying inadequacies in their leadership. This latter function caused residents to question formal authorities and whether or not they should be trusted. This is an example of the ways in which traditional authorities, media, and individuals interact during a crisis and how the event itself may undermine this relationship. Durkheim's (1897) concept of anomie, Weick's (1993) "cosmology episode", and Stein's (2004) "critical period" all provide frameworks for understanding these social disruptions caused by sudden disaster.

During the Fire

As discussed earlier, natural disasters inherently produce a state of anomie for those who are caught in the chaos. These events include not only sudden and drastic changes to the physical environment, but also to the social environment; this produces normlessness and uncertainty. Individuals may be confused and not know what behaviors are expected of them or of others. Collective authority—those norms and expectations that guide community life—loses its influence in times of upset.

Other more formally established authorities also proved somewhat powerless in the context of the fire. JD, who evacuated late that morning, sought out EMS workers to tell them about the dozens of cars trapped behind him on the main highway. With long, halting pauses and starting to cry, he recalls: “I’ll never forget the look. Just, these are the emergency medical people, you know? The people who are trained to handle this stuff, looked at me with such a face like, ‘We don’t know what to do. Just save yourself.’” In this case, their authority and ability to act in meaningful ways was overridden by the threat of the fire, rendering them powerless. Additionally, there was a breakdown in typical alert systems that left residents with no reliable authority to follow. Paradise had in place a Code Red phone notification system, where residents were expected to know their residential zone and wait for evacuation orders (Krieger and Debolt 2018). In theory, this would prevent unnecessary traffic jams and would allow those people who were most immediately threatened to escape first. However, many people who ended up losing their homes that day never got a phone call. Pam remembers waiting for the call that morning: “We knew about the zones, that we were supposed to be waiting until our zone was evacuated for the traffic, and we didn’t realize that the system wasn’t working. So about 12:15, our son-in-law called from Flagstaff, Arizona and said, ‘You guys need to leave.’ He was watching the

news. We couldn't see anything." Denise also did not know to leave until she got the call from her daughter who was watching events unfold on the news from Chico.

Without a clearly established authority, typical rules fell by the wayside, and this manifested in the chaos of the physical environment. Below, JD describes the chaotic scene he encountered as he tried to leave town that morning:

Eventually I saw that somebody had got up off the road and driven off the road through the fire to get out. And, at that point, I had already come to the conclusion that my life was going to end there. So when I saw a chance to drive through the fire up off the road, I took it and was able to get out. And as I got out, I realized that the cars ahead of me had been left. They were all empty. You know, there's just so much going on, there's explosions, there's fire all around you [...] Right where I was, where I got out of, maybe like twenty or thirty minutes later, they had gone through with a bulldozer and pushed all the cars out of the way, because so many people had left their cars just on the road. After I got past the initial block of cars, there was, like, it was like [deep sigh], it was like a movie where there was just cars scattered like criss-cross in the road. It made no sense.

He describes the strangeness of the situation as "something like a movie"; he has no other existing frame of reference that can help him comprehend this new context. Others describe it as "surreal" or "like some kind of a dream." Tim witnessed a firetruck spraying at massive flames on the roadside and described it like "a little kid with a squirt gun [...] He was so over-matched it was almost comical." And Heidi sensed "this weird feeling in the air," as she passed her friends and their families in cars packed full with pets and boxes; even the dogs didn't bark at each other and seemed absorbed in the strangeness.

In the anecdote recounted above, JD only hesitates for a moment before driving off the road and up the hillside—a behavior that would be forbidden and punished under any normal circumstance. Similarly, Adrienne recalls riding in the back of a truck bed with several others down the highway and passing police officers along the way who did not blink an eye. It was not until they were far enough away from the fire, in another town, that an officer finally stopped them and said they would need to figure out another ride. And when the truck driving behind

Tim slammed into the back of his vehicle, not once but twice, they simply kept moving. For as long as the fire was burning, the only rule was survival.

This anomie state was compounded by damage to the cellular towers and subsequent loss of cellular service. Because of the urgency of the situation and many people's inability to access their regular social networks, reliance on strangers was imperative. During this "critical period" (Stein 2004), residents were suddenly forced to abandon previous rules and norms that they had used to guide social life. Adrienne's mom, trapped in Paradise without a car, started to leave on foot when she was picked up by an elderly couple turning around in her driveway. Similarly, Jammie, who was separated from her thirteen-year-old daughter during the evacuation, recalled her daughter's story of getting out of town with her friend that morning:

The firefighter came running down the road and said, 'Get out of your cars and run! The fire is going to get you. You've got to run!' [...] So they get out and they start running. This time there was like a lot of people, so they come running, they get to cars that were moving, and everybody jumped in cars that were moving. So they jump in a car and they go a little ways. Same thing, they have to get out and they run. They did that for three cars.

Here, a typical danger—getting into cars with strangers—is neutralized. The more prescient danger of the fire takes primacy. Later, with her nine- and thirteen-year-old daughters together in Chico, a man who they do not know offers to drive Jammie's girls to her in Oroville, about twenty-five miles away. "I'm like, send it!" She remembers. "Stranger danger out the door! Right? Like, what's a stranger at this point? Yeah, send them with some stranger! Go for it!"

For some, this reliance on strangers was indicative of the tight-knit community Paradise was—an ability to trust people you do not know, paired with a willingness to help them. For others, the fact that they were unable to reach and help those in their typical social networks exacerbated their feelings of powerlessness. Changes to the social structure had deeply personal impacts on residents' understanding of where they fit in their community and how they relate to

those around them. Tim, whose wife called him panicked and crying, recalled: “Talk about the most helpless feeling in the world. For me, that was the absolute worst moment right then. That was the absolute worst. I just have never felt so helpless in my entire life.” Where he normally framed himself as a protector of his wife, here that identity was challenged. In these ways, the change in normative roles and expectations changes not just individualized behaviors, but also the ways in which individuals relate to one another. The importance of these social networks will be discussed in greater detail in the following section.

Social Capital, Weak Ties, and Network Disruptions

Literature Review

Social networks are a critical resource for responding to and recovering from natural disasters. Not only can they provide emotional support, but also material and instrumental support for navigating difficult bureaucratic processes. However, these social networks are also inevitably altered by disaster events. This places victims in a double-bind whereby their social support is restricted at the time when they may need it most (Kaniasty and Norris 1995). Additionally, various financial and other constraints may cause these social resources to be distributed unequally across and within communities.

Social infrastructure plays an important role in disaster response and recovery. Households with greater social capital—defined by participation in civic life, feelings of trust, and contact with neighbors—tend to recover from disasters more quickly, as do those with denser social networks (Sadri et al. 2018). Low-income people with less financial and material support may mobilize their bonding capital with similar others to pool resources in times of trouble. On the other hand, those with higher socioeconomic status may use their bridging and linking capital (to dissimilar others and to institutions, respectively) to make connections and

access services (Hawkins and Maurer 2010). Social capital also plays out in important ways at the community level, as neighborhoods with greater civic engagement, well-established social norms, trust in leadership, and denser social networks recover and repopulate faster after disasters (Nakagawa and Shaw 2004; Aldrich 2012). In fact, this social capital appears to have an even greater impact on the speed and quality of recovery than other pressing factors like the extent of physical damage and the presence of economic and human capital (Aldrich 2012).

Considering the importance of these social connections, it is not surprising that network disruptions are tied to psychological distress following a natural disaster (Morris and Deterding 2016; Bland et al. 1997). This is especially true when the event leads to increased physical distance between individuals and important others, through evacuation or permanent relocation (Kaniasty and Norris 1995; Bland et al. 1997). The destruction of physical gathering places may also disrupt routine activities that promote a sense of social embeddedness among community members (Kaniasty and Norris 1995). The stress buffering hypothesis posits that social supports help cushion the impact of acute, stressful events on mental well-being (Cohen and Wills 1985). Peggy A. Thoits (2011) suggests that this occurs through a variety of mechanisms. For example, social ties may provide opportunities for positive social comparison, that is, comparing oneself to similar others in a way that improves self-concept. Other evidence suggests that social networks may moderate the relationship between stressful events and mental health by providing feelings of belonging and mattering (Thoits 2011; Morris and Deterding 2016). Rather than receiving direct support from others, people develop a sense of comfort and security within relationships, as well as clear expectations of their assigned roles (Thoits 2011).

Disasters may disrupt the reciprocal nature of these relationships, though. The deterioration model of social support posits that stress from traumatic events hinders people's

access to social support, and so victims experience both the direct and indirect impacts of disasters. These include, respectively, things like physical losses and the experience of trauma, as well as the deterioration of social networks (Kaniasty and Norris 1995). In a five-year follow-up with Hurricane Katrina victims, Morris and Deterding (2016) found that displaced individuals were able to access various forms of social support through their new social networks. However, these new relationships lacked the comfort and ease of their long-term relationships, from which they felt isolated. Additionally, individuals were distressed by their inability to fulfill obligations in those long-standing relationships. In this way, social networks are important not just for the various things they can give to an individual; their reciprocal nature also impacts self-concept and the ways in which people position themselves within their social worlds.

However, the importance of social networks does not just apply to core network members. Existing research points to the particular importance of “weak ties” (Granovetter 1973). While strong ties are generally defined by emotional intensity, intimacy, and reciprocity, weak ties refer to those acquaintances that add breadth, not depth, to one’s social network. Weak ties often provide a bridging function, bringing together disparate parts of a network; they are critical because they allow information to travel outside particular cliques. People beyond one’s social circle have different knowledge and resources, as well as access to different social networks, that help diffuse information and reduce social distance. By better enabling communication, they may also increase sense of community, social cohesion and trust. In turn, this helps to fortify communities against external threats (Granovetter 1973; Granovetter 1983).

As we can see here, the disruption of social resources during and following a natural disaster is important in a few ways. The loss of these relationships is a stressor in itself, but it

also upsets a critical coping resource that individuals look to for both emotional and instrumental support during hard times.

After the Fire

Throughout disaster response and recovery, residents of Paradise relied heavily on their social networks for both emotional and instrumental support. For some, this came in the form of religious groups, such as the Kingdom Hall in Paradise which opened up a disaster relief center outside of town. This group also organized trainings and provided equipment and supportive volunteers to join members as they returned to the town for the first time, helping them sort through the debris. For others, their workplace provided important supports following the Camp Fire. Adventist Health, the largest employer in the area through the Feather River Hospital which remains closed in Paradise a year later, provided employees with four months of paid work, allowed them to retain their benefits, and tried to find them new positions at other locations if they were interested in relocating. They also set up a fund from their national network to provide additional cash support to some impacted employees.

Still, the ability to mobilize informal networks of friends and family was critical. These networks provided places to stay—sometimes for several months—and collected donations on their friends' behalves. They helped with moving, childcare, and cleaning up properties. They also provided information, which was at times difficult to come by and understand following the fire. Colleen, a hairdresser, was able to keep working after the fire and thus utilize her access to a broad network of customers to access this information. "I learn all kinds of things talking to my clients, because we're all sharing a similar story. And so it's like, what did you do about this? And they're like, oh this, blah blah blah. So I'm glad I work. I'm glad I talk to people all the time, because the insurance agents, the adjusters, they're not always on your side." She goes on

to explain the other important thing she gets from this network: emotional support. “Your hairdresser is your therapist and, for me, certain clients are my therapists. You know? You can sit and you can talk and you can cry. You can do whatever you want, and both sides are safe and secure and it’s all good.”

Together, these instrumental and emotional supports enabled some residents to get back on their feet, but such networks are not equally distributed and are not available to everyone. For residents who did not have these sturdy networks, recovery proved difficult. Brenda and her ninety-two-year-old mother, who she lived with at the time, had only each other to rely on. “We didn’t have any family, so that’s why we ended up in a shelter,” she concludes. Once there, she was disturbed to find an assortment of others who were also alone. “There were a lot of people there that didn’t have a pot to piss in to begin with and now they have nothing, really nothing.” Here, social isolation and disadvantage prior to the fire reproduce themselves in the face of disaster. Sarah, a sixty-seven-year-old woman with physical disabilities and a low income, lived alone before the fire and had a similar experience. She almost did not make it out during the fire, except for a home health worker who thought about her at the last second, turned around during her own evacuation, and picked Sarah up; she evacuated with nothing except for the pajamas she was wearing that morning. She ended up at the Red Cross shelter in Oroville, where there was a norovirus outbreak, before being consolidated at the larger shelter in Chico. She worried about the shelters’ inability to accommodate individuals with disabilities, and also believed that there was an unwillingness to help people who were perceived as outsiders prior to the fire, those “living a marginal, on-the-edge kind of lifestyle” off the grid, in the mountains—a stigmatized population alluded to by a number of participants. As such, many marginalized residents had less

support from their own personal networks and also faced barriers in accessing adequate care from more institutional settings like shelters, charities and government resources.

Even for those with weak networks who fared better initially, the recovery process is particularly draining as time goes on and the burdens add up. Idell, who lives alone with her adult son with severe disabilities, bought a house in Chico after the fire. But for her,

The hardest thing I have to deal with—and I had this before the fire—was any kind of support from other people, because they all have somebody. I can't seem to find someone that doesn't have anybody. So they have somebody and I don't seem, I don't have the supportive family at all. They have a husband that's supportive, or a lot of them can't do things with me because they're busy. They're like, 'I have a husband and I have to do things for him' I have nobody. I don't have a family, I don't have a mother or father or cousin or brother or sister or husband. There's nobody. There's me and him [motions toward her son]. And of course he's mentally disabled so he's not there for me. So I have no support system at all. A lot of people had a husband and they got out with their family or they have kids. I don't have any of that.

For Idell, even though she had friends and a social life in Paradise, when the fire happened, everyone retreated to their primary networks. Because she did not belong to a primary network, she felt alone and abandoned by her friends. So even though she was managing alright materially since the fire, she felt isolated.

Even for those with strong social networks, the fire caused disruptions. Along with the loss of natural coping resources mentioned earlier, there were strains on the social resources that would normally provide comfort and help through difficult times. These networks are inevitably tied to the loss of physical spaces, showing again the ways in which the physical environment constrains and guides social life. Prior to the fire, there were a variety of places where people gathered with others and interacted with their community. These included swim clubs and gyms, quilting guilds, Alcoholics Anonymous and Al-Anon meetings, religious communities, workplaces, and volunteer sites. Not only did these groups and activities provide an opportunity to be around other people, they also provided a sense of community and belonging for

participants. Vickie explains how “Mostly we were grieving for the loss of our community, for our stability, for my swim class, which I still haven’t found anything close to [in my new community]. I miss them, those old people. I often wonder what happened to them [...] It’s just being a part of something small enough that you didn’t feel like you were a little fish in a big sea.” Similar to the ways the physical environment structures behavior, here the social infrastructure organizes the life of participants. As such, residents mourn the loss of particular people as well as the disruption of routines that gave their lives meaning and order. For Idell, the site of this cohesion was the Hospice thrift store where she volunteered. “We miss that pretty much more than anything. It was such a social place,” she remembers. “There were people that were regulars that would come just to talk and visit. Sometimes they would come just to see us. And they were family, we were all family, we were all connected.” Jo, on the other hand, had a number of ties to the community, both formal and informal. Their interruption impacted more than just those relationships, but also the lifestyle she had crafted in Paradise over the past twenty-five years:

We were living where we wanted to live, doing exactly what we wanted to do. I met with my girlfriends every Monday and Wednesday and we walked the community walking trail. We would meet at the park and there was a small group of us. I attended Al-Anon meetings regularly with my girlfriends and we’d go to lunch every Friday. I mean, I had something going every day of the week. I was a member of the Daughters of the American Revolution [DAR], and I was able to go to those meetings. And then after we were living with our daughter, we went to a FEMA trailer in Corning, and to get to Oroville for those DAR meetings was a two-hour drive in traffic! So it really did disrupt what I had built, a good life for myself.

Instability interfered with individuals’ ability to stay socially connected. Additionally, not knowing where they would be living a week, a month, or a year later sometimes made residents hesitant to fully engage with their new communities.

While relationships with close family and friends appeared to be fairly resilient for residents after the fire, more peripheral relationships were harder to maintain. However, weak ties are critical to people's ability to access resources and information and to feel integrated within their community, and these things are especially vulnerable to disruption after a disaster. As illustrated by Vickie's comment above, who lost contact with the other women from her swim club, many of these weak ties were irretrievably lost after the fire and left residents feeling adrift. For example, some realized how important the acquaintances in their neighborhood were to them, only after the fire, as Denise explains here:

We lived in a very walkable neighborhood and running, using the streets there, you knew almost all of your neighbors by their first names. You might not know their last name or their phone number or anything else, but you know their daughter just got married or their dog died, or whatever. And to lose your whole community [...] and all of a sudden these people are gone from your life, and they were in your life every single day. And you have no idea where they are or if they're ok.

These neighbors and other weak ties make up residents' social infrastructure, and their loss overlays the loss of physical landmarks discussed earlier. Because they were such an integral and consistent part of their daily routine, their absence feels disorienting and makes it difficult for some residents to navigate their new social landscapes.

The loss of these weak ties also interrupts residents' ability to access basic but important services and resources. These include dentists and doctors, mechanics, and contractors. Tamara, the single mother of two young daughters, bought a new house two hours from Paradise after losing hers in the fire. She experiences regular anxiety about not knowing who to call about repairs on her new home, things like fixing a fence or cleaning the gutters. She also finds herself shopping for nearly everything online now, because she does not know where to go to find things in her new community. Jammie agrees that it's hard "being in a community where you don't know who to call. Before it was like, 'oh, the air conditioner! Call this guy!' Or, 'we need this,

let's call this guy!' You know? It's like, you knew who to call. Or if you didn't know somebody directly, you knew somebody who would know." This is a function of both small-town life and long-term residency. Not knowing how to access these things in their new community, or in the "new" community of Paradise, causes significant distress for individuals and serves as a constant reminder that they do not quite belong there. In this way, the disruption of social norms and expectations that started during the fire itself continues throughout the recovery process.

Coping with trauma from the fire and the subsequent network disruptions places a significant strain on relationships, both old and new. Initially, the fire was all-consuming. Residents had to figure out how to meet both their basic, immediate needs and make decisions about their long-term futures. They had to file insurance claims, haggle with FEMA, get their properties cleared, restock basic material goods, and contend with an overwhelmed housing market. As time went on, some attempted to start rebuilding their social networks, but found it was not easy. Jeanie attempted to organize a barbeque at her new home in Chico for friends who remained in the area, but only a few people showed up. Idell had a similar experience, as she tried to rally friends on Facebook into a monthly group for sewing and other crafts but got no response. The fact that everyone coped with the fire differently made it difficult for these women and their social groups to find a common ground, and many of those relationships suffered because of it.

For others, particularly those who relocated to new communities, they felt like others expected them to move on from the fire sooner than they were ready. Pat, who relocated, recalls an experience from that winter when she felt this sentiment: "You got four months out and the fire was old news. I came down here to work and one of my coworkers—this was early February and I say something about the fire—and she goes, 'Gosh, that was so long ago!' It's almost like

she's telling me, 'aren't you over that yet?'" When we look at the Camp Fire, we see residents like Pat who were uprooted through a traumatic experience and replanted in communities with others who had not been impacted by the event. This caused significant stress, as they felt that their new neighbors could not fully understand their grief, and they were unsure whether their feelings were normal. Sometimes they felt this while crying in public or struggling at work. Jammie expressed concern that their new school district was not adequately acknowledging or addressing her young daughters' trauma; she felt teachers and administrators did not understand what they had been through or know how to meet their needs in this new setting. In these cases, the lack of a positive comparison group caused additional stress for residents in their new communities. Compare this to Heidi, still living in Paradise, who hears the school superintendent's voice cracking during public meetings, and "it makes me feel so normal." Pam agrees that being in Paradise helps because "it's somewhat comforting that you're not the only one it's happening to." This access to similar others combats the social isolation experienced by others whose ties to the community have been severed both socially and geographically.

Paradisians must balance the necessity of these relationships with the challenges of fostering them. For some, this means putting themselves out there in new ways. Some residents who relocated to Chico continue to shop at Paradise grocery stores and use Paradise gas stations, both to support the community economically and to preserve some connection to it. In town, Helene has given up her morning walks in the canyon in exchange for walks through town because "I can stop and talk to people and see what they're doing [...] They're always willing to talk. And most of them are saying, 'All of our friends have left!' And I say, well, we can be friends, I would love that, to strike up new friends. People need that."

Others agree, as a number of community members and groups have organized formal opportunities to rebuild this social infrastructure. These include a monthly “Party in the Park,” Thursday night community dinners, and the Camp Fire Zone Project. This latter project attempts to overcome the chaos and misinformation inherent in disaster response. “We get information from the county and the state and the federal and God only knows how many other places, and I’m able to pass that information on,” explains Colleen who is involved with the initiative. “Not everybody is on Facebook. Not everybody emails. I have a senior community that comes in and sees me. They’re like, ‘Oh Colleen, do you know where I can get that free water that they’re giving out?’ Oh yeah, there’s this [...] So by knowing these people and already knowing their situations [...] we’re sharing information, educating ourselves, educating others.” Residents have lost many of the informal connections they previously had in their communities, so here they are instead attempting to construct a more formal structure for information-sharing and community-building.

Ultimately, many residents have been able to use their collective trauma to build new connections and relationships with others. They provide a sense of understanding, comfort and belonging where they otherwise felt unmoored and alone. This collective sentiment centered around shared experience is critical to residents’ feelings about their community and the future they hope to rebuild there, as we will see below.

Threats to Community Identity

Literature Review

Following a large-scale disaster, residents must contend with questions about their own futures and that of their community. Inevitably, natural disasters impact community cohesion and resilience. Research generally suggests that cohesion, defined by feelings of togetherness and the

pursuit of common goals, increases following a disaster (Chang 2010; Hetherington et al. 2017). Following severe floods in Carlisle, United Kingdom in 2005, Chang (2005) found that residents' perception of community cohesion increased following the event, but he also found that this effect varied according to residents' level of impact. Cohesion was highest among those who experienced moderate damage to their property, followed by those who were severely impacted, and finally those who experienced little to no impact to their property. This suggests that low-impact residents may not see the need to mobilize community resources, while high-impact residents may have to prioritize individual interests over community ones. Similarly, following floods in Calgary in 2013, Hetherington and colleagues (2017) found that levels of cohesion increased with the residents' severity of post-traumatic symptoms and exposure to destruction. Reception of greater levels of aid appears to make residents feel more connected to and supported by their communities. Access to accurate information, trust in leadership, and inclusion in decision-making processes are also critical in fostering positive feelings of engagement and support within one's community (Collins et al. 2011).

But while disasters offer communities an opportunity for renewal and cohesion, they often end up exacerbating pre-disaster inequalities and conflicts. Pais and Elliott (2008) conceptualize impacted communities as "recovery machines," an extension of Molotch's (1976) idea of cities as "growth machines." In growing communities, conflicts arise between individuals who value the place's particular meanings and attachments and corporate elites who value its profit potential. This conflict leads to an unequal distribution of power and capital whereby endless growth is valued over the quality of life for residents (Molotch 1976). This process is extended following a disaster, as communities are injected with capital from insurance payouts and federal aid. Efforts focus not only on functional recovery, but on building things back better

than before. This emphasis on growth over recovery is insidious, as it is framed under the guise of resilience. “Within this political climate, growth, not just recovery, becomes a moral prescription that is promoted as being not only good for the local economy but for the collective psyche, a way to put the disaster ‘behind us’” (Pais and Elliott 2008:1420).

This profit-driven framing of recovery may also neglect, or even threaten, parts of the community that are especially meaningful to citizens, such as natural areas. The benefits of natural areas may be more abstract than manmade ones; mental health, community-building, and belonging are more difficult to measure than job creation, housing, and local businesses. Full recovery of natural areas may also unfold at a much slower pace, encouraging developers to focus instead on the built environment where they are likely to get a quicker return on their investment.

Of course, this process, along with decreased vacancy rates and higher housing costs, also ends up pushing out the poorer members of impacted communities. In the first year after Hurricane Katrina, the average rent in New Orleans increased 70% (Pais and Elliott 2008). Five years later, less than one-fourth of residents of the Lower Ninth Ward—New Orleans’ poorest district—had returned, compared to a 157% population increase in the high-income Central Business District (Mutter 2010). In these ways, we can see that inequality is not only present in the disproportionate vulnerability of residents prior to disasters but is also reproduced throughout the recovery process.

This unequal recovery inevitably ends up changing the demographic and cultural features of areas affected by natural disasters. By “creating widespread displacements and necessitating significant new construction” natural disasters may leave communities particularly vulnerable to gentrification (van Holm and Wyczalkowski 2019: 2766). Areas that suffer extensive damage in

natural disasters are more likely to experience large-scale population loss and gentrification, especially in small communities that lack resources which are critical for re-establishing civic life, like schools and hospitals (Cross 2013; van Holm and Wyczalkowski 2019). Further, these changes may be exacerbated by local and state policies that encourage private investment and undermine citizens' autonomy. Oftentimes this merely hastens changes that were already starting to unfold slowly prior to the disaster (Contardo, Boano and Wirsching 2018). As we will see below, these ongoing conflicts about community and identity are also playing out in Paradise as residents consider the future of their town.

Looking Ahead

The changes that occurred through the Camp Fire influenced residents' thinking about the future in important ways. For some, the material losses severed their connection to the past in ways that felt liberating. This mimics the role of wildfire in the natural world: burning down the existing landscape provides fertile soil for rebirth and new growth. Adrienne, the twenty-five-year-old college student who had lived in Paradise for most of her life, explained this change that she started to feel once the initial shock and upset wore off:

I'm doing far better now than I had ever been in my entire life. I have learned so much and realize that it has been, as terrible as the fire was, it was a good thing that it happened because it really forced me to fully take steps that I hadn't taken before and I have essentially been moving from just, like, taking little baby steps before to just, like, leaps and bounds. Because I had never once before considered living on my own, and now I am [...] I started to eat healthier and I was starting to take care of myself better. I was starting to go outside more actually. I was just going out and interacting with other people. And I started to just have fun. I started doing things that I had never done before, all of a sudden, I was actually experiencing life again.

It wasn't until after the fire that Adrienne realized the constraints the town—and her attachment to it—had placed on her life. For the first time, she was living on her own and considering leaving the area; when we spoke, she was even looking into a year-long study abroad program.

Pat, another lifelong resident of Paradise, also felt a sense of freedom from her material losses in the fire. She had been holding on to all of her mother's things—letters she had written, books, her good china—since she passed away when she was a teenager. The fire took those things away. “On the one hand, it's heartbreaking, and on the other hand, it is so freeing. That weight around my ankle is gone. I can now do what I want. I don't have to haul that crap around, and I don't have to feel guilty, because *I* didn't make it go away.” Pat, at sixty-one-years-old, is excited by the prospect of discovering who she might be without those things, a weight she did not realize she had been carrying until it was gone.

Others seriously considered starting over elsewhere but ultimately decided that their attachment to the town was too strong. Jo and her husband planned a trip to Idaho to consider relocating there, but ultimately they concluded “we didn't want to go to Idaho. This is our home. You know, we had plans. We bought our retirement home ten years before, and we were doing what we wanted to do, living the life we wanted to live. We were completely happy, so we decided to go back to that.” Instead, they moved into a house with a friend in Paradise, while they prepare to eventually rebuild on their own property. Residents like these who decided to stay recognized a unique opportunity for the re-creation of the community of Paradise, rather than just for themselves individually. However, not everyone agrees about what the town should or will become.

Like many other small but growing towns throughout the country, conflicts between modernization and tradition preceded the disaster. The Camp Fire only brought these debates to the forefront. Tim summarizes the environment in Paradise prior to the fire:

It was a community that was going through some growing pains [...] because of the fact that we were switching from what would have been traditionally a retirement community to now being kind of a bedroom community [...] So there was a little bit of conflict between the older generation—“Ah, we always did it this way”—but the new folks are

coming in and wanting to do it this way. So things were changing and evolving a little bit. The old timers were still trying to hang onto the Gold Nugget Days and the parade and all that stuff, and the new people were changing the parade. And I'm not saying that's bad, but it's different than it was before, so there were some growing pains.

To those looking to preserve the traditional character of Paradise, the new changes felt invasive. The town felt busier, more generic and less friendly; to them, change threatened to undermine those very things that made Paradise special. Others who were in favor of development recognized the opportunity to improve their small town with access to greater resources and a stronger local economy.

Which side of this debate people landed on often ran along both generational and class lines. Jill found older residents' insistence on "keep[ing] Paradise really old and pioneer-y" to be "frustrating for younger people like us in their thirties and forties and now even fifty because it's like, no. Let a little new come. Let some new stores come, let this happen." Sarah, on the other hand, saw these changes as part of a larger effort to push out poorer residents. "The town had been making decisions that were aimed at gentrification and the wealthy, at, how do we get rid of the poverty in town? Instead of trying to build affordable, sustainable housing and redevelop the community to be inclusive, it was really moving back to: if you're very wealthy, you can afford to live here." Age and social class appear to intersect here. While some older residents seem glad to have younger families moving into the area, others felt that it threatened their particular way of life. After all, being in a small mountain town had afforded them both freedom and privacy—"a place where you could go if you wanted to hide," as one resident put it. As it started to grow and look more like other towns in the area, this became less possible.

For several residents, recent changes to Skyway—the main thoroughfare (and evacuation route) through town—clearly exemplified this conflict. Not long before the fire, the town council had made the decision to reduce Skyway from four lanes down to two. Some residents protested

the move, noting the potential risk of slowing traffic during evacuations, but concerns about pedestrian safety, downtown commerce, and parking won out. Tony believes “they were just trying to create this quaint downtown, which is very nice, you know? Little towns, I like that, but it was just the wrong place to do it, in my opinion.” Colleen agrees that leaders were thinking “we need all this fun stuff to market our downtown and make it kind of like Nevada City or Grass Valley [other small towns in the region with thriving downtown sectors].” Residents like Tony and Colleen and others believe that in trying to change Paradise—to make it more attractive to outsiders—local leaders risked the well-being of those who lived there. Indeed, during the Camp Fire, traffic slowed where Skyway bottlenecked. In this way, the conflict had material consequences beyond the abstract ones centered around identity.

Several months later, as residents reflect on their community, many recall an idealized version of Paradise. They remember it as “small town U.S.A.” In doing so, many appear to overlook or disregard preexisting problems, not unlike the person who washes over the painful faults of a loved one after their death. Still, a few remember some of the negative elements from before: drug use and poverty, but also a kind of hard-nosed libertarianism and disdain for rules, and a certain unfriendliness toward people who were different. By no means did residents recognize these as defining characteristics of the community, but rather, an “undercurrent.” It may be that other residents never recognized this element, or that they have only chosen to dismiss it from their memories since the fire. Either way, those who remain or who plan to return are now attempting to recreate their community out of this idealized, unspoiled memory.

The construction and subsequent reconstruction of Paradise as an idyllic small town inherently excludes those who do not fit within this image. For residents, this has produced a particular anxiety around “external” threats and a need to guard their community against them.

Most salient of these threats is over-development. Many residents fear that the Camp Fire has provided opportunities for wealthy outsiders to come into their town and change it. “The subdivisions will start coming in and it won’t be the same,” predicts JD. “I could see it becoming just more of a suburb of Chico, like tract houses and places to live as Chico gets bigger.” This anxiety about its transformation from “small town” to “suburb” is common among participants. Brenda feels equally sure of this change: “Oh it will [change]! Definitely. They’ll replace a lot of things with big box stores, and there will be resorts and that kind of thing.”

Not only do these anticipated changes threaten the distinct physical character of the community—replacing old houses with new tract homes, and small businesses with big box stores—but also the character of the people who live there. Residents worry that the town’s poorer residents will be priced out and will not be able to afford to rebuild and live in Paradise. Because of this, Brenda believes “it is going to be very different when it’s rebuilt. I think a lot the houses where the lower income people lived are not going to be here anymore. They’re not going to be able to afford to rebuild.” Tamara also “fear[s] investors turning it into something it never was meant to be [...] Because they’re saying they’re not going to do trailer parks, so the people who are the poorest are not going to come back.” Sarah, who is herself low-income and has relocated to rural North Carolina for now, already felt pushed out, claiming: “I think we’re throwaways. I think we’re being told, ‘You’re disposable.’” Perhaps because she already felt marginalized prior to the fire, Sarah now feels as though she has been excluded from the recovery process, which she thinks has been aimed primarily at insured homeowners.

While this anxiety around new development was overwhelmingly common among residents, not everyone shares these fears. Some believe that the fire has provided the chance to start over and do things better, and new development is a part of that. “The fire did a lot of

horrible things, but it actually gave this community a complete opportunity to reset itself,” Jill explains. “Maybe we don’t have to go back to all those same problems that we had before.”

Similarly, Heidi describes Paradise now as “a really clean slate to do things really right and better.” Tammy is not shy about her hopes for the future of her town:

There’s people who are going to try to make it what it was, but it’s never going to happen. And I don’t want it to happen. I want it to be a new town. I want it that every home that shows up is brand new. That helps your property value, I mean, come on! You know those little old single-wide 1977 trailers are pretty much all burned up. I know that those were lives and plans and dreams, people who could only afford that because they were old themselves. I mean, I understand. It’s going to sound selfish, but that’s not my reality. I want to see a town with a new perspective.

Like Tammy, several residents struggled to reconcile their desire for a new, nicer town with the fact that this would mean not everyone could be included. They did not explicitly say that they wanted poor people out of the town, and most in fact did *not* want that, but they were unsure where they fit in their vision for the future of Paradise.

In these ways, the Camp Fire brought preexisting debates about the future of Paradise front and center, as Tim acknowledges here:

What I’m worried about is the kinds of things that they [the “old-timers” before the fire] were worried about too, that there is going to be this new group of people that maybe aren’t from Paradise or aren’t locals or don’t have that attachment to the city or to the town and want to change things. And nobody, for as much as they say they do, nobody really likes big change like that. Not at home. Everybody likes everything new and exciting somewhere else, to go visit, but when you get home you like things a certain way. And that’s kind of the way I am too, and I think a lot of the people in town are too.

The resistance to change is marked by the expectation that “a different type of person could start moving up there.” An influx of “outsiders” into the town poses threats to the physical landscape, social connections, and cultural norms. Ultimately, residents fear being made into outsiders in their own home.

Another threat to residents' vision for Paradise is the presence of drugs and crime. As is common after large-scale disasters, looting did occur in Paradise and was one of several things after the fire that undermined some residents' feelings of security. Tammy, whose house survived, returned to Paradise to find that their house had been burglarized by an out-of-town contractor they had hired to do repairs. Similarly, Jeanie describes Paradise since the fire like this: "Now there's a whole bunch of hoodlums running amok. My friend has a trailer up there and somebody stole the propane tanks and batteries for his RV last night [...] There's just this element up there that's just doing whatever the hell they want." Incidents like this produce a sense of distrust among some residents. Helene, the eighty-year-old woman who returned to her house in Paradise and lives alone there, admitted that, since hearing of drug arrests nearby her residence, "I lock up, and I never locked up before. I definitely have lights on outside at night, and I love the dark, so you know, I like to be able to see the stars and you can't when you have lights on." Despite her desire to return to life before the fire, she has adapted to new perceived threats in her community by locking her doors and keeping her lights on.

Some residents saw these drug users and criminals as marginalized members of their community before the fire who have since taken advantage of the chaos. Yvette describes "these people who do not live normal lives [who] were coming out of the woodwork," and Heidi refers to "the tweakers that didn't burn out in Magalia [who] have really taken advantage of this and are down there looting." Both of these descriptions paint the picture of "others" who are attempting to use the Camp Fire to capitalize off of their marginalized status.

Many residents take this outsider label even further, careful to point out that they perceive these threats as coming from outside their community altogether. Several express a belief that homeless people and drug users came from all along the West Coast to take advantage

of services and donations provided after the Camp Fire. One resident describes it as “vulture city” and praises the sheriff’s department for trying to “keep the riff-raff away.” It is unclear how common this practice actually was, but it is notable that residents understood these people to be literal outsiders. This construction of the “other” is critical for residents to be able to maintain the idealized memory of their town. They are acknowledging that problems like drug and crime exist, yet they are disowning them. In doing this, they are able to embrace those qualities that they admire about their town and externalize the ones they do not.

This process has enabled the formation of a type of limited solidarity. After all, “others” are functional because they reinforce cohesion among belonging members. Residents used their shared vision for the future of Paradise to construct a new sense of community and feelings of belonging. Those who remain in Paradise or who plan to return feel not just that they want to rebuild, but that they *need* to. When asked why she wanted to buy a new home in Paradise after losing hers, Pam responded, “Because it’s home, and it’s not all gone. This place [her business, which survived the fire] didn’t burn for a reason. Whatever it’s going to be, there needs to be people who want to be a part of it, and that’s me.” Jill agrees that the town needs its people to return: “I feel like it needs people like us, it needs people that—we luckily did have a home that survived and that we’re rebuilding—that are here and that are present and that are prepared to kind of be here and help put it back together again.”

This sentiment not only bolsters residents’ connection to place, but also to each other. They talk about meeting and befriending neighbors they never knew before, sharing their successes and struggles over community dinners, and providing both instrumental and emotional support to one another. They are able to do this “because most of us have a common goal, and that’s to see our town do better and be better.” Tammy feels hopeful because the small number of

people who remain “came [back] to build a community.” Those who share their vision for the future of Paradise feel closer than ever, but this still requires the exclusion of those who feel differently. Jill sums up this common sentiment, saying that “Hopefully only the good, solid people that really want to be a part of the rebuilding process of the town come back.” This notably excludes those involved in drug and criminal activity, mentioned above, as well as those who weren’t there to begin with. These “others” pose threats to this shared vision, and the core group of “stayers” are united and strengthened by their defense against them.

DISCUSSION

When the Camp Fire broke out, residents experienced a sudden and drastic loss of social norms that carries on throughout the response and recovery processes. But it is not just a changing of their social worlds; the widespread destruction of their built and natural environments has significant impacts on their identity at a number of levels and influences their ability to be resilient in the face of loss. Additionally, these physical places are inextricable from the ways in which people understand themselves and their relationships to others.

During the event, chaos and confusion produced a state of anomie whereby typical norms and expectations were upended. The fire caused darkness in the daytime, falling ash and debris, and uncertainty about the direction of safety or danger. Alongside this was the change in social rules, and evacuees were forced to rely on strangers for help. Both of these speak to a change in authority, whether that be the typical natural order or social organization. This undermined residents’ feelings of safety, and sometimes their own identity as helpers or protectors. Being unable to save their homes and pets, or unable to contact or help their loved ones, challenged who they believed themselves to be—in itself a disorienting experience that did not end with the

fire. Throughout the long process of recovery, residents struggle with this sense of belonging and mattering in their old and new social worlds.

Upon returning to Paradise in the weeks and months following the Camp Fire, residents struggled with the loss of those things that had previously made their community feel like home. This included both physical and social infrastructure. Like the “natural order” mentioned above—dictating things like light and darkness and time of day—these community norms and expectations provide critical structure to residents’ lives. Without physical landmarks from before the fire, people felt literally unable to navigate their new community. Similarly, residents’ loss of weak ties posed significant challenges to their ability to seamlessly navigate their social environments and compounded feelings of not belonging. They also struggle with changes to the symbolic meanings attached to Paradise, embedded in the physical place. For many, sites of comfort were transformed into memories of trauma. Many also lost social relationships and resources that would otherwise have helped to buffer the stress of difficult times. Still, at this stage, they start to find hope in the slow but certain reconstruction of their social network, mirroring the optimistic return of plants and animals to the local natural environment. In these ways, residents maintain hope that life will once again return to Paradise.

In the long-term, residents must grapple with this reconstruction of their physical and social worlds, and they must do this without the stable footing and security of “home.” As I have discussed at length, both individual and community identities are socially constructed, in part, through their embeddedness within a particular physical environment. As such, disruptions to that environment—both built and natural—cause disruption to self-concept, community connections, and the availability of some coping resources. This influences residents’ anxieties about the future of Paradise: if the town that they once knew and loved exists only in memory,

where does that leave them? And is it possible—or desirable—to reconstruct a community as it was before, or at least as they remember it? Some residents fear losing their town twice: once on November 8th, and again through the rebuilding process. It is difficult to rebuild a community you cannot navigate or fully comprehend. As such, this process means relearning their way around once-familiar territory, both literally and figuratively. Individuals must restore order to their own lives by finding new homes or rebuilding old ones, establishing relationships with other survivors, and finding work to support themselves financially. But they also must come together to do this at the community level, creating a new “normal” from which they can start to rebuild. Throughout this process, the natural environment serves as a guide for starting over.

CONCLUSION

In his work on human wayfinding, Reginald G. Golledge (1999) explains that the role of cognitive maps is to answer these questions: “Where am I? How do I return home? Where is the place for which I am searching? How do I get there?” (32). For residents of Paradise, these answers are not so clear. Disruptions to both their physical and social landscapes have left many people there feeling disoriented and adrift. These changes do not occur in isolation. Rather, as we have seen, social and physical worlds overlay each other throughout the disaster, response, and recovery processes.

The impact of a large-scale disaster like the Camp Fire cannot be measured solely by material losses. Rather, the experience of the event itself combines with these losses to affect identity and community in important ways. While existing research has addressed the intersection of the physical and social worlds generally, it has not yet adequately considered what happens to that relationship when the physical environment is inalterably changed, and how this plays out over the long course of recovery. This research is an attempt to address that gap.

By drawing on a number of different literatures, I have sought to bring together what we know about place, identity, community, and resilience to illustrate the ways in which these things are impacted by disaster, but also how they intersect throughout the recovery process. These questions matter. Focusing on rebuilding physical infrastructure while neglecting the social life that gives it meaning cannot fully address the myriad needs of a community after disaster.

Still, this research has a number of limitations. Qualitative research of this nature is not intended to be representative of any population, and so I cannot assure that the conclusions I have drawn here represent all of Paradise, much less other communities affected by disasters. My sample of participants has some clear limitations, particularly when it comes to gender. More research is needed to better understand the ways in which these processes play out differently among men and women. My interviews were also conducted several months after the Camp Fire. Some residents' feelings and memories of the event itself may have changed in this time. Additionally, it will be useful for future researchers to continue to explore the ways the patterns recognized here shift over a longer period of time. Finally, qualitative research of this nature asks participants to engage in a deeply personal and vulnerable experience, sharing stories that are upsetting and possibly traumatic. This, in addition to my recruitment through Facebook and snowball sampling, likely biases my sample by unintentionally excluding some residents who are less open to strangers and less socially connected. Responses of such individuals may have differed significantly from those I gathered here, and so accessing that population will be an ongoing challenge for future researchers. Ultimately, my goal was to recognize patterns that arose through these interviews and propose a more multidisciplinary way of thinking about this relationship between the physical and social realms.

The questions I address in this paper demand attention in the context of rapid and destructive environmental change, and they will only become more salient as time goes on and this crisis worsens. What will our relationships—to others and to ourselves—look like in this new landscape? Paradise provides unique insight to this question, now and for years to come.

LIST OF REFERENCES

- Albrecht, Glenn, Gina-Maree Satore, Linda Connor, Nick Higginbotham, Sonia Freeman, Brian Kelly, Helen Stain, Anne Tonna, and Georgia Pollard. 2007. "Solastalgia: The Distress Caused by Environmental Change." *Australasian Psychiatry*, 15:595-598.
- Aldrich, Daniel P. 2012. "Social, not physical, infrastructure: The critical role of civil society after the 1923 Tokyo earthquake." *Disasters*, 36(3):398-419.
- Alexander, Kurtis. 2019. "Camp Fire: Paradise in recovery, six months later." *San Francisco Chronicle*, May 3. Retrieved September 27, 2019 (<https://www.sfchronicle.com/california-wildfires/article/Camp-Fire-Paradise-in-recovery-six-months-later-13815152.php>).
- Alston, Margaret, Desley Hargreaves and Tricia Hazeleger. 2018. "Postdisaster Social Work: Reflections on the Nature of Place and Loss." *Australian Social Work*, 71(4):405-416.
- Ashkanasy, Neal M., Oluremi B. Ayoko and Karen A. Jehn. 2014. "Understanding the physical environment of work and employee behavior: An affective events perspective." *Journal of Organizational Behavior*, 25:1169-1184.
- Bell, Michael Mayerfeld. 1997. "The ghosts of place." *Theory and Society*, 26:813-836.
- Bland, Susan H., Erin S. O'Leary, Eduardo M. Farinero, Fabrizio M. Jossa, Vittorio M. Krogh, John M. Violant, and Maurizio M. Trevisan. 1997. "Social Network Disturbances and Psychological Distress following Earthquake Evacuation." *The Journal of Nervous & Mental Disease*, 185(3):188-195.
- Blennow, Kristina, Erik Persson, and Johannes Persson. 2019. "Are Values Related to Culture, Identity, Community Cohesion and Sense of Place the Values Most Vulnerable to Climate Change?" *PLoS ONE*, 14(1):e02 10426.
- Boghani, Priyanka. 2019. "Camp Fire: By the Numbers." *PBS Frontline*, October 29. Retrieved November 26, 2019 (<https://www.pbs.org/wgbh/frontline/article/camp-fire-by-the-numbers/>).
- Bourque, Francois and Ashlee Cunsolo Willox. 2014. "Climate Change: The Next Challenge for Public Mental Health?" *International Review of Psychiatry*, 26(4):415-422.
- Burley, David, Pam Jenkins, Shirley Laska, and Traber Davis. 2007. "Place Attachment and Environmental Change in Coastal Louisiana." *Organization & Environment*, 20(3):347-366.
- Chang, Kirk. 2010. "Community cohesion after a natural disaster: Insights from a Carlisle flood." *Disasters*, 24(2):289-302.

- Cohen, Sheldon and Thomas Ashby Wills. 1985. "Stress, Social Support, and the Buffering Hypothesis." *Psychological Bulletin*, 98(2):310-357.
- Collins, Susan, Bruce Glavovic, Sarb Johal and David Johnston. 2011. "Community Engagement Post-Disaster: Case Studies of the 2006 Matata Debris Flow and 2010 Darfield Earthquake, New Zealand." *New Zealand Journal of Psychology*, 40(4):17-25.
- Contardo, Jorge Inzulza, Camillo Boano, and Camila Wirschin. 2018. "Gentrification in (re)construction: Talca's neighbourhoods post 2010 earthquake." *International Journal of Disaster Resilience in the Built Environment*, 9(2):170-183.
- Dannenberg, Andrew L., Richard J. Jackson, Howard Frumkin, Richard A. Schieber, Michael Pratt, Chris Kochtitzky and Hugh H. Tilson. 2003. "The impact of community design and land-use choices on public health: A scientific research agenda." *American Journal of Public Health*, 93(9):1500-1508.
- Denis, Michel, Celia Mores, Doriane Gras, Valerie Gyselinck and Marie-Paule Daniel. 2014. "Is Memory for Routes Enhanced by an Environment's Richness in Visual Landmarks?" *Spatial Cognition & Computation*, 14(4):284-305.
- Durkheim, Émile. 1897 (1997). *Suicide: A Study in Sociology*. George Simpson (editor). New York, NY: Free Press.
- Eisenman, David, Sarah McCaffrey, Ian Donatello, and Grant Marshal. 2015. "An Ecosystems and Vulnerable Populations Perspective on Solastalgia and Psychological Distress After a Wildfire." *EcoHealth*, 12(4):602-610.
- Glad, Kristin A., Tine K. Jensen, Gertrud S. Hafstad, and Grete Dyb. 2015. "Posttraumatic stress disorder and exposure to trauma reminders after a terrorist attack." *Journal of Trauma & Dissociation*, 17(4):435-447.
- Goenjian, Armen K., Alexandra Roussos, Alan M. Steinberg, Christina Sotiropoulou, David Walling, Marina Kakaki, and Stavroula Karagianni. 2011. "Longitudinal study of PTSD, depression, and quality of life among adolescents after the Parnitha earthquake." *Journal of Affective Disorders*, 133(3):509-515.
- Golledge, Reginald G. 1999. "Human wayfinding and cognitive maps." Pp. 25-43 in *The Colonization of Unfamiliar Landscapes: The Archaeology of Adaptation*, edited by Marcy Rockman and James Steele. Abingdon, UK: Routledge.
- Granovetter, Mark S. 1973. "The Strength of Weak Ties." *American Journal of Sociology*, 78(6):1360-1380.
- Granovetter, Mark S. 1983. "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory*, 1:201-233.

- Hawkins, Robert L. and Katherine Maurer. 2010. "Bonding, Bridging and Linking: How Social Capital Operated in New Orleans following Hurricane Katrina." *The British Journal of Social Work*, 40(6):1777-1793.
- Hetherington, Erin, Sheila McDonald, Muci Wu, and Suzanne Tough. 2017. "Risk and Protective Factors for Mental Health and Community Cohesion After the 2013 Calgary Flood." *Disaster Medicine and Public Health Preparedness*, 12(4):470-477.
- Higginbotham, Nick, Linda Connor, Glenn Albrecht, Sonia Freeman, and Kingsley Agho. 2007. "Validation of an Environmental Distress Scale." *EcoHealth*, 3:245-254.
- Hutto, Richard L. 2008. "The Ecological Importance of Severe Wildfires: Some like it Hot." *Ecological Applications*, 18(8):1827-1834.
- Kaniasty, Krzysztof and Fran H. Norris. 1995. "Mobilization and deterioration of social support following natural disasters." *Current Directions in Psychological Science*, 4(3):94-98.
- Keane, Robert E., James K. Agee, Peter Fule, Jon E. Keeley, Carl Key, Stanley G. Kitchen, Richard Miller, and Lisa A. Schulte. 2008. "Ecological effects of large fires on US landscapes: benefit or catastrophe?" *International Journal of Wildland Fire*, 17:696-712.
- Krieger, Lisa M. and David Debolt. 2018. "Camp Fire: Paradise residents say they received no Mass cellphone alerts to evacuate, or to warn of fires." *The Mercury News*, November 13. Retrieved November 11, 2019 (<https://www.mercurynews.com/2018/11/13/camp-fire-paradise-residents-say-they-received-no-mass-cellphone-alerts-to-evacuate-or-to-warn-of-fires/>).
- Layne, Christopher M., Jared S. Warren, William R. Saltzman, John B. Fulton, Alan M. Steinberg, and Robert S. Pynoos. 2006. "Contextual Influences on Posttraumatic Adjustment: Retraumatization and the Roles of Revictimization, Posttraumatic Adversities, and Distressing Reminders." Pp. 235-286 in *Psychological Effects of Catastrophic Disasters: Group Approaches to Treatment*, edited by Henry I. Spitz, Gary M. Burlingame, and Philip R. Muskin. Abingdon, United Kingdom: Routledge.
- Littlefield, Robert S. and Andrea M. Quenette. 2007. "Crisis Leadership and Hurricane Katrina: The Portrayal of Authority by the Media in Natural Disasters." *Journal of Applied Communication Research*, 35(1):26-47.
- Lynch, Kevin. 1960. *The Image of the City*. Cambridge, MA: MIT Press.
- Magee, Liam, John Handmer, Timothy Neale, and Miss Monique Ladds. 2016. "Locating the Intangible: Integrating a Sense of Place into Cost Estimations of Natural Disasters." *Geoforum*, 77:61-72.
- Molotch, Harvey. 1976. "The City as a Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology*, 82(2):309-332.

- Moore, Peter D. 1996. "Fire damage soils our forests." *Nature*, 384(6607):312.
- Morris, Katherine Ann and Nicole M. Deterding. 2016. "The emotional cost of distance: Geographic social network dispersion and post-traumatic stress among survivors of Hurricane Katrina." *Social Science & Medicine*, 165:56-65.
- Morrissey, Shirley A. and Joseph P. Reser. 2007. "Natural Disasters, Climate Change and Mental Health Considerations for Rural Australia." *Australian Journal of Rural Health*, 15:120-125.
- Mutter, John. 2010. "Disasters widen the rich-poor gap." *Nature*, 466:1042.
- Nakagawa, Yuko and Rajib Shaw. 2004. "Social capital: A missing link to disaster recovery." *International Journal of Mass Emergencies and Disasters*, 22(1):5-34.
- Pais, Jeremy F. and James R. Elliott. 2008. "Places as Recovery Machines: Vulnerability and Neighborhood Change After Major Hurricanes." *Social Forces*, 86(4):1415-1453.
- Perdue, Wendy Collins, Lesley A. Stone and Lawrence O. Gostin. 2003. "The built environment and its relationship to the public's health: The legal framework." *American Journal of Public Health*, 93(9):1390-1394.
- Pynoos, Robert S., Armen Goenjian, Madeline Tashjian, Meline Karakashian, Raffi Manjikian, Gagik Manoukian, Alan M. Steinberg, and Lynn A. Fairbanks. 1993. "Post-traumatic Stress Reactions in Children After the 1988 Armenian Earthquake." *The British Journal of Psychiatry*, 163(2):239-247.
- Sadri, Arif Mohaimin, Satish V. Ukkusuri, Seungyoon Lee, Rosalee Clawson, Daniel Aldrich, Megan Sapp Nelson, Justin Seipel, and Daniel Kelly. 2018. "The role of social capital, personal networks, and emergency responders in post-disaster recovery and resilience: A study of rural communities in Indiana." *Natural Hazards*, 90:1377-1406.
- Scrimin, Sarah, Ughetta Moscardino, Fabia Capello, Gianmarco Altoe, Alan M. Steinber, and Robert S. Pynoos. 2011. "Trauma reminders and PTSD symptoms in children three years after a terrorist attack in Beslan." *Social Science & Medicine*, 72(5):694-700.
- Seeger, Matthew W., Timothy L. Sellnow and Robert R. Ulmer. 2003. *Communication and Organizational Crisis*. Santa Barbara, CA: Praeger.
- Sellnow, Timothy L., Matthew W. Seeger and Robert R. Ulmer. 2002. "Chaos Theory, Informational Needs, and Natural Disasters." *Journal of Applied Communication Research*, 30(4):269-292.
- Stedman, Richard C. 2003. "Is it really just a social construction?: The Contribution of the Physical Environment to Sense of Place." *Society and Natural Resources*, 16(8):671-685.

- Stein, Mark. 2004. "The critical period of disasters: Insights from sense-making and psychoanalytic theory." *Human Relations*, 57(10):1243-1261.
- Thoits, Peggy A. 2011. "Mechanisms Linking Social Ties and Support to Physical and Mental Health." *Journal of Health and Social Behavior*, 52(2):145-161.
- Tom, Ariane and Michel Denis. 2004. "Language and Spatial Cognition: Comparing the Roles of Landmarks and Street Names in Route Instructions." *Applied Cognitive Psychology*, 18:1213-1230.
- Tom, Ariane Cecile and Barbara Tversky. 2012. "Remembering Routes: Streets and Landmarks." *Applied Cognitive Psychology*, 26:182-193.
- U.S. Census Bureau. 2018. "Paradise town, California." *QuickFacts*. Retrieved December 5, 2019
(<https://www.census.gov/quickfacts/fact/table/paradisetowncalifornia,US/PST045218>).
- van Holm, Eric Joseph and Christopher K. Wyczalkowski. 2019. "Gentrification in the wake of a hurricane: New Orleans after Katrina." *Urban Studies*, 56(13):2763-2778.
- Weick, Karl E. 1993. "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster." *Administrative Science Quarterly*, 28:628-652.
- Wilkerson, Amy, Nichole E. Carlson, Irene H. Yen and Yvonne L. Michael. 2012. "Neighborhood Physical Features and Relationships with Neighbors: Does Positive Physical Environment Increase Neighborliness?" *Environment and Behavior*, 44(5):595-615.