

Unsettling Dreams: The Agency of Earthquake Literature from Japan and the Pacific Northwest

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ABSTRACT

This paper examines select works of literature from the Pacific Northwest and Japan through the lens of seismicity. I include *after the quake*, Haruki Murakami's response to the Kobe earthquake of 1995, Frank Galati's stage adaptation of *after the quake*, a variety of literary responses to the Tohoku earthquake including *March Was Made of Yarn* and Ruth Ozeki's novel *A Tale for the Time Being*, and Adam Rothstein's *After the Big One* envisioning the aftermath of a Cascadia Subduction Zone earthquake in Portland, Oregon. Through a hybrid methodology of close-reading, biographical criticism, and ecocriticism focused around discourses of crises and natural disaster, I compare these works as artifacts of 'earthquake cultures.' I find that the three major works in the study – Murakami, Ozeki, and Rothstein – each assert the power of storytelling and fiction in the context of disaster. This fictional power dismantles boundaries between categories such as nature and culture, nation and time-period, dreaming and waking, and fiction and reality. This study challenges the field of ecocriticism to reconsider narratives of crisis and argues that literature can be a potent force in the task of reconciling with change.

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PREFACE

Like many citizens in Portland, Oregon, I have never been in a major earthquake. And, like many residents of the Pacific Northwest, I wasn't even aware that the region was due for a massive earthquake event until a *New Yorker* article went viral in the summer of 2015. "The Really Big One" by Kathryn Schulz introduced a wide, viral audience to the Cascadia Subduction Zone and the extreme earthquake hazard it poses to the Pacific Coast from British Columbia to Northern California (Schulz 2015). Dominated by the San Andreas Fault and fracking-induced shaking in The Midwest, the earthquake conversation in North America turned its attention to the Pacific Northwest. A combination of recent scientific knowledge, Native American oral tradition, and Japanese tsunami records tell us that the last Cascadia earthquake occurred in January of 1700. This timing ensured that the cities, towns, and settlements of the Pacific Northwest grew and developed without knowledge or consideration of the huge megathrust earthquakes the land was capable of unleashing.

However, after the eruption of Mount St. Helens in 1980, the seismic character of the Pacific Northwest showed itself to a community of scientists. As scientists began to realize that massive earthquakes have happened along the Cascadia Subduction Zone, government officials began to push for building codes and emergency procedures to prepare for disaster. In the last 35 years, the earthquake and the unpreparedness of the Pacific Northwest has become more and more known. The future earthquake has seeped into the minds, built environments, and cultures of the Pacific Northwest.

This is an incredible story about the role of historical memory of a place, about the precarious windfalls of science, about the fractured knowledge created by colonialism. It has captivated millions of readers who shared Schulz's piece across the web. For all intents and purposes, this earthquake narrative is a true story.

This thesis explores the stories derived from seismicity. While Schulz's piece navigates the genre of nonfiction, this thesis turns to writers who employ fiction as a way of fitting the event of an earthquake into a narrative scheme. Fiction affords writers creative and narrative tools to exert a degree of agency over the unsettled powerlessness that comes when the earth beneath our feet springs violently to life. This speaks to the place of literature to navigate change, be it social change, natural change, climate change, or other kinds of change that might inspire

writers to take up their pens. My research is guided by this question: *what is the power of fiction to act upon cultures unsettled by change, such as disaster?*

A fictional text mediates communication between a writer and a reader. Critics disagree about how the writer, the reader, and the text each interact to create meaning. This paper explores the relationship between the writers, their worlds, and the texts they create. I consider the perspectives and experiences of the writers as important to understanding the power of the stories as the language and structure of the texts themselves. Locating the power of fiction in both the world of the text and the world of the author pinpoints an intersection between place, language, and lived experience. These writers fold earthquakes – event akin to pure, terrifying Nature – into the individual human experience and the cultural, regional identities of Japan and the Pacific Northwest. In the navigation of categorical nature and culture, this thesis is an application of ecocriticism to disaster narratives, focused around earthquake fiction.

My research is focused by the question: *how and why do writers of Japan and the Pacific Northwest render earthquakes in fiction?* Beginning in Haruki Murakami's *after the quake*, a collection of short stories written in response to the 1995 Kobe Earthquake, I trace the magical capabilities of fiction into his surreal post-disaster world. The March 11, 2011 Tohōku earthquake, tsunami, and Fukushima nuclear disaster spurred several works I discuss: an array of charitable story collections, prominently *March Was Made of Yarn*, and Ruth Ozeki's novel *A Tale for the Time Being*. *March Was Made of Yarn* and its peers demonstrate a commercial role of the publishing industry in addition to the emotional strength of fictional responses to catastrophe. Ozeki's novel meditates on how disasters and the stories of their victims traverse time, space, and the boundary of fiction. Lastly, I turn to Adam Rothstein's speculative fiction piece *After the Big One* illustrating a scenario from the future Cascadia earthquake in Portland, Oregon. He uses the science-fiction genre to rehearse emotionally the inevitable event, thereby demonstrating an instrumental value of science fiction. Each work blends fiction with the real events experienced by real people and witnessed by much of the world through news media. My thesis demonstrates the intentions and creative decisions made by fiction writers choosing to add their artwork into the mixed media landscape of disaster narrative. *I argue that through the technical qualities of fiction, authors and texts alike have the power to reimagine and reassemble earthquake culture through the creation of fictional worlds.*

BACKGROUND

THE CULTURE OF “NATURAL” DISASTERS

The phrase ‘natural disaster’ connects that which we call ‘nature’ to the human experience of disaster. The events that initiate a “natural disaster” – earthquakes, volcanic eruptions, tsunamis, tornadoes – are often actually natural hazards. In the fundamental text of disaster studies, *At Risk*, the authors explain disaster as “a complex mix of natural hazards and human action” (Wisner et al. 1994, pg. 5). *At Risk* takes issue with the assumed separation of natural disasters from the social frameworks that influence how hazards affect people, arguing instead that the social causes of differential vulnerability determine risk, which in turn determines the caliber of the disaster. Disasters are inherently social and the natural hazards that trigger major disasters don’t necessarily dominate the outcome or fallout.

At Risk establishes a social underpinning of natural disasters that draws attention to the contributions of natural hazards and social conditions to specific disasters. The development of North American environmentalism in the 20th century revolved around threat of environmental crisis, from Rachel Carson’s warning about toxicity and Paul Erhlich and Garrett Hardin’s alarm regarding population growth to cotemporary concerns regarding climate change (Carson 1962, Ehrlich 1968, Hardin 1968). Environmentalism and environmental discourse has often been couched in the language of apocalypse, with crisis and disaster imminent in the current course of human development. However, the habits, behaviors and structures of human societies are the root cause for these environmental crises. These apocalyptic narratives pit humans against nature and lament the separation of human society from natural harmony (Naess 1973), driving the wedge of the nature/culture binary. In other words, Western human culture is to blame for the loss, end, and death of nature.

The environmental crises of the environmental movement are differentiated from natural disasters by the assignment of blame to human culture. For natural disasters, often natural hazards take the ‘blame.’ *At Risk* dispels such distinction of blame between natural and anthropocentric disasters, arguing that the differential vulnerability that turns a natural hazard into a disaster is often independent of that hazard. Throughout the book, Wisner et al. catalogue vulnerability and hazard types through case studies ranging from the Irish Potato Famine to

floods and coastal storms. Different types of disasters have different characteristics and range in human causation. Of earthquakes and volcanoes, *At Risk* describes:

These are highly energetic natural events that occur irrespective and independently of social action and any modification of the environment. We mention the significance of human action in relation to these natural trigger events in order to highlight not the insignificance of humanity in relation to these geologic processes, but to underscore the fact that human action and inaction can nevertheless impact upon the *outcomes* of earthquakes and volcanic eruptions (Wisner et al. 1994, pg. 274).

Earthquakes and volcanoes constitute “natural trigger events” that are not caused by human or social conditions. Other disasters, such as Hurricane Katrina, Chernobyl, and the Irish Potato Famine, have root causes in historical, social, technical, or otherwise human manipulations with earth systems. The impetuses of both earthquakes and volcanoes stand outside of this category of human-caused or human-stimulated disaster, although Wisner et al. points out that human actions and cultures can influence the results of these events.

Wisner et al. establishes that cultures interact with natural hazards in important ways even when such disruptions are not human caused. Works such as Lynn White’s “The Historical Roots of Our Ecological Crisis” (White 1973) and William Cronon’s “The Trouble with Wilderness; or, Getting Back to the Wrong Nature” (Cronon 1995) have traced the crises bemoaned by environmentalists to assumptions, ideologies, and controversies reaching back to the medieval world and the Romantic period. These historical contexts reveal underlying narratives of the natural world that contribute to contemporary attitudes and practices that many environmentalists view as destructive and crisis-producing. These viewpoints believe that environmental crises are human caused, resulting from a problematic relationship that pits humans against nature.

The historical explanations of natural disasters don’t trace underlying causes in the same way. In fact, looking back at the human perception of natural disaster in Western history, religious myth and parable looms large. Indeed, the disruptions caused by natural disasters can be divinely immense. The fear and trauma of both experiencing and anticipating large-scale events such as mega-earthquakes, volcanic eruptions, wildfires, and other sudden changes in earth and atmosphere that imperil human lives and systems can be paralyzing. It is when tsunamis raze entire coasts and when hurricane winds upend the sturdiest structures in the landscape that the sheer physical power of the earth can feel the most intense. Even today as

human systems seem to override the earth¹, cataclysmic events such as volcanic eruptions and earthquakes experienced both first-hand and through news media serve as reminders of the sublime scalar difference between the planet and its inhabitants.

Events such as earthquakes and volcanoes are as old as the earth's crust, outdating humankind by a grand scale. Instead of human cultures developing towards crises, like in the discourse of classic environmentalisms, many human cultures developed around the natural hazards of their environments. These 'disaster cultures' are the result of knowledge and memory of destabilizing events in the cultural conception of place. These memories become narratives, folded into spiritual beliefs and religious doctrine, oral traditions and origin stories. For instance, the Japanese earthquake myth of Namazu describes a catfish living underground that shakes its tail to cause the entire earth to shake, resulting in an earthquake. Namazu is tempered by the god Kashima who holds down the catfish with a capstone. When Kashima is tired or distracted, Namazu jumps at the opportunity to cause an earthquake.² In Cascadia and Sumatra as well, similar imagery appears in indigenous myths regarding earthquakes. Ancient stories from Sumatra say that the Earth rests on the horns of a monster described as a serpent with the horns of a cow (Frazer 1918). An indigenous myth from British Columbia outlines the struggle of Thunderbird and Whale (Ludwin et al. 2005).

Environmentalists looking to the Bible and other foundational texts of Western culture for clues to the underlying intellectual or historical causes of the environmental crisis demonstrates how cultural stories influence and dominates nature. Looking at mythology of natural disasters, however, yields a relationship where the earth's characteristics influence the stories of the culture.

Human cultures developing with the historical memory of disasters and resulting understanding of risk have adapted to such events and folded their occurrence into regional cultures. These disaster cultures can be seen in infrastructures, laws, educational curricula, local myths and narratives, signposts, as well as in the knowledge of local residents. For example, the state of California has a highly visible earthquake disaster culture with strong historical memory of large earthquakes in recent history, such as the San Francisco earthquake of 1906 and Loma

¹ This epoch is known as the Anthropocene.

² The Japanese myth of the catfish is an enduring image. Its history is discussed in detail in Weisenfeld 2012 and Rambelli 2014. Its relationship to the Edo earthquake of 1855 is discussed in Smits 2006.

Prieta 1989. Building codes and earthquake drills are two such ways that earthquake risk and preparation are built into the daily culture of this specific region. Other regions of the United States, such as southern states with frequent hurricanes or Midwestern states with frequent tornadoes, integrate these weather events into the curriculums, city development, codes, and daily tasks as well. Shelter basements, evacuation routes, systems for alert, and stories about past events are examples of this disaster culture. Escape routes and signage in places at risk for tsunami waves, such as the east coast of Japan and the Oregon Coast are examples of elements of the built environment that comprise an aspect of disaster culture.

The disaster culture that frames my study is different than Ulrich Beck's notion of risk society. Beck posits that as affluent societies create modernity through technology, the feedback loops that reproduce wealth simultaneously and systematically produce risk. He relates affluence and scarcity to the "production, definition, and distribution of techno-scientifically produced risks" (Beck 1992, pg. 19). Beck's risk society describes a technological condition of modernity. My phrase "disaster culture" acknowledges how the risks and the lived experiences of all sorts of disasters impact regional identities and human landscapes.

ART AND DISASTER

Artists have long turned to fiction as a tool for both responding to change and creating it. Art's relationship to crisis and disaster has many dimensions. Periods of peace and relative political stability such as the 16th Century in England and the Heian period in Japan produced a courtly flourishing of poetry and artwork that was unthinkable in times of political tumult. There are many examples of real world crises appearing in literary work. The choice of fictionalizing these events was occasionally made to protect the author from the historical consequences of risky ideas. For instance, the creation of an imagined island in Thomas More's *Utopia* allowed him to speak freely about social and political crises without pointing fingers directly at the powerful regime of King Henry VIII.

These historical artistic renaissances suggest an antithetical relationship between artistic pursuits and disaster. Yet, in the 20th century art works and movements respond in full force to disasters of many origins. There is art made by witnesses of disaster, such as the photographic culture of the Great Kanto Earthquake of 1923 (Weisenfield 2012) and Picasso's famous painting of the 1937 Guernica bombing in Spain (Picasso 1937). Contemporary movements such

as disaster porn which includes stylized images of Chernobyl, abandoned factories in Detroit, and other artistic renderings of real life disasters. There is also a flourishing of galleries of art made by victims of disaster and crisis. There are exhibits with names such as “Art from the Holocaust” which showcases charcoal drawings created by inmates in concentration camps in the 1940s. Exhibits like “L’Art en guerre, France 1938–1947: From Picasso to Dubuffet” present artwork made in direct response to World War II in France, including works by prisoners of war. Recently at the Boise Art Museum in Boise, Idaho, there was an exhibit called “Minidoka: Artist as Witness” which included artwork made by Japanese Americans relocated to internment camps in the 1940s. These examples demonstrate not only an artistic response to trauma, change, and crisis, but a fascinated market for that art in the modern world audience. These artworks and movements incorporate all sorts of disasters: war, economic collapse, nuclear fallout.

Perhaps the most studied literary response to crisis is the interwar period of the 1920s which produced profound and numerous works of literature and artwork in response to World War I. Such works as T.S. Eliot’s *The Wasteland* and art movements such as dada, expressionism, and surrealism that developed in Europe and the United States offered artistic and literary responses to the immense violence experienced in the previous decade.

One of the most fascinating case studies of artwork’s response to a ‘natural disaster’ is the phenomenon of 1816-1817, the year without a summer. In April 1815, Mount Tambora erupted in modern-day Indonesia, the most powerful volcanic blast in recorded history, 100-times the force of Mount St Helens (Broad 2015). This event caused major disruptions to atmosphere and agriculture affecting the entire globe. The particles propelled from the blast entered the atmosphere and blocked sunlight, resulting in “three years of planetary cooling” (Broad 2015). Freezing temperatures and crop failures were prevalent across Europe and North America. The fallout from the eruption worsened the Irish Potato Famine and eliminated summer weather in New England and Europe in 1816, becoming known as the “year without a summer” (Bate 2000, pg. 97). Filtered through the volcanic atmosphere, the world looked different. The vivid sunsets and frigid weather were documented by painters such as Caspar David Friedrich of Germany and England’s J.M.W. Turner and John Constable (Broad 2015). The cold summer detained a party of writers indoors in Switzerland, including the Shelleys and Lord Byron. The result of the spoiled vacation was a writing contest which yielded both Mary Shelley’s *Frankenstein* and John Polidori’s “The Vampyre.” These works created two of the most iconic

monsters in literature. *Frankenstein* is often cited as the first work of science fiction and many critics have used its origin story as leverage in interpreting the text (Phillips 2006). The relationship between the volcanic eruption and the fit of horror literature it inspired is frequently acknowledged in both literature and geology courses. Lord Byron's "Darkness," John Keats's "To Autumn," and Li Yuyang's "A Sigh for Autumn Rain" are the most famous poems that were inspired by the volcano's weather effects (Broad 2015; Bate 2000).

Voltaire wrote about the Lisbon earthquake of 1755, a traumatizing event that tested religious and philosophical doctrines of good, evil, sin, and blame. Voltaire treated the earthquake both in a poem, *Poem on the Lisbon Disaster*, and in his novel *Candide* (Voltaire 1755, Voltaire 1759). Voltaire's writing on the earthquake served as both a grieving practice or memorandum for the innocent victims of the earthquake and as an attack on philosophical optimism, denying there is such thing as a benevolent god. As Bate suggests in "Major Weather," Voltaire's existential reaction to the Lisbon earthquake indicates the realization that "the earth has its way of striking back, most drastically with earthquakes and volcanic eruptions, but more often with plain old bad weather" (Bate 2000, pg. 100).

This background offers the current landscape of disaster studies as it relates to my project. I have also provided examples of how art in general has grappled with disaster in many contexts. Since my project focuses specifically on fiction and literature, I will provide theoretical backing about how fiction is uniquely equipped to render disaster.

THEORY

LITERATURE AS TECHNOLOGY

In Aristotle's *Poetics*, he writes that tragedy "achieves, through the representation of pitiable and fearful incidents, the catharsis of such pitiable and fearful incidents" (Golden 1968, pg. 11). The notion of "catharsis" literally means purging or cleansing of the body. Aristotle uses it to mean the rehearsal of emotional response through a sort of emotional purge on the part of the audience. Though Aristotle employs this metaphor in a discussion specifically of drama, "catharsis" is central to why people seek entertainment in tragedy and glean enjoyment from watching or reading about "pitiable and fearful incidents." Tragedy serves a social and emotional function to rehearse emotion, an instrumental purpose relevant to grappling with disastrous

events.

Aspects of “catharsis” can be seen in the very structure of literary fiction. As Ursula Le Guin writes in her piece “The Carrier Bag Theory of Fiction,” the middle section of a story is supposed to be “conflict” (Le Guin 1986, pg. 152). Crisis is central to the structure of literary fiction. It propels the story forward, adds intrigue and urges the reader to discover the resolution. This crisis may be war, an impending marriage, an internal struggle within a character, or perhaps it is a natural disaster. Even if a story doesn’t engage with a political or environmental crisis in the content of the narrative, the creation and resolution of a crisis is the expected form of a novel, epic poem, short story, film, or any other entertainment media. Though the placement and character of crisis can be altered and experimented with, most readers would agree that a story without some sort of crisis is boring and not worth reading. Catharsis may help to explain why we enjoy, even expect, to see characters struggling to overcome challenges and seek change.

“Catharsis” suggests an instrumental purpose for engaging with narrative: to rehearse and practice feeling. The structure of the tragedy and the space of the drama – the methods and materials by which the representation is realized – would then be instruments. This brings up an important distinction for discussing written fiction in the context of disaster networks: language, and therefore things made out of language such as stories, is a human technology. Further, I want to draw attention to the notion that not only is language technological, but the structure of narrative and conventions of genre are both technological developments in fiction writing, not to mention all the linguistic ticks and literary allusions which deepen and specify meaning. Therefore, the structure of crisis in literature and drama, and the idea of a beginning, middle, and end to a story (necessary components all literatures and narratives must account for) are pieces of that communicative and empathetic technology.

Technology is a hot topic in the environmental studies and sciences, both embraced and rejected by proponents of different environmental doctrines. Bruno Latour’s essay “Love Your Monsters” in *The Breakthrough Institute’s* collection *Love Your Monsters* uses Mary Shelley’s 1818 Romantic science fiction novel *Frankenstein* to argue that society should not shun or abandon our technologies. In his metaphor, Dr. Victor Frankenstein’s monster is the symbol of technology. The immense trouble that Victor encounters results from his neglect and rejection

of the monster, his “technology,” and not the creation of the technology itself. Being rejected and neglected, the monster blunders through the world causing violence and mayhem (Shelley 1818).

Latour’s discussion of Shelley’s *Frankenstein* and his description of the narrative of modernity speak to the relationship between environmental thought and the structure and genre of fiction. He writes:

The dominant, peculiar story of modernity is of humankind’s *emancipation* from Nature. Modernity is the thrusting-forward arrow of time — Progress — characterized by its juvenile enthusiasm, risk taking, frontier spirit, optimism, and indifference to the past. The spirit can be summarized in a single sentence: “Tomorrow, we will be able to separate more accurately what the world is really like from the subjective illusions we used to entertain about it.

The very forward movement of the arrow of time and the frontier spirit associated with the modernizing front is due to a certain conception of knowledge: Tomorrow, we will be able to differentiate clearly what in the past was still mixed up, namely facts and values, thanks to Science.

Science is the shibboleth that defines the right direction of the arrow of time because it, and only it, is able to cut into two well-separated parts what had, in the past, remained hopelessly confused: a morass of ideology, emotions, and values on the one hand, and, on the other, stark and naked matters of fact (Latour 2012).

To Latour, “modernity” is a “story” defined by a forward pointing arrow. “Science” is at the forefront of this arrow, moving the story forward with gusto. Latour outlines a clean separation between things: future and past, reality and illusion, values (emotions) and facts. Science is the method that delineates these things. Science is “right,” correct. However, Latour ultimately rejects this ideology and suggests that instead of looking to “Science” to further separate humans and Nature, future and past, illusion and reality, fact and value, we should be seeking intimacy and attachment. Emotions and values are not discrete from “stark and naked matters of fact.” We should see them as intertwined. Although Latour doesn’t outright say this, he does imply that “subjective illusions” are not too far from “what the world is really like.” In fact, perhaps they are the same.

Fiction certainly falls into the category of “subjective illusion.” Indeed, what is a more “subjective illusion” than a novel? There are even those that adhere to the notion that novels and fiction are more ‘true’ than real life. When science and fictional “subjective illusions” are interwoven, like in certain works of science fiction and in narrative science communication, perhaps Latour’s intimacy of attachment can be realized, at least in part. Latour himself employs

this method, using a literary work of science fiction as a metaphor for his argument. He represents “Science” and modernism through a “subjective illusion” in a very compelling and, perhaps, true way. Latour shows that metaphor, even in the most literary Romantic sense, is a powerful tool for communicating scientific information and the environmental theory that underpins that contemporary debates of technology.

Like Le Guin’s “Carrier Bag Theory of Fiction,” Latour’s piece also speaks to the structure of narratives and stories. Latour emphasizes over and over that the dominant narrative of the modernist story is progress, a “forward-thrusting arrow.” Le Guin addresses this structural trope as well, also with a narrative metaphor. In an abridged interpretation of her essay, she explains: the first technologies of humankind are often remembered as the weapons – the spears, the sticks, the long, hard, bony, things that people used to kill animals and kill each other. These are the stories that we hear. What we don’t hear about is what was probably the true first type of technology is the container, the thing to hold other things. The container brings energy *in* rather than expends energy *out*. After all, don’t people need a container to carry their weapons in and a container to bring back the meat from the kill site? (Le Guin 1986).

Le Guin uses these two opposing versions of the original human technology metaphors for the structure of narratives. The weaponry represents the common way that narratives are taught – linearly. They have a beginning, middle, and end. The proper shape of a narrative is often construed as an arrow or spear, like Le Guin’s description of early weaponry and Latour’s modern momentum. However, just as Latour seems critical of such a narrow, linear conception of modern technology, Le Guin expresses her own criticism of linear narrative conventions:

I differ with all of this. I would go so far as to say that the natural, proper, fitting shape of the novel might be that of a sack, a bag. A book holds words. Words hold things. They bear meanings. A novel is a medicine bundle, holding things in a particular, powerful relation to one another and to us (Le Guin 1986, 151).

In this way, Le Guin tackles the same linear narrative of progression that Latour posits and questions. She connects to environmental history and technology. In a funny way, both Latour and Le Guin are discussing the fundamental relationship of humans with technologies. Le Guin employs the “carrier bag” metaphor to fiction. She argues that in the shape like a carrier bag, fiction has the power to hold “things in a particular, powerful relation to one other and to us.” There is intimacy and attachment in these relationships. These relationships are metaphors. They are science imbued with values, expressed through emotions. She shows how narratives and

fictions through “subjective illusions” can not only represent, but alter “the way the world is really like.” Fiction here has the capacity to create intimacy and attachment. In this way, Le Guin upturns the linear narratives of progress, Science, and the scientific detachment against which Latour cautions. Le Guin’s theory emphasizes the technological and instrumental potential for fiction, likening it to a “medicine bag.” These emotional powers invoke catharsis, and narrative technology is envisioned as a cultural container for this very process of emotional intimation and transformative attachment.

LITERATURE AS PLACE

These frameworks discussing literature as technology suggest that narratives can have teeth. They can alter the stakes of the non-fictional “real” world by reaching across into the “real” world. Latour’s ideas of attachment and intimacy can perhaps be achieved through literary (or fictional) representations, metaphors, and empathy-producing narratives. It is important that these narratives and scenarios are, as Aristotle puts it, “the representation of pitiable and fearful incidents.” Fiction exists in this representational mode, where alternate worlds can be conjured by the stroke of the pen. Fiction thus has the unique power to conjure entire worlds where it can transport readers (Busselle and Bilandzic 2008, Green et al. 2004, Green 2004). This traveling between the “real” and the fictional that takes place within a reader’s mind is called transportation by psychologists who study the mental processes of reading. Under transportation theory, fictional worlds essentially become places where the audience can go by “creating belief” (Worth, 2004, p. 447). Of course, visual media narratives such as film and television also achieve this sort of audience transportation, but by showing images alongside language.

Writing a piece of fiction requires that writers must also transport themselves into that place and make specific choices about the rules and aesthetics of that world. In genres of realism, that world looks very similar to the world of the writer. In historical fiction perhaps the world has been extensively researched in order to represent as close as possible the real world as it was experienced by real people at the time. In other genres, such as science fiction and fantasy, the narrative world may be unrecognizable or operate under rules that would be impossible in the real world of the audience or writer. In Busselle and Bilandzic’s work, they found that magical or unrealistic worlds did not disrupt the reader’s understanding or engagement with a narrative, unless there were inconsistencies or other distractions within the world (Buddelle and Bilandzic

2008). Magical realism combines a world of realism with magical elements that are unquestioned and accepted into the world.

Science fiction utilizes narrative to create imagined futures, alternate universes, extra-terrestrial worlds and societies. The “science” part of science fiction varies greatly. There is “hard” science fiction that relies heavily on the actual science prevalent in the storyline (Cramer 2007). Michael Crichton’s *Jurassic Park* is an example of hard science fiction (Crichton 1990). But there are other works of science fiction that don’t necessarily treat “science.” The genre label itself implicates a relationship between science and fiction. This relationship varies widely depending on the specific works and their intentions. Because earthquake discourses are largely scientific (geology, physics, engineering, public health), the specific relationship between science and fiction in the literature of natural disaster may have importance for the intention, message, or artistry of a piece.

ECOCRITICISM

While certain types of literary criticism aim to understand fiction by examining only the world contained within the pages, other methods consider literature as an artifact of culture, of place, and of history. These broader lenses for studying literature acknowledge that earth systems, political events, migrations, wars, and other aspects of human culture seep across the nebulous border from ‘reality’ into fiction. When fiction engages with events of the real world, this expands the possibilities of that ‘real’ world (Le Guin 1986). In this way, the power of fiction is not just determined by its content, but also by specific contexts, experiences, and intentions of its author and its reader. When instances of crisis and change are rendered in fiction, this offers both writers and readers emotional vocabularies to grapple with changes outside of their own control, such as the case of political upheaval and natural disasters. Considered as creators of place and representations of lived experience, literatures bring emotional power to bear on complex networks of earth systems, regional identities, and individuals in dialogues of crisis and response.

Locating the power of fiction in both the world of the text and the world of the author pinpoints an intersection between place, language, and lived experience. These facets of fiction allow us to consider it as an artifact of a specific culture. In the genre of ‘environmental’ literature, nature writing and science fiction generated in the last two centuries celebrate rural landscapes, imagine dystopian and utopian future, and lament processes such as urbanization,

deforestation, industrialization, and climate change (Buell 2001). Jeffrey McCarthy defines ecocriticism as seeking to “understand our present anthropocentric assumptions and, also, to reimagine the ways human beings understand their connection to the natural world” (McCarthy 2002, pg. 180). This kind of analysis can take many forms. Another paper by McCarthy examines historical ecologies and commodities of the Congo in relation to Joseph Conrad’s *Heart of Darkness* (McCarthy 2009). Another example is Alan Bewell’s argument that John Keats’s “To Autumn” celebrates the England’s temperate climate in opposition to the tropical colonies (Bewell 2008). Both of these incorporate historical ecological, climate, and economic data to understand the represented environments of 19th century works.

Today’s environmental discourse is strewn with the language of dramatic and looming crisis, as ecocriticism emerged out of the concerns of classical environmentalism. The same fixation on environmental crisis that captivated social scientists of classic environmentalist works drives much of the work of ecocriticism (Gifford and Beckett 2007). However, the genre of natural disasters such as earthquakes and volcanoes is largely overlooked in ecocriticism. As discussed earlier, Jonathan Bate’s chapter “Major Weather” on the Mount Tambora eruption in Romantic literature offers one example of non-anthropogenic disasters in ecocriticism. Susan Sontag’s “The Imagination of Disaster” explores the formats of science fiction films portraying all types of disasters (Sontag 1978). This reveals a gap in the ecocriticism literature, where disaster literatures are more frequently analyzed as artifacts of specific disasters rather than components of a larger discussion regarding the contours of nature and culture in literature. The blend of fiction, lived experience, and geographical relationships through which I conduct my research has potential for the fields of environmental literature and ecocriticism to carefully consider the role of natural disaster and catastrophe in the discipline. Considering natural disaster literature under an ecocritical framework may test how both of these niches attempt to hold things in new relations to one another.

SITUATING EARTHQUAKE LITERATURE

This thesis explores modern of earthquake narratives rendered in fictional genres and the artists who create them. Overwhelmed by the power of earth systems and tectonic shifts to impact human cultures, these artists seize the unique powers of fiction to take creative control of worlds within the confines of art. These fictional worlds, as counterparts or extensions of a world

where the earth shakes for six minutes in Japan and where the coast of the Pacific Northwest bulges under the strain the subduction, allow writers to explore the emotional processes of grief, resilience, and anticipation.

“Earthquake literature” isn’t a genre in the way that science fiction or young adult fiction are. Perhaps one could define “earthquake literature” as any piece of literature that includes an earthquake somewhere in its plot. Another definition might be a piece of fiction that has been written in response to an earthquake or in proximity to an earthquake. My definition of “earthquake literature” considers any work that includes mention, portrayal, representation, or response to an earthquake of any size and sort. However, the texts that I chose to dig deeply into are more specific. Certainly, they include an earthquake as an important element of plot, but moreover, they must engage with a real earthquake either experienced or predicted. In this way, I ensure that the fictional representation of the earthquake has a counterpart in the real world and thereby I am able to consider the fiction part of the larger cultural context of disaster.

PACIFIC NORTHWEST

In the United States, the Pacific Northwest tops the list for unexpectedly high seismic risk. A major earthquake has not occurred since white settlers arrived, essentially preventing an earthquake culture such as California has from developing from historical memory and story. Indeed, the Pacific Northwest is located on a subduction zone mega-thrust fault, the type of fault that produces the largest earthquakes ever recorded. Chile 1960, Alaska 1964, and Tohōku 2011 are all examples of megathrust subduction zone earthquakes. The Pacific Northwest stretches from Northern California through Oregon and Washington to British Columbia in Canada. This region has not experienced a major earthquake since January 1700, before white settlers had arrived. This event has been dated through oral traditions of indigenous people in the Pacific Northwest (Ludwin et al. 2005), geologic deposits of tsunamis sands and landslides (Goldfinger et al. 2012), and, remarkably, via Japanese documentation of a mysterious tsunami without any prior shaking (Atwater et al. 2015). Goldfinger’s study has found evidence of massive seismic events causing tsunamis and earthquakes across the entire span of the Juan de Fuca plate boundary with the North American plate, and has constructed an event history by corroborating different geologic evidence (Goldfinger et al. 2012). Goldfinger’s study estimates a 30% chance that Southern Oregon will experience an earthquake of 8.0 in the next 50 years. A full slip of the

Juan de Fuca plate, resulting in an earthquake of 9.0 or greater has a 10-15% chance in the next 50 years.

Because the Pacific Northwest has not experienced an earthquake in recent history and the historical memory of the indigenous people has been silenced as a result of colonization, the earthquake disaster culture in the region does not match the risk. Until recently, at the impetus of Schulz's *New Yorker* article, an earthquake culture in the Pacific Northwest was only apparent in scientific communities and Native American tribes. As the knowledge of the region's seismicity spreads through government agencies and lay people alike, an earthquake culture is growing. But without an event to demonstrate the true vulnerabilities of the region, it is unclear how effective media campaigns and scientific papers can be in instigating an earthquake culture in the most vulnerable communities.

As information regarding Cascadia reaches a wide audience, writers have begun to pay attention to the earthquake risk and government officials have begun looking for fictional ways to communicate about earthquake preparation (Barlow, Rizzo, and Hahn 2016, 2014). In anticipation of the Cascadia event, Portland writer Adam Rothstein published a series of short speculative fiction called *After the Big One* synthesizing scientific and governmental information into a salient narrative of a 9.0 earthquake in Portland.

People in the Pacific Northwest are engaged with disaster cultures from other places as well. Global media and cosmopolitanism distribute information and narratives across the world, depositing bits of disaster culture. Ruth Ozeki, a writer in British Columbia, writes her novel *A Tale for the Time Being* as a Canadian witnessing the Tohōku earthquake and Fukushima nuclear disaster unfold across the ocean. Though her book is located in the Pacific Northwest and her residency might label her a North American writer, her work acts as a bridge between the disaster cultures of Japan and the Pacific Northwest and impacts both.

JAPAN

Japan is located at the convergence of the Pacific Plate, the Philippine Plate, and two slabs of the Eurasian Plate – the Okhotsk and the Amur Plates. The Pacific Plate is subducting underneath both the Okhotsk and the Philippine Plate, which subducts under the Amur Plate. This multiple plate boundary is highly active, resulting in the frequent earthquakes Japan experiences. These quakes vary from small to very, very large. In the since 1900, there have been

three major earthquakes that have transformed the earthquake culture of Japan: the 1923 Great Kanto Earthquake in Tokyo, the Kobe earthquake of 1995 in southern Japan, and the Tohōku Earthquake of 2011 off the northeastern coast.

The Great Kanto Earthquake of 1923 ravaged Tokyo during the lunch hour. The shaking was measured at around 8.0 Mw, caused by a rupture along the Sagami Trough, where the Philippine Plate subducts underneath the Okhotsk Plate. Fires and violence erupted, along with a tsunami that reached heights of 12 feet. It was the deadliest disaster ever recorded in Japan (Morton 2014). The aftermath of the disaster was documented by photography, one of the first major disasters to be imaged in that way (Weisenfield 2012). Leith Morton translates poetry written in the two months after the event in “The Great Tokyo Earthquake of 1923 and Poetry.” He writes:

The poetry produced in the wake of the 1923 earthquake made an enormous contribution to the literature of disaster by showing how culture could serve as a memorial to disaster and also act as a means by which those who lived through it could cope with the event. Trauma memorialized in literature not only functions as a reminder to future generations of the tragedies of the past but also creates a literary precedent or model for the witnessing and recording of similar events in the future (Morton 2014, pg. 273)

The 1923 earthquake was formative for Japan’s conception of disaster and artistic responses (Karlsson 2014).

Though not earthquakes, the two atomic bombs that the United States dropped on Hiroshima and Nagasaki in August of 1949 were major catastrophes that greatly contributed to the disaster culture of Japan, and indeed the entire world, in the second half of the 20th century. The history of nuclear war in Japan is unique – no other place in the world has been bombed by nukes in war (although other places have experienced nuclear disasters). This event introduced nuclear decimation and radiation to the historical memory of disaster, a legacy that is never far from Japanese disaster narratives.

These two mega-disasters offer a 20th century context for the two events that produced the Japanese literature I explore here: The 1995 Kobe earthquake and the 2011 Tohōku earthquake and tsunami. Of course, as Atwater et al. demonstrate in *The Orphan Tsunami*, Japanese earthquake culture extends backwards centuries, providing written documentation of tsunamis and earthquakes for Japan’s modern history. The next earthquake Japanese geologists are anticipating would hit Tokyo, one of the frequent deep-thrust earthquakes the city

experiences. A 2008 study isolated a slab fragment wedged beneath the city, a source of seismicity that poses a great risk to the metropolis (Toda et al. 2008).

At Risk declares it's impossible to generalize about a national culture of disaster when different populations within any region face different degrees and types of vulnerability. Such differentiation yields different disaster cultures. As Roy Starrs asks in the introduction to *When the Tsunami Came to Shore: Culture and Disaster in Japan*: “Do people’s social and cultural responses to disaster reveal anything about their ‘national culture’ or even ‘national character’ or ‘national psychology’? Is there even such a thing as a ‘unique’ national-cultural response to disaster”? (Starrs 2014, pg. 7). I recognize the limitations of generalizing a culture according to regional or national boundaries. While I use the term “earthquake culture”³ to describe the societal adaptations to disaster, I do not assume that the earthquake culture is homogenous across Japan or the Pacific Northwest.

By examining both Japan and the Pacific Northwest, I explore two places with very different seismic pasts and a very different variety earthquake cultures. However, they each share a similar seismic hazard. The disaster memory of the two places are connected by the atomic bombs of the Second World War and the tsunami information transmitted by the Pacific Ocean that corroborated the earthquake history of the Pacific Northwest and solved a historical mystery in Japanese tsunami records. These connections help situate the comparative aspect of my literary study.

SITUATING AROUND TEXT

I have identified two places to situate my study in the world, a region and a nation on either side of the Pacific Plate. I have given brief context regarding the earthquake culture of each place, pointing at specific events and their cultural resonance. However, as my theoretical background states, texts themselves create their own places. My study focuses on specific fictional texts. Though they are associated with certain regional labels – *A Tale for the Time Being* as Canadian literature or *after the quake* as Japanese – I investigate the fictional places within each text that resembles, but does not equal, the respective geographic locations. In this way, my project dives into the boundary between reality and fiction by looking closely at how a

³ I am indebted to Dr. Elizabeth Safran for coining the term “earthquake culture” and this project is derived from her research on earthquake communication.

fictional text imagines or reimagines a real place. I am curious how texts navigate fictional, national-cultural, and physical borders in the context of Pacific Rim earthquakes.

Situated in these ways, my research seeks answers to the question, how and why does Japanese and Pacific Northwest literature render earthquakes? The ‘how’ looks to the language and dialogue of the texts themselves; the ‘why’ explores the artistic and social designs of the authors.

METHODOLOGY

This paper focuses on the production of fiction and the possible interpretations of earthquake presence within those fictions. It aims to describe how earthquakes function structurally, linguistically, and metaphorically in five texts. Secondly, it explains why authors decided to write about specific earthquakes in a fictional capacity according to the authors’ regional identities and philosophies. I draw my methodology from studies in literature and social theory. The literary analysis is a blend of focused close reading, contextualization through historicism and ecocriticism, and examination of the author’s biographies and philosophies.

LITERARY ANALYSIS

The tool of close reading developed from New Criticism, a school of analysis that considers strictly the words on the page. However, close reading has since become ubiquitous to most literary analyses, including schools with broader lenses. The main school of criticism I employ in my methodology is ecocriticism, focused around the portrayal of earthquakes. According to Terry Gifford in “Recent Critiques of Ecocriticism” the subfield “has not developed a methodology, although its emphasis on interdisciplinarity assumes that the humanities and science should be in dialogue and that its debates should be informed equally by critical and creative activity” (Gifford 2008, pg. 15). Since the methodology of ecocriticism is loosely defined, I employ a blend of tools for analysis. My analysis of the texts isolates passages in the text which discuss, imagine, or otherwise represent an earthquake. I conducted close readings of these earthquake passages, examining the figurative language and major themes that emerge within each passage, through each individual text, and across my selection of texts.

In addition to my textual analysis of the language, I collected author statements from interviews in newspapers and magazines regarding their work, their philosophies, and their earthquake experiences. I found interviews online in such publications as *LA Review of Books*, *The New York Times*, *The Paris Review*, *The Guardian*, *The Telegraph*, and others. In addition, I found several interviews from NPR and OPB. I isolated statements from the authors that explained their intentions of writing the work, their emotional responses to the earthquakes they wrote about, and their philosophies about writing fiction in general. Because my research question ponders the bridging between fiction and reality in the context of disaster, the lived experience of the authors proves important for tracing the lines of reality and fiction. This author-focused component of my methodology is inspired by Satterfield and Slovic's work on environmental values (Satterfield and Slovic 2004) and Pauls Toutonghi's fiction courses at Lewis & Clark College, both of which consider the life and intentions of an author oftentimes inseparable from the meaning of the work.

Table 1: Major Texts

Text	Author	Date	Setting	Seismic Event	Genre
after the quake	Haruki Murakami	2000, 2002 (English translation)	Various cities and prefectures in Japan	Great Hanshin (Kobe) Earthquake January 16, 1995	Short story, magical realism
after the quake (stage adaptation)	Frank Galati	2009	Tokyo, Japan	Great Hanshin (Kobe) Earthquake January 16, 1995	Drama
March Was Made of Yarn	Elmer Luke and David Karashima (editors)	2012	Various	Tohoku Earthquake, Tsunami and Fukushima Nuclear Disaster March 11, 2011	Fiction, nonfiction
A Tale for the Time Being	Ruth Ozeki	2013	British Columbia, Canada Various prefectures in Japan	Tohoku Earthquake, Tsunami and Fukushima Nuclear Disaster March 11, 2011	Novel
After the Big One	Adam Rothstein	2016	Portland, Oregon	9.0 Cascadia Subduction earthquake (predicted)	Serialized speculative fiction

To choose the texts of my study, I first scoured the internet for “earthquake literature” to find lists such as one compiled by the *Los Angeles Times* (Ulin 2011). By restricting the choices to contemporary earthquake literature, I ensured there would both be a fuller array of peripheral media from which to derive disaster context and living authors with recent interviews speaking about their work. Because my literary analysis relies on both of those components to explore the contours of fiction, this contemporary time period is crucial and provides the very best data. As stated above, I restricted my choice to texts responding to real events either experienced or anticipated with scientific backing. Lastly, I restricted by analysis to written fiction, choosing to forego a broader media analysis of films, comics, documentaries, and radio. The only exception to the literary fiction is the inclusion of Frank Galati’s stage adaptation of Murakami’s *after the quake* to bolster my analysis of Murakami. In addition to the *LA Times* list, I followed the informal recommendations of two advisors, Dr. Elizabeth Safran and Dr. Andrew Bernstein to find Ruth Ozeki’s *A Tale for the Time Being* and *March was Made of Yarn* respectively.

MAPS AND NETWORKS

In order to organize, visualize, and further my analysis, I employ several mapping techniques. Using the 3D Maps function in Microsoft Excel, I map the settings at the level of city and region of each text using sample postal codes. By applying a Cartesian framework to an array fictional worlds, I examine the relationships between fictional place and geographic space that contains both seismic events and human cultures.

While my literary analysis attempts to locate earthquakes in textual relationships, my spatial analysis examines elements of those texts in a global non-fictional arena. This essentially ruptures the borders between the fictional worlds and our own. This rupture has implications for considering fictional texts as empowered actors in networks of disaster culture. In order to visualize these relationships, I use Actor-Network Theory to create networks that account for fictional actors such as characters, human actors such as writers, and nonhuman actors⁴ such as

⁴ In her article “Context Stinks!” Rita Felski applies Bruno Latour’s Actor-Network Theory to controversies in literary analysis: “The Latourian model of the nonhuman actor, moreover, presumes no necessary measure of scale, size, or complexity. It includes not only individual novels or films, but also characters, plot devices, cinematography, literary styles, and other formal devices that travel beyond the boundaries of their home texts to attract allies, generate attachments, trigger translations, and inspire copies, spin-offs, and clones. We are far removed, in other words, from an aestheticism in which art works are chastely sequestered from the worldly hustle and bustle, their individual parts relating only to each other, (Felski 2012, pg. 587)

the texts and the earthquakes. By this, I am able to account for texts as cultural artifacts and cultural architects both within and without the confines their fictional worlds

This hybrid methodology has theoretical backing both from the humanities and the social sciences. As H. Aram Veenser writes in introduction to *The New Historicism*, contemporary critical lenses of reading literature don't require the critic to choose between reading the text in isolation or reading the text in a network (Veenser 1989). While my literary analysis reads texts *as* networks of human culture and 'natural' earthquake disasters, my method of ecocriticism also leads to thinking of a text as an actor within many that comprise a network of disaster culture.

RESULTS AND ANALYSIS

The order through which I will treat these texts in the thesis is chronologically. Not only does this follow specific events in order, from the 1995 Kobe Earthquake to the future Cascadia event, but allows me to have a starting point from which to trace themes between the works.

HARUKI MURAKAMI AND THE KOBE EARTHQUAKE

The earthquake that struck the Hyogo prefecture in January 1995 was the largest Japan had experienced since the Great Kanto earthquake of 1923. The official name of the event is the Great Hanshin-Awaji Earthquake Disaster, but outside of Japan the event is commonly known as the Kobe earthquake. The city of Kobe was hardest hit, absorbing about 71% of the estimated fatalities. The event was measured at Level 7 on the scale of the Japan Meteorological agency and 6.9 Mw on the moment magnitude scale, the equivalent of 7.2 on the Richter scale (Wisner et al. 1994). Between 5,500 and 6,500 people were killed, with injuries numbering over 40,000, and a displaced population estimated around 300,000. The earthquake exposed vulnerabilities in the Japanese earthquake infrastructure and the governmental disaster response was criticized as slow and ineffective. Transportation structures were paralyzed and trade was reduced by more than 20% as of 2002 due to the time needed to rebuild. The economic repercussions were felt around the world (Wisner et al. 1994). According to Wisner et al. the root causes of the differential vulnerability that resulted in such dramatic, tragic, and immense losses and outcomes were prejudice against ethnic minorities, unequal distribution of economic power, and a strong belief in modernization and science which gave citizens false confidence in the Japanese disaster systems (Wisner et al. 1994, pg. 298).

Haruki Murakami is one of Japan's most beloved contemporary writers. Though he was born in Kyoto, he claims to be from Kobe since his family moved there when he was two (Wray 2004). Murakami's writing style is known for being enigmatic and subconscious, as well as being heavily influenced by Western writers and culture. After rising to fame in the 1980s, Murakami left Japan to live more anonymously. In the 1990s, he lived in Boston, Massachusetts working as a writing fellow at Tufts University and Harvard University. It was in Boston where Murakami sat in front of his television in 1995 and watched Kobe crumble and burn. Two months later, he watched the news coverage of the Tokyo subway sarin attacks. In an interview

with *The Telegraph*, Murakami remembers the experience of watching the disaster unfold from afar:

I was shocked. And it made me feel that something was changing drastically in Japan. It was 50 years since the end of the war. And in these years Japan had been getting stronger and stronger, economically and socially. People got rich. But something was happening, and those two events were a kind of metaphor for all sorts of change. We had come to believe that the ground we stood on was stable, solid, hard. But when the earthquake comes, it's not stable any more, not solid any more. And we believed our society was safe; but when some terrorists attack a subway train, it's not safe any more. So we had a myth of solidity and safety, but it was destroyed, suddenly. And it was just after that the economic bubble burst, so that was a milestone in post-war Japanese history (Murakami in Brown 2003)

These two disasters stirred Murakami to respond. He returned to Japan determined to use his position as a writer to create serious works to guide the disaster narrative of Japan away from banal and sensationalist news coverage. In response to the sarin gas attacks, Murakami collected interviews with victims in *Underground: The Tokyo Gas Attack and the Japanese Psyche* (Murakami 2001). In response to the Kobe earthquake, Murakami wrote six short stories in a collection titled 神の子どもたちはみな踊る *Kami no Kodomo-tachi wa Mina Odoru*, literally translated as "The children of the gods all dance" (Wikipedia). The English translation, translated by frequent Murakami collaborator and translator Jay Rubin, was published in 2002 as *after the quake*. The Kobe earthquake marked a turning point for Murakami to return to Japan and write stories and work that are true works of Japan.⁵ Here, I use the Jay Rubin's translation of the stories and typographical conventions of that edition, where all titles are kept in lower case.

Locating the stories in after the quake

Though each of the stories takes place in the weeks between the Kobe earthquake and the Tokyo gas attacks, the Kobe earthquake itself is peripheral to the stories. Mentions of the events appear on the television, in newspapers, and in the pasts and memories of the characters. Though several characters are originally from Kobe, none have strong connections or ties to the place. At

⁵ "I'm trying to write about the Japanese. I want to write about what we are, where we are going, why we are here. That's my theme, I guess" (Murakami in Wray 2004)

the same time, the earthquake creates a subtle tension in each, as the underlying connector between all six disparate and disconnected stories.

The first story in the collection, titled “ufo in kushiro,” begins with the wife of the main character disappearing after watching the Kobe earthquake coverage for five days straight. Her decision to leave her husband suddenly is a mystery. Since she has no ties or connections in Kobe, the impetus of the earthquake is uncertain. In the aftermath of his wife’s abandonment, Komura is sent on a journey north to Hokkaido to deliver a package to a woman.



Figure 1: Setting in "ufo in kushiro"

As this map demonstrates, the movement of Komura from Tokyo to Hokkaido after the disappearance of his wife, and after the earthquake, creates incredible spatial distance between the character and the event of the earthquake. In this story, no characters have connections to Kobe and the only presence of the earthquake is through conversations and news reports.

The second story “landscape with flatiron” takes place in Ibaraki, a



Figure 2: Setting in "landscape with flatiron"

town in Japan's eastern coast. Though one character, Mr. Miyake has family in Kobe, he does not express concern or connection.

The third story, "all god's children can dance" takes place entirely in Tokyo. The earthquake appears in newspapers on the subway and as an image in a dreamy dance sequence. As well, the mother of Yoshiya travels to Kobe with relief supplies as part of her Christian faith. However, this moment is not emphasized in the story.



Figure 3: Setting in "all god's children can dance"

The fourth story "thailand" takes place furthest afield, in Thailand. The main character Satsuki, a doctor, travels to Bangkok for the World Thyroid Conference. She stays for vacation and develops a close relationship with her driver. It is revealed that Satsuki has a stone inside of her, a stone of anger and resentment directed at a man who lives in Kobe. Though the story takes place far from Japan, the earthquake seems to have a close relationship to Satsuki's anger.



Figure 4: Setting in "thailand"

The fifth story, “super-frog saves Tokyo,” also takes place in Tokyo but engages with a fictional earthquake set to destroy Tokyo. The mythology of the story is that an evil worm earthquakes has been awoken by the Kobe earthquake and will unleash a larger earthquake upon Tokyo. There is a mythical part of this story that behold Tokyo’s underworld, populated by bugs, worms, and frogs, creatures that cause and predict earthquakes.



Figure 5: Setting in "super-frog saves tokyo"

The final story in the collection, “honey pie,” takes place in Tokyo after the earthquake but includes flashbacks to provide character backstory. The three main characters are from different places in Japan: Junpei the fiction writer from Kobe, Sayoko the literary scholar from Tokyo, and Takatsuki the news reporter from Nagano. Although Junpei is from Kobe, his decision to pursue a career as a writer has estranged him from his family and his connection with his home is broken.



Figure 6: Setting in "honey pie"

These maps of each story demonstrate how peripherally the Kobe earthquake figures into the collection. The stories draw from cultures and regions across Japan, though Tokyo is the most frequent setting across the collection. Tokyo is also the only place where a different earthquake is mentioned, in “super-frog saves tokyo” where the city is at risk for a mega-earthquake just after (and in mythological response to) the Kobe event.

While these maps reflect the major settings of each story, they are mainly restricted to Japan with the exception of “thailand.” “honey pie” also includes an international context, with Junpei traveling to Barcelona just before the Kobe event and witnessing the earthquake on Spanish television (Murakami 2002, pg. 171). This moment is the most extreme distance from the event and the one most similar to Murakami’s own experience watching the news coverage from Boston.

Locating the earthquake in after the quake

While the stories are set in places where the earthquake is not, the Kobe earthquake and other earthquake symbols are embedded within the texts in indirect and magical ways. The first place where the Murakami shows the earthquake is in the news, a technique that historicizes the text and marks it in time. The second place where the earthquake can be found is in the dreams and fantasies of the characters. The third place where the earthquake appears is in the visceral experience and human bodies of the characters.

In “ufo in kushiro,” Komura’s wife spends the five days before she disappears glued to the television watching “crumbled banks and hospitals, whole blocks of stores in flames, severed rail lines and express ways” (Murakami 2002, pg. 1). Here, Murakami emphasizes the destruction of infrastructure as covered by the news media. Hospitals, banks rail lines, all consist of transit, monetary, and healthcare structures that are necessary to a modern city. The television images in this story emphasizes how the earthquake guts this city. The wife’s fascination with these images demonstrates the captivating quality disaster can have on witnesses. Perhaps some sort of catharsis occurred in the visual experience of the earthquake witness, and this prompted Komura’s wife to leave. Murakami has noted that his stories offer an alternative narrative to the news coverage that is banal and sensational (Lewis 2013). This description appearing in the very first paragraph of the very first story directly confronts the mesmerizing and shocking quality of such media.

On the train to Hokkaido, Komura reads about the earthquake in the newspaper:

“The number of dead was rising. Many areas were still without water or electricity, and countless people had lost their homes. Each article reported some new tragedy, but to Komura the details seemed oddly lacking in depth” (Murakami 2002, p. 11)

In this first part of the story, the earthquake is everywhere in the media landscape of the represented Japan. Komura notices the lack of depth in the details of the tragedy. The news is the only way for him to access the stories and experiences of the victims, but the news isn't emotionally and narratively equipped to do the story justice. Though the story suggests that the earthquake and Komura's wife's disappearance are somehow related, the story only represents distance between the characters and the tragedy. This story is less about the aftermath of the earthquake as reported in the news, but about the effect of news reports on an individual. There is something exhausting and obsessive about witnessing disaster and this story puts this pressure on the characters.

The final story “honey pie” is important to locating the earthquake within the news because one of its main characters and the villain, Takatsuki, works as a news reporter:

Takatsuki enjoyed his work at the newspaper. They assigned him first to the city desk and kept him running from one scene of tragedy to the next, in the course of which he saw many dead bodies. “I can see a corpse now and not feel a thing,” he said (Murakami 2002, p. 161).

In this character, Murakami expresses the numbness to pain and death created by the repeated exposure to it in a professional capacity. This impersonal attitude in the reporters themselves leaks into an impersonal, distanced, and otherwise unemotional tone of reporting. If the reporter feels nothing when he sees the corpse, as Takatsuki admits, the writing produced would also be void of emotion, and therefore the audience of the news would absorb the banal facts and unemotional register. We know the Murakami believes this is a problem and represents this in his text in order to demonstrate how fiction can make banal news stories a powerful plot device, a lens through which the characters experience the tragic undertones of the world. It makes the tragedy both muted and feverish. The undercurrent of emotion sadness is only enhanced by its subtlety.

Though the news reports and the television are the only places where the characters come into direct contact with the earthquake, Murakami demonstrates this undercurrent of emotion and intensity by rendering the earthquake in dreams. Murakami is known for his subconscious,

dreamy style, a take on magical realism. The earthquake is embedded into the consciousness of the characters, despite them being emotionally and physically distant from the immediate feeling of shaking or the aftermath of disaster.

“super-frog saves tokyo” is a comical, mythological story about a businessman named Katagiri who finds a giant, talking frog in his home after work one day. Frog asks Katagiri to cheer him on during a mortal battle with the earthquake-causing worm in the underworld of Tokyo. However, the evening that Katagiri is supposed to meet Frog for the battle, he collapses unconscious and wakes up in the hospital the day after the earthquake was due to occur. Though he has no recollection, the nurse at the hospital tells him there was no earthquake in Tokyo and that he yelled “Frog!” a lot in his sleep:

Katagiri closed his eyes and listened to the slow, rhythmic beating of his heart as it ticked off the minutes of his life. How much of what he remembered had actually happened, and how much was hallucination? Did Frog really exist, and had Frog fought with Worm to put a stop to the earthquake? Or had that just been part of a long dream? Katagiri had no idea what was true anymore (Murakami 2002, p. 134).

Katagiri’s perspective, we realize here, is unreliable. Is he insane, hallucinating giant frogs and an earthquake worm underneath Tokyo? And yet, Frog appears in the hospital room, assuring Katagiri that he came to the battle in his dream and was a great help in defeating the worm and preventing the earthquake. This passage and its fictional speculation of Katagiri’s untrue dreams should remind one of the concept of reading as hallucination and of the importance fiction places on precisely what is *not* true. This passage upturns the fantastical world of the story, where all the rules seem to suggest that there really is a worm and an earthquake and a frog. The hospitals and science of the ‘real’ world poke through, making the fantastical elements of the Katagiri’s world closer to a representation of insanity than of a magical world. If we take Katagiri’s world in its dreamy symbolism, we see a version of the catfish myth of Japanese earthquake lore, a joke about the ability of animals to predict earthquakes, and a dream space where the Katagiri can access the mysterious workings of the earthquake. If Katagiri is in fact insane, Murakami presents the traumatic earthquake event of Kobe as a central factor of the man’s hallucinations, hospitalization, and burgeoning insanity.

Two other dreams dominate Murakami’s dream-scape in *after the quake*. In “honey pie,” a child is affected by nightmares after watching too much news coverage of the Kobe earthquake. Her mother Sayoko explains:

I think she saw too many news reports on the earthquake. It was too much for a four-year-old. She wakes up at around the time of the quake. She says a man woke her up, somebody she doesn't know. The Earthquake Man. He tries to put her in a little box – way too little for anyone to fit into. She tells him she doesn't want to go inside, but he starts yanking in her arm – so hard her joints crack – and he tried to stuff her inside. That's when she screams and wakes up" (Murakami 2002, p. 147)

Like in “super-frog saves tokyo,” the earthquake is animated within the dreams of the character. Here, it is “The Earthquake Man” who threatens the girl in her dreams. However, the explanation of the dream, the boundary between awake and sleep is unclear. First, Sayoko says that the girl wakes up around the time of the quake, which would be 5:46 am. The girl reports that The Earthquake Man wakes her up, and that it is when she has been awoken that he manhandles her into the box. But then she wakes up again, screaming. The duplicated waking in this scene suggests that The Earthquake Man dream is in between the world of dreams and the world of the present. The earthquake has obviously seeped into the dream world, but unlike “super-frog saves tokyo,” the earthquake dream doesn't reveal any reason or explanation for the earthquake. It just presents a pure threat to the girl, a man who exerts power over her and tries to constrict her physically. The earthquake shrinks the girl in the dream, but she wakes up in defense. Perhaps it is just a nightmare, the seepage of horrific news stories into the consciousness of children, but perhaps The Earthquake Man is real in some dream space and time.

While there is no earthquake dream in “thailand,” it should be noted that there is a dream for Satsuki to release a rock that is a metaphor for her anger.

While the earthquake appears in the news and in the character's dreams, it also comes to live viscerally through the bodies of the characters. While Murakami describes the bodies of his characters as harboring earthquakes within in them. As well, the earthquake has a sexual character in “ufo in kurisho,” “all god's children can dance,” “thailand,” and “honey pie,” where it hovers around the female body and haunts scenes of sexual intercourse.

In “ufo in kushiro,” Komura watches the movements of a woman, Shima, as she walks: “He had the strange impression that he was witnessing some moment from the past, shoved with random suddenness into the present” (Murakami 2002, pg. 14). The moment of *déjà vu* gaze, her body mimics the movement of plate tectonics where the physical tensions and strains that have been building up for years are “shoved with random suddenness into the present.” There is the ghost of a memory in Komura's experience, a jarring repetition akin to the frequent earthquakes

Japan experiences. The female body is the location for these memories, the impetus for this moment of Komura's trauma⁶. When two become intimate later in the story, Komura is unable to perform sexually because he is distracted by the earthquake: "images of it had come to him one after another, as if in a slide show, flashing onto the screen and fading away. Highways, flames, smoke, piles of rubble, cracks in streets. He couldn't break the chain of silent images" (Murakami 2002, pg. 25). The sexual encounter is imbued and ruined by the earthquake in Komura's memory. Not only do the news images seem to have permeated the consciousness of the character deeply, but are strongly associated with the Komura's sense of intimacy, perhaps because of the parallel between the earthquake and his wife. The earthquake is not just in the body of the Shima, but in the mind of Komura, and he takes it with him as he travels as far away from the epicenter one can go without leaving Japan. Though the earthquake is an event at a fixed place on the earth, the event can travel the world through news, through memory, and through the body.

The earthquake also interferes with sex in "honey pie," when Junpei and Sayoko are interrupted by Sala's nightmare of the Earthquake Man. In "thailand," the earthquake originates from the female body of Satsuki. When she finds out that a man from her past survived the Kobe earthquake, she reflects:

She had hoped that he would die in agony. In order to bring that about, she had gone so far as to wish in the depths of her heart for an earthquake. In a sense, she told herself, I am the one who caused the earthquake. *He* turned my heart to stone; *he* turned my body to stone" (Murakami 2002, pg. 106)

As the intensity of her emotion and bitterness wells up in her and as she weeps, she takes responsibility for the earthquake and acknowledges that her hatred caused it. She blames the man from her past for turning her "heart" and "body" into "stone." This is a common trope, traceable to Greek mythology, of turning one's body into stone, especially a thwarted lover. Instead of making the stone of Satsuki's bitterness inert and powerless, Murakami lets her stoniness unleash great force and movement. Attributing an earthquake to a woman scorned, even if that earthquake leaves the man at fault unharmed, gives a divine power to the emotions and

⁶ In that sense, in my stories, women are mediums—harbingers of the coming world. That's why they always come to my protagonist; he doesn't go to them (Murakami in Wray 2004)

experiences of women⁷. We must believe that she actually did create the earthquake, for those are the rules of Murakami's dream world. In all three of these examples, the earthquake is at work in the sexual frustration of the characters, either forbidding consummated love in "honey pie" and "ufo in kushiro," or unleashing the suppressed reproductive power of Satsuki. The earthquake destroys moments of intimacy and attachment between characters, loosening the social fabric of the world.

While "all god's children can dance" is likewise saturated with a sexual overtone (Dil 2014), the visceral experience of the earthquake comes from Yoshiya dancing on the earth. The surreal passage connects the artistic movements of dancing with the unsettling truths of instability in the experience of earthquakes:

And then it struck him what lay buried far down under the earth on which his feet were so firmly planted: the ominous rumblings of the deepest darkness, secret rivers that transported desire, slimy creatures writhing, the lair of earthquakes ready to transform whole cities into mounds of rubble. These, too, were helping to create the rhythm of the earth" (Murakami 2000, pg. 79).

As Jonathan Dil discusses in "All Shook Up," this moment of dancing may symbolize the rebirth of Yoshiya, an expression of freedom and joy from his uncertain origins (Dil 2014). But I want to focus on the dreamy materiality of this scene rather than the religious or psychological significance to the character. This is a moment of unity with the earth. He is stricken with a clarity of vision to see or feel beneath the earth into the same "lair of earthquakes" Katagiri accesses in his dream about super-frog. Yoshiya's sense of the "rhythm of the earth" comes both from the visceral movements of his body in dance, and from his connection to the external underworld that harbors earthquakes and creatures. Murakami equates earthquakes with underground creatures with vicious intentions, perhaps reimagining the mythology of the catfish. While the earthquake world is accessed by an emotional moment, it also seems to require movement on the part of Yoshiya. If this moment is indeed a moment of elation and transcendence, it is coupled with, and perhaps tempered by a destruction literally underlying it.

The shared setting of an "earthquake lair" with "slimy creatures" beneath Tokyo is further developed by Yoshiya's nickname;

"Yoshiya's girlfriend throughout his college years called him "Super-Frog" because he looked like some kind of giant frog when he danced. She

⁷ See Dil 2014 for a discussion of the historical trope of jealousy in Japanese literature regarding Satsuki's hard feelings.

loved to dance and would always drag him out to clubs. ... As he let himself go and moved his body in time to the music, he would come to feel the natural rhythm inside him was pulsing in perfect unison with the basic rhythm of the world. The ebb and flow of the tide, the dancing of the wind across the plain, the course of the stars through the heavens: he felt certain that these things were by no means occurring in places unrelated to him” (Murakami 2002, pg. 77).

The myth of Yoshiya is that he is the child of God, although the story reveals this is obviously untrue. However, these moments of dancing where Yoshiya can access the “basic rhythm of the world” indicate a transcendental element to his experience. These two dancing passage together indicate that earthquakes and the “ebb and flow of the tide” are part of this “basic rhythm of the world.” There is something cyclical about a “rhythm” and a planetary scale bearing down onto Yoshiya’s dancing. While the dancing is not creating the earthquake, it is sensing the earthquakes that have not happened yet. With Murakami’s creation of the earthquake underworld, there seems to be a constant threat of an earthquake in Tokyo. It’s as if the impetus of the Kobe earthquake serves as reminder of the vulnerability other parts of Japan face, bringing back memories and glimmers of knowledge from Tokyo’s past events.

In summary, earthquakes in *after the quake* connect to the bodies of the characters, appear in the social fabric of the setting in newspapers (reinforcing the role of media of the social aspects of disaster that prolong and change the disaster), and are most present in ambiguous, underground, dream spaces where monsters and villains lurk.

Fictional Power in “honey pie” and the Galati’s stage adaptation

In an interview with The Paris Review, Murakami reveals that he intends his fictional works to be self-consciously fictional. He likens writing fiction to a movie set where everyone knows the setting is fake. Murakami embraces the power of this fakeness in relation to realness:

I don’t want to persuade the reader that it’s a real thing; I want to show it as it is. In a sense, I’m telling those readers that it’s just a story—it’s fake. But when you experience the fake as real, it can be real. It’s not easy to explain.

In the nineteenth and early twentieth centuries, writers offered the real thing; that was their task. In War and Peace Tolstoy describes the battleground so closely that the readers believe it’s the real thing. But I don’t. I’m not pretending it’s the real thing. We are living in a fake world; we are watching fake evening news. We are fighting a fake war. Our government is fake. But we find reality in this fake world. So our stories

are the same; we are walking through fake scenes, but ourselves, as we walk through these scenes, are real. The situation is real, in the sense that it's a commitment, it's a true relationship. That's what I want to write about (Murakami in Wray 2004).

This quotation emphasizes the fakeness of fiction, the representational quality that makes it fiction rather than non-fiction or fact or truth or reporting. While on one hand Murakami aims to render Japan in verisimilitude, he also wants to make sure that his texts revel in their status as renderings. Another metaphor he employs to describe this is that of video games, stating: "sometimes while I'm writing I feel I'm the designer of a video game, and at the same time, a player. I made up the program, and now I'm in the middle of it" (Murakami in Wray 2004). Here, Murakami describes both writing and reading fiction as the same world-building as coding video games. However, when Murakami writes, he is building the game as he is playing it. Murakami cites himself as the creator of the virtual reality of the setting of his texts. Drawing attention to the status of fiction as fake also directs attention to the concept of the writer as the maker.

The stories in *after the quake* include a metafictional acknowledgement of the writer. In this way, the collection not only represents the Kobe earthquake in a surreal story-world, but also emphasizes the authorial agency writers practice by creating fiction. This agency, when applied to earthquakes by Murakami, asserts creative control over the aftermath of disaster and the chaos of change. In particular, the final story "honey pie" and Frank Galati's stage adaptation of both "honey pie" and "super-frog saves tokyo" are emblematic of Murakami's earthquake metafiction.

"honey pie" is the story that comes closest to Kobe (see Figure 6). The character Junpei in "honey pie" is central to the metafiction of *after the quake* because Junpei has many similarities to Murakami himself. First, he is a fiction writer who is originally from Kobe and attended Waseda University in Tokyo. These details track with Murakami's biography. In another similarity, Junpei is abroad in Barcelona when the Kobe earthquake strikes, and he receives the news through Spanish television. This mirrors Murakami's own location in the United States witnessing the disaster from afar. But moreover, the moment of the earthquake in "honey pie" come just after Junpei is struggling to assert his own agency in his love for Sayoko. He ponders: "What was left for *him* to decide? And so he went on wondering. And not deciding.

And then the earthquake struck” (Murakami 2002, pg. 170). The earthquake presents something wildly out of Junpei’s control, much more so than his ambivalence towards pursuing love.

Junpei is the character who is most directly affected by the earthquake. His dot on the map (see figure 7) overlaps with the Kobe earthquake. Though he takes no action to contact the victims of the quake or connect with his estranged family, it affects him deeply:

It was an echo from a past he had buried long ago. He hadn’t set foot on those streets since graduation, but still, the sight of the destruction laid bare raw wounds hidden somewhere deep inside him. The lethal, gigantic catastrophe seemed to change certain aspects of his life – quietly, but from the ground up. Junpei felt an entirely new sense of isolation. I have no roots, he thought. I’m not connected to anything (Murakami 2002, pg. 170-71).

Perhaps by its chaotic nature, the earthquake highlights for Junpei the fragility of his existence. Like the other stories, the earthquake exists in and around Junpei’s body – isolating him, opening him internal wounds. Unlike the other characters, Junpei’s relationship with the earthquake is more metaphorically realistic than the supernatural or dream-like representation of the other stories. It sparks painful nostalgia. However, feeling wounded and isolated by the jarring event of the earthquake paves the way to his reclamation of agency in the falling action of the story. He expresses his love for Sayoko (though their sexual encounter is interrupted by her daughter’s dream of the Earthquake Man). This resolution of the love triangle positions the fiction writer triumphant over the news reporter because of his emotional, artistic, and linguistic virtues of rendering truth in beauty.

The ending ties together the artistic and emotional agency that Junpei reclaims after, and because of, the earthquake:

I want to write stories that are different from the ones I’ve written so far, Junpei thought: I want to write about people who dream and wait for the night to end, who long for the light so they can hold the ones they love. But right now I have to stay here and keep watch over this woman and this girl. I will never let anyone – not anyone – try to put them into that crazy box – not even if the sky should fall or the earth crack open with a roar (Murakami 2002, pg. 181).

This coda to the entire collection ends the book. The changes in Junpei’s world – the earthquake and the family he strengthens – encompass an important shift in his creative goals and emotional priorities. The stories he wants to write are going to be “different” from before. It’s impossible to separate this manifesto from Murakami’s own intentions for writing post-Kobe. The stories that Junpei wants to write are the very stories that precede the statement. This ending asserts the

power to art to change the endings of disaster stories. Each of Murakami's stories are set in an intermediate space of grieving. Just as news media can shape the aftermath and outcome of a disaster (and often for the worse), Murakami's *after the quake* shapes the aftermath of the Kobe earthquake.

While the surrogate that Murakami creates in Junpei is the punchline of the collection, Frank Galati's stage adaptation of Murakami's stories highly emphasizes the self-conscious storytelling of the final story. Galati's play was originally produced by the Steppenwolf Theatre Company in Chicago, Illinois. It opened October 30, 2005 and was directed by Galati. Galati is well-known for his literary stage adaptations, most notably *The Grapes of Wrath*. In *after the quake*, Galati combines "honey pie" and "super-frog saves tokyo" in a similar dreamy aesthetic as Murakami's stories. Much of the dialogue of the play is verbatim from Jay Rubin's English translation. A review states: "we see that a storyteller can't dispel the world's woes, but he can teach a child and himself how to face fear" (Lovendusky 2007).

Galati emphasizes storytelling in the play in two ways. The first is by making Junpei the storyteller of "super-frog saves tokyo" and thus embedding "super-frog" within "honey pie." This reinforces an interpretation of Junpei as a figure for Murakami, by literally making Junpei the author of one of Murakami's stories. The second artistic choice on the part of Galati that puts pressure on authorship is by including the character of the narrator. This reframes the stage production as a story being told while it is simultaneously being acted. Because Junpei's character is the storyteller for half the play, there are moments in the play where the narrator and Junpei take turns. The play accumulates narrators in excess, allowing characters to narrate themselves while also being narrated. For instance, examine these passages side by side:

<i>Story</i>	<i>Play</i>
<p>It was an echo from a past he had buried long ago. He hadn't set foot on those streets since graduation, but still, the sight of the destruction laid bare raw wounds hidden somewhere deep inside him. The lethal, gigantic catastrophe seemed to change certain aspects of his life – quietly, but from the ground up. Junpei felt an entirely new sense of isolation. I have no roots, he thought. I'm not connected to anything (Murakami 2002, pg. 170-71).</p>	<p>JUNPEI. It was an echo from a past he had buried long ago. NARRATOR. He hadn't set foot on those streets since graduation – JUNPEI. – But still, the sight of the destruction laid bare raw wounds hidden somewhere deep inside him. NARRATOR. The lethal, gigantic catastrophe seemed to change certain aspects of his life JUNPEI. – quietly, but from the ground up. NARRATOR. Junpei felt an entirely new sense of isolation. JUNPEI. I have no roots. I'm not connected to anything (Galati 2009, pg. 29).</p>

The stage version retains the exact same words, except for eliminating the “he thought” tag from the final line. However, it also alternates the speech between Junpei and the narrator. The effect is that Junpei refers to himself in the third person, as if he is also the narrator. Murakami’s original voice gets placed in Junpei’s dialogue, collapsing the boundaries between writer and character, and enhancing the agency of both. The characters of the stories are also their audience and creator.

Not only are the boundaries between art and artist questioned, but the worlds of the fictional artworks likewise bleed into one another. Murakami’s original text accomplishes an intertextual resonance between “super-frog saves tokyo” and “all god’s children can dance” through the shared seismic underworld. Galati maintains this fluidity between the stories by embedding “super-frog saves tokyo” within the Junpei’s authorship. To draw upon Le Guin’s theory on the importance of form, the play is a series of interior containers or narrative each spilling into one another. Importantly, the most interior narrative embedded within the layers of other narratives is that of “Superfrog Saves Tokyo” and within that, the myth of the earthquake-causing malicious Worm. By placing the actual event of an earthquake at the very center of the narrative structure, Galati as the playwright reminds us that despite the details of love, sex, ambition, and the structures of fiction, the unsettling and fear-invoking event of an earthquake remains at the heart of the art. Besides greatly emphasizing the process through which stories are told and received, this embedding is fundamentally unsettling, confusing, chaotic, even difficult to follow⁸. In this way, the form of the play shifts the proverbial ground beneath the footing of the audience, maintaining an unpredictable movement between stories and characters.

Held in relation to the short stories, Galati’s play accomplishes two things. The first is the reassertion of artistic agency and the meditation on “the healing aspect of story” (Galati 2008). As an interpretation of Murakami’s original stories, Galati’s play rearranges the characters in relation to one another and in relation to the audience. Galati’s interpretation brings Murakami’s artistic agency to the forefront of the artistic content and of the general discourse regarding the stories. In an interview about his adaptation of Murakami’s works, Galati speaks for Murakami’s experience and artistic:

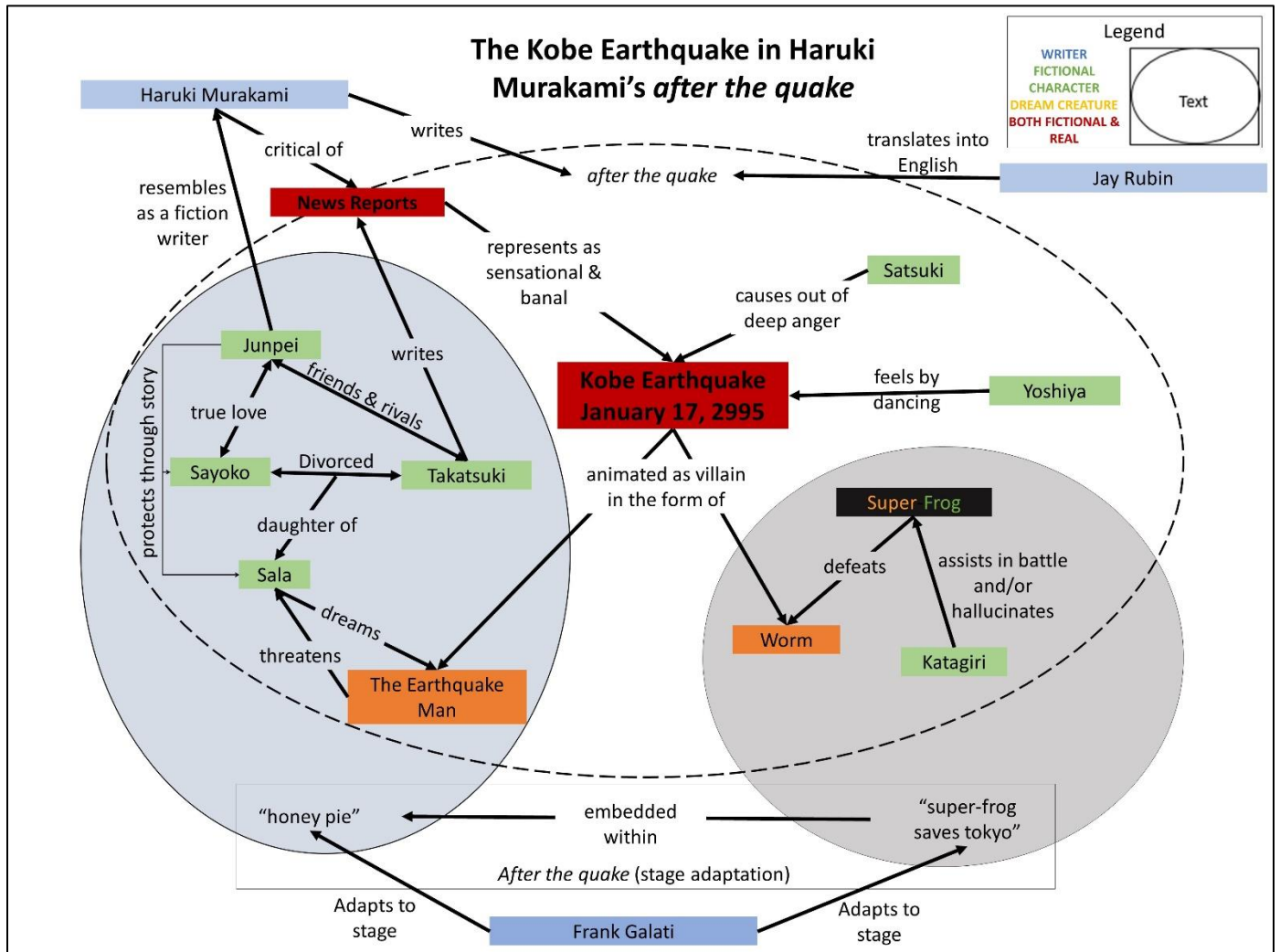
⁸ I did not see a production of the play, which limits my ability to analyze elements of staging and performance

The collection of stories in “after the quake” is poised in the moment between the Kobe earthquake of 1995 and the Sarin gas attacks in the Tokyo subway that occurred the very next month. These were huge events for Murakami, not just because they immediately affected his artistic life, but also because they affected his very soul. Murakami felt that he needed to move his work into another region of expressiveness in which he could incorporate what he was beginning to see as his growing responsibility as an artist to address contemporary social issues (Galati 2008)

In the task of making meaning from Murakami’s text, Galati’s intense engagement with the text in the transformation of the stories into a stage production is valuable for extracting the underlying values and themes that are constant between the original and the adaptation. Therefore, Frank Galati’s stage adaptation of Murakami’s *after the quake* in the arena of American theatre clarifies and embellishes the original. Galati’s production of Jay Rubin’s translation of Murakami introduces an important point regarding the agency of a piece of art. Besides Galati’s play, the movement of *after the quake* through the world sees a film adaptation of “all god’s children can dance” set in Los Angeles. While the stories embed the real event of the earthquake into a fictional format, the art itself also becomes an actor barreling through space impacting other writers and artists and thus being altered, adapted, and shaped into new forms for new contexts and different audiences. This dynamism demonstrates a text essentially revising itself.

But what’s more important is the twofold way that *after the quake* demonstrates a fragile barrier between fiction and reality: as the real earthquake impacting and affecting the fictional by directing Murakami’s work and as the fictional offering emotional and creative power to real people in the task of making art and coping with disaster. This actor-network of *after the quake* shows its movement and the dialogue between the fictional world and the real world that it both represents and acts upon. This network maintains a distinction between the fictional and the real, but those borders are crossable. It demonstrates the victory of the fiction writer over the news reporter and the ability of fictional texts to move beyond their fictional borders.

Figure 7: Actor Network of Murakami, Galati, and the Kobe earthquake



LITERARY RESPONSES TO THE TOHŌKU EARTHQUAKE AND TSUNAMI

The Kobe earthquake was a turning point in Haruki Murakami's career. In both *after the quake* and *Underground*, he began his endeavor to write the voice and voices of Japan. As Galati interprets, Murakami turned the powers of his talent and celebrity into acts of social responsibility to Japan. Though he hasn't produced another work akin to his two responses to Kobe, after the Tohōku earthquake, tsunami, and Fukushima nuclear disaster Murakami made several public appearances to discuss the tragedy. Upon the occasion of his reception of the International Catalunya Prize in Barcelona, Murakami gave an acceptance speech condemning nuclear technology and, more importantly to this study, characterizing the disaster culture of Japan. Speaking to the people of Catalonia, Murakami calls for a spiritual response to disaster that transcends boundaries:

If all of you in Catalonia, and all of us in Japan, could become “unrealistic dreamers,” if we could come together to create a “spiritual community” that unfolds beyond the limits of borders and cultures, what a wonderful thing that would be. I believe that would be the starting point for the rebirth of all of us who have passed through assorted terrible disasters and terrors of unmitigated sadness over recent years. We should not be afraid to dream dreams (Murakami 2011).

The literature connected to the Tohōku earthquake and tsunami I discuss in this section truly “unfolds beyond the limits of borders and cultures.” With Murakami recognition, the power of dreams and the power of global connection, I first turn to several philanthropic literary collections to explore the economic power of a grieving literature. Secondly, I consider the transcendent abilities of literature in Ruth Ozeki's *A Tale for the Time Being*.

Grieving Tohōku

The Tohōku earthquake was the most powerful earthquake ever recorded to hit Japan, at 9.0-9.1 Mw. The earthquake happened at 2:46 in the afternoon on March 11, 2011. The shaking lasted for six minutes. It was a megathrust earthquake caused by the subduction of the Pacific Plate, a recurrence of a subduction mechanism that produced massive earthquakes and tsunamis in the past. The tsunami that followed the earthquake reached 40 meters (133 feet) and traveled six miles inland. Reports confirm 15,894 deaths, 6,152 injuries, 2,562 missing persons, and 228,863 displaced. Apart from the damage and terror caused by the force of the earthquake, the tsunami caused severe damage including nuclear meltdowns in the Fukushima Daiichi Nuclear

Power Plant complex. Both Murakami and the Japanese Prime Minister recalled the devastation of World War II in statements regarding Tohōku and Fukushima. The Prime Minister called Tohōku the greatest disaster Japan has faced since World War II (Truchman et al. 2011). Murakami described the event as Japan's nuclear attack on themselves. The earthquake caused Japan the move east closer to North America by 13 feet and accelerated the rotation of the earth (Chang 2011).

The nuclear disaster created by the earthquake and disaster disrupt Tohōku's relationship to the "energetic natural event that occurs irrespective and independently of social action and any modification of the environment" of an earthquake. This case study illuminates the multiplicity of disaster and the impossibility of separating a "natural event" from its many contexts and resonances. I try to focus on the seismic characteristic of Tohōku and the its transformation of earthquake culture in Japan and the world, but, of course, the nuclear catastrophe is inseparable from seismicity. Indeed, this combination of "natural disaster with a man-made disaster," as Rosenbaum writes in "Post 3/11 Literature in Japan," presents an unprecedented collision within Japan's disaster psychology (Rosenbaum 2014, pg. 108).

The anthology *When the Tsunami Came to Shore: Culture and Disaster in Japan* edited by Roy Starrs is organized into two parts. The first section presents "Cultural Responses to the Triple Disaster of March 2011" and the second section contains Japanese responses to earlier disasters. The organization of this volume reveals just how transformative 3/11 was for Japanese earthquake culture. Not only are there eight articles explaining different facets of the cultural response to 3/11, but the event sparked remembrance of disasters past. Murakami, the Prime Minister, and Starrs each attempt to place 3/11 in a schema, a broader category of the Japanese experience of disaster in attempt to contextualize the tragedy.

In the moments, days, and months after the earthquake, writers around the world jumped to apply their vocation to relief efforts. Three collections appeared soon after the catastrophe aimed at prompting charitable donations and relief funding. *2:46: Aftershocks* and *Shaken: Stories from Japan* were both created immediately after the event, being published in April and June 2011 respectively. *2:46: Aftershocks* was spearheaded by the Red Cross, contains short piece of nonfiction from writers both in Japan and looking at the disaster from afar. It includes raw reactions, photographs of people crying with relief and despair, short letters and vignettes. Part of its instant tone was facilitated by its availability on Kindle and the fact that it was sourced via

Twitter. *Shaken* was created by the Japan America Society of Southern California, includes predominantly the work of mystery writers, and was also made available for download on Kindle. One hundred percent of the proceeds of each collection go to the relief efforts for victims of the disaster. Rosenbaum discusses at length of the role of social media in the organization and execution of publishing these collections, in particular through sourcing material from well-known artists across the world.

Published in time for the one year anniversary of Tohōku, *March Was Made of Yarn: Reflections on the Japanese Earthquake, Tsunami, and Nuclear Meltdown* edited by Elmer Luke and David Karashima is another intentional, charitable collection of literature by well-known writers across the world. *March Was Made of Yarn* includes predominantly Japanese works that were translated into English. While the proceeds of the book also go to post-disaster humanitarian efforts, this volume is less instantaneous than the two discussed previously. Its subtitle labels it “reflections,” indicating that it contains a perspective of recovery and distance, rather than containing instant reactions like the other two. In this way, *March Was Made of Yarn* intends not just humanitarian efforts, but to connect the process of making art with the process of grieving and recovering from loss. The other two collections have similar intentions, but I choose to focus on the artwork of *March Was Made of Yarn* specifically because its distance from the event and Japanese audience provides a fuller glimpse of an earthquake culture negotiating with the event and its aftermath.

The collection incorporates several genres from short story, nonfiction, poetry, and manga in an amalgamation of artistic responses to the Tohōku disaster. Because there were so many different pieces and types of pieces, I will talk about the collection as a whole and mention several specific pieces within the collection that are significant to my study. Many of the pieces specifically grappled with the nuclear disaster and with the tsunami, rather than the earthquake shaking. Nevertheless, *March Was Made of Yarn* is significant for two reasons. The first is its status alongside *Shaken* and *2:46* as a commercial, or monetary, actor within a global Tohōku disaster network. The second relates to its artistic rendering emotional processes of loss and physical entities such as the ocean.

The titular story “March Yarn” by Mieko Kawakami represents the earthquake in a similar way to Murakami: as a peripheral event, seemingly unrelated to the immediate events of the story but importantly underlying the key tension. “March Yarn” follows a couple on a vacation

to Kyoto in the last term of the wife's pregnancy. The two have stale conversations and are both afflicted by an overwhelming tiredness. The wife dreams of her childbirth, but the entire world including the child and the people and the ocean are made of yarn:

When something unpleasant or dangerous happens, things suddenly come apart. They go back to just being yarn, they wait it out... They're yarn after all. Sometimes the yarn turns into sweaters, or mittens, and that's how that protect themselves. When something scares them, that's how they get through it" (Kawami M. 2012, pg. 63).

As she explains the dream to her husband, the woman eventually reveals that "even March was yarn" (Kawami M. 2012, pg. 64). This revelation is never explained, despite the husband's confusion about how a segment of time can be made of a material such as yarn. This metaphor, created by the dream space of a pregnant woman, describes a world which is resilient to danger by virtue of its fragility. A world made out of yarn is flexible and soft, rather than stiff and hard. In an earthquake, yarn would continue being yarn. It's a material, rather than a form. By envisioning a world by its mutable material rather than by its current form, the metaphor embraces unpredictability and puts faith in the substance of the world. In the dream, the world turns to yarn – unformed, flexible, awaiting safety in order to form again – in the event of danger. While a loss of form upturns the status quo and destroys a sense of permanence, a world of yarn accounts for and prepares for constant change.

The dream space here has resonance with Murakami and other works in the collection, as does the centrality of the pregnant woman. Dreams allow for a space of healing, of grieving, of understanding loss in the story. The yarn dream literally reconstructs the world. Murakami's comparison of writing to dreaming offers a parallel between the symbolic space of dreams in the stories and the symbolic place of the story itself. Though "March Yarn" has a significant melancholy tone, the resiliency of the yarn dream and the anticipation of the child leave the story with a note of hope. Other stories, such as "all god's children can dance," "thailand," and "Pieces" (Kakuta 2012) in *March Was Made of Yarn*, mourn the losses of miscarriage and express anxiety around the reproductive abilities of the female body in a world at risk of disaster. Indeed, the loss of the child in "Pieces" seems to be a parallel for the losses suffered by the earthquake and tsunami. Pregnancy and reproduction have an important role in creating human time. Placed in juxtaposition with an earthquake's role in the human understanding of time, the stories represent the uncertainty, fragility, and potential strength of human futures contained within the female body.

Because the tsunami in Tohōku produced such devastation, several of the stories in *March Was Made of Yarn* focus on the ocean. Barry Yourgrau’s “A Dream from a Fisherman’s Boat,” follows the course of the tsunami in a dream space, where the dreamer is afloat on the sea in his boat. “Ride on Time” by Kazushige Abe is narrated by the collective voice of a surfing community awaiting a legendary wave that is forecast to arrive on Friday. While Yourgrau’s story has magical, dream elements, the dreamer sees the aftermath of the tsunami as crying children, upturned vending machines, and other scenes of destruction. “Ride on Time” anticipates the tsunami as a special surf wave, a challenge, a competition to successfully catch and ride a monster wave. Surfing a tsunami is absurd, of course. It’s not a swell one can ride. Discussing the tsunami in terms of extreme sports and testing the human skill against the force of nature, however, adds an element of heroism and self-sacrifice for the potential of greatness to the disaster discourse. These texts represent the power of the ocean to destroy, but also to inspire. In this way, these stories add an oceanic facet to the artistic earthquake culture that emerged post 3/11.

The stories intentionally written about Tohōku join a cacophony of disaster responses, grieving, healing, imagining, and spurring charitable donations. Artists make art out of the disaster, using the event and its repercussions as the subject of the artwork, even when it doesn’t immediately appear so. However, the Tohōku earthquake and tsunami not only elicited a genre of responding art. The events of 3/11 remade art that already existed. Two examples of Tohōku’s earthquake fiction, “God Bless You, 2011” from *March Was Made of Yarn* and Ozeki’s novel, were originally written before Tohōku. Hiromi Kawakami and Ruth Ozeki both altered their original material to incorporate the events of 3/11 into the story. “God Bless You, 2011” a story from 1993 about a man and a bear going on a walk in a radioactive setting, adding a dystopian angle of nuclear disaster. In *March Was Made of Yarn*, Kawakami includes the original story next to the revised version so that readers can see the difference.

In the story of how *A Tale for the Time Being* came to be, Ozeki reports that she had written a manuscript before the Tohōku event. However, something about the writing and the story wasn’t working, and she wasn’t sure what to do. Even though she was dissatisfied with the manuscript, she submitted it to her agent anyways. Then the earthquake happened.

It was one of those catastrophic moments that sort of stops time. It was very clear to me that I had written a pre-earthquake, pre-tsunami, pre-

Fukushima book. Now we were living in a post world, the book was no longer relevant (Ozeki in Rothenfluch and Rosman 2014).

While the specific circumstances of disaster-induced revision varies between Ozeki and Kawakami, the fact that Tohōku deeply impacted both authors enough to revisit their previous work suggests something profound about the changes prompted by disaster. The world that existed before Tohōku and Fukushima is altered by the event of disaster, and so too is the artwork. While Ozeki and Kawakami explicitly track the artistic changes between the pre-disaster art and the post-disaster work, Tohōku 's impact might actually revise other artistic renditions of disaster or other literature from Japan in ways we don't yet know.

A Tale for the Time Being: Bridging Transpacific Disaster

A Tale for the Time Being by Ruth Ozeki is an artifact of the earthquake culture in the Pacific Northwest because it was written in British Columbia, Canada, but contends with the earthquake culture of Japan and the connection between the two coasts through the event of Tohōku earthquake, tsunami, and nuclear disaster. The novel beholds the discovery of a diary from Japan that may have floated over from the tsunami by a woman in an island off the coast of British Columbia. The woman, the recipient and reader of the diary, is a writer suffering from writer's block who lives with her husband and her cat, and her name is Ruth. Like Murakami's stories, Ruth Ozeki's narrative structure offers a statement towards the relationship between 'reality' and fiction. Not only does she put herself into the novel as the character reading the diary, but the Nao, the voice of the diary, frequently ponders the powers and limitations of writing. Ozeki's novel reinforces transportation theory and Murakami's philosophy in its assertion that fiction has the power to transport, make real, and cause readers and writers alike to contend with the unsettled world in an emotional and sympathetic way.

Ozeki grapples with the question of how, as a fiction writer, she should respond to a catastrophe such as Fukushima, even as it was still unfolding. Both her fictional style and her philosophy reinforce and bolster the theoretical framework of transportation and the notion of literature as a place by blurring the boundaries between 'reality' and fiction. Her work also emphasizes the global scope of this potential as she emphasizes the shared border of Japan and the Pacific Northwest of the Pacific Ocean, which is both a force of destruction and a conduit for

connection. In this way, not only does Ozeki blur the containers of fiction and ‘reality’ but she also blurs the distinctions between different earthquake cultures within my study.



Figure 8: Setting in *ATFTTB*

A Tale for the Time Being spans the Pacific Ocean. The novel alternates between chapters of the diary, where Nao is recording her life in Japan, and the frame narrative of Ruth finding and reading the diary. Like Galati’s stage adaptation embeds “super-frog” into Junpei’s storytelling, Ozeki embeds Nao’s story within a book being read in the context of the story. Nao lives in Tokyo, writing in her diary in a café in Akihabara Electricity Town, but travels to Sendai to spend the summer at her grandmother’s temple. Sendai was the major city closest to the epicenter of the Tohōku earthquake. Ruth lives in Whaletown, British Columbia, on Cortes Island. Nao spent her childhood in Sunnyvale, California because her father worked as a computer programmer until he was fired and the family had to move back to Japan. The settings of the novel form a rim around the Pacific Ocean, which takes up the most space on the map. The ocean is an important conduit in the novel, bringing Nao’s diary from Japan to British Columbia, probably by the tsunami waves from Tohōku. Ozeki emphasizes the connection between Japan and the Pacific Northwest as both

physically constructed by the ocean and fictionally constructed by the relationship of writer and reader.



Figure 9: Settings in *ATFTTB* in Japan and N. America

The transpacific movement in the novel plays a large part, and is mentioned in many contexts besides the instance of the diary. Because Ruth (like Ozeki) is Japanese American, she is attuned to moments where the two cultures meet and exchange. One such moment revolves around the presence of a Japanese oyster species in the waters of British Columbia. Ruth and her husband walk along the beach and ponder the oyster shells among the rocks:

[Oliver says] ‘It’s just that *Crassostrea gigas* originally came from Japan. From Miyagi, actually. In fact, the other name for them is the Miyagi oyster. Isn’t that where your nun is from?’

‘Yes,’ she said, feeling the wide Pacific Ocean suddenly shrink just a little.” (Ozeki 2013, pg. 187)

The “nun” is Nao’s grandmother Jiko, who’s temple sits on the Sendai coast. As Ruth and Oliver walk along the same beach where they found the diary, they realize that other things in the shore came from Japan as well – the oysters underfoot. When Ruth feels the ocean “suddenly shrink just a little,” this indicates that she feels closer to Japan in that moment. After Tohōku the Pacific Ocean truly did shrink suddenly, by thirteen feet. While this moment invokes the physical changes of the earthquake, the closeness also reveals how the transpacific exchanges have shaped the lives and environments of both places. Later, Oliver notes that he and Ruth would never have met if it weren’t for World War II. Nao’s diary only exists because her problems originated from her father being fired and her family moving to Tokyo. And Nao’s family story

returns to the Pacific arena of World War II. The world of the novel is entirely underlain with subtle and overt connections between Japan and North America – physically, fictionally, ecologically, generationally, and informationally. This comprises place in Ozeki’s novel, a collapsed distance between Japan and Ozeki’s Canadian Pacific Northwest across space, culture, and communication.

Of course, while the text emphasizes the connections between the two continents, the maps also remind of the incredible distance between the characters. Temporally, the diary is written in the early 2000s whereas Ruth reads it in 2011, wedging a gap of about a decade between the time of writing and the time of reading. A major theme of the novel is making up for lost time. Ruth reacts to the knowledge that the Tohōku earthquake shortened Earth days, wondering “how much time did we lose?” (Ozeki 2013 pg. 203). This is both a comment on the physical alterations upon the earth of Tohōku and a more sentimental query regarding lost lives, lost potential, and the time lost in the process of rebuilding. In the same way that Ozeki wrote Nao’s story before Tohōku but fuses it into a post-disaster tale, Ruth reads the pre-disaster diary and constantly puts it in the post-disaster context. She wonders from the very start whether Nao is alive in her present moment of reading, after the earthquake. But she is never able to find out.

Her inability to find out where Nao is in relation to her own world makes her question whether Nao and her story are real. She seeks corroborative evidence of a real human being who wrote the words she reads. The world of the diary text and the world of Ruth are mixed up. Even though Ruth knows and believes the diary is real, it seems fictional. As a writer, Ruth finds the world of fiction familiar:

When she was writing a novel, living deep inside a fictional world, the days got jumbled together, and entire weeks or months or even years would yield to the ebb and flow of the dream. Bills went unpaid, emails unanswered, calls unreturned. Fiction had its own time and logic. That was its power. (Ozeki 2013, pg. 314)

Like Murakami, Ozeki describes writing fiction like a “dream.” The “fictional world” has a depth wherein the writer inhabits. This rearranges the space of the world, as Ozeki demonstrates with Japan and the Pacific Northwest. It also rearranges the temporal structures of the world, where time behaves differently in both the writer’s experience and within the structure of the fictional narrative. Ruth controls her own reading experience of the diary for this, attempting to read at the same pace that Nao writes. She justifies this, stating “that way she wouldn’t end up with an overly compressed or accelerated sense of the girl’s life and its unfolding” (Ozeki 2013,

pg. 38). To write is to both connect events in a temporal scheme, but also to place that temporal scheme in a spatial form. Ozeki's intensely deconstructs the process of both writing and reading a spatial-temporal narrative creation. She questions the way that art and fiction imitate life by drawing attention to how fiction necessarily manipulates the pace of life for the experience of reading.

There are several instances of non-linear narration in *A Tale for the Time Being*, including flashbacks to 9/11 and two other diaries written by a Japanese soldier in World War II. However, the most significant and dramatic moments of temporal manipulation appears in the form of a dream, where text and life reach the climax of integration in Ozeki's story. As a storm rolls in and Ruth's cat goes missing, Ruth opens the diary to find that the words on the page have disappeared. The pages that were once filled with Nao's handwriting have become blank. That night, Ruth dreams:

What does separation look like? A wall? A wave? A body of water? A ripple of light or a shimmer of subatomic particles, parting? What does it feel like to push through? Her fingers press against the rag surface of her dream, recognize the tenacity of filaments, and know that it is paper about to tear (Ozeki 2013, pg. 347).

In the beginning of the dream, Ruth moves through the substance of paper, breaking through its substance. This movement destroys the "separation" the dream sequence opens with. While the material through which Ruth moves is "paper," in a sense it is also a "wall," a "wave" and "a body of water." The point is that in her dream, she is able to break through all these boundaries: the paper that separated her from Nao, the water that separates the Pacific Northwest from Japan, and the wave that separates the pre-disaster time from the post-disaster time.

After she breaks through the "paper", she find herself in Japan and sees Nao's father sitting a bench preparing to kill himself. Ruth intervenes, telling him what Nao has divulged to her in the diary and sends him on his way to retrieve her. When Ruth wakes up, the diary is full of language again. This moment is remarkable because Ruth travels back in time and space in order to intervene in the story she is reading, therefore altering it. Indeed, the "power" of fiction that Ruth describes earlier is the "power" to act upon both the life of the reader and the life of the writer. Ruth is both, as the reader of Nao's diary and as the writer of the novel we are reading. Her movement across her reality, her fiction, and our reality puts a strain on all boundaries between fiction and reality.

Although Ozeki's novel takes up many topics, disaster is the thread that connects the entire thing, in its many parts. While the novel engages with the Japanese culture of disaster through its World War II narrative and the Tohōku earthquake and tsunami, Ruth bears witness to these disasters as a reader and a viewer from across the ocean. Ozeki wrote the novel in English for an English-speaking audience. As her novel emphasizes the breakage and fluidity of boundaries, it does so both in terms of geo-cultural boundaries and fictional boundaries. *A Tale for the Time Being* asserts that Japanese disaster and the aftermath thereof travels across the ocean and into the minds and lives of others. Ruth's character shows just how profoundly disaster abroad affects her own life. Ozeki's own story of writing demonstrates how the Japanese disaster transformed her creative work. The Japanese disaster does not only alter the Japanese disaster culture, but the disaster culture of all who bear witness to the event. Ozeki's text shows this transference of disaster culture. But in her novel, this movement of disaster culture is contingent upon the role of fiction to facilitate human connection. One of the first things we learn about Nao is that she is writing the diary *to* someone. She exclaims: "It feels like I'm reaching forward through time to touch you, and now that you've found it, you're reaching back to touch me!" (Ozeki 2013, pg. 26). This is precisely what happens in Ruth's dream. Ozeki shows the magic of fiction that facilitates human connection across distances of time and space and how truly transformative this process is. In the spaces of fiction and of dreams, which have parallel functions for many of the authors in this study, impossible connections are made possible.

Ozeki's novel shows earthquake culture and the imagination of disaster to moving across time and space through fiction. Through the novel was written in response to Japanese disaster, it is set simultaneously in Japan and the coast of the Pacific Northwest, another place in the world at risk for enormous earthquakes and tsunamis. Though most of the disaster content relates to Tohōku and Fukushima, the Cascadia Subduction Zone makes one direct appearance. Oliver, Ruth's techie artist husband, finds a Japanese app that is supposed to issue early warnings for earthquakes. Looking at the app, he says: "That's cute. We should have that here. We are due for a big one here. I wonder if it will work in Whaletown" (Ozeki 2013, pg. 199). Upon further exploration of the app, Oliver discovers it only gives information for Japan. Ruth wonders out loud: "I thought Canada was safe" (Ozeki 2013, pg. 202). In this small bit of dialogue, Ozeki includes Cascadia and draws a connection between the two different earthquake cultures. In the

context of the app, the novel reveals information about British Columbia seismic hazard through a comparison with Japan. This parallels the way that the study on the Orphan Tsunami of 1700 (Atwater et al. 2005) corroborates and confirms Cascadia's activity through partnership with Japan.

SCIENCE FICTION AND THE FUTURE CASCADIA QUAKE

Ozeki, Murakami, Galati, and the charity fiction collection were each inspired to write earthquake fiction in response to an event. They apply the tools of fiction to grapple with the process of grieving disasters past. The shock of the earthquake event and the task of recovery underlies the motives of these authors. However, since earthquakes are repeated events, many of these fictions include reference to earthquakes in the future. "super-frog saves tokyo" anticipates an earthquake underneath Tokyo. The final story of *March Was Made of Yarn*, called "After the Disaster, Before the Disaster" ends with a character's response to the 1923 Great Kanto Earthquake. The character hears the official report that the 1923 earthquake stopped after four minutes, but he "did not believe the official record. Ryūnosuke believed the earthquake would never stop. He believed the disaster was still to come" (Peace 2012, pg. 206). These examples of anticipated disaster couple the grief of experienced disaster with the fear of future catastrophe.

Preparing for anticipated disaster is the work of government agencies, scientists, public health officials, engineers, and other vocations. Predicting earthquake probabilities, magnitudes, effects, and vulnerabilities plays a huge role in disaster preparation on all levels. Scientists and officials in Japan have undertaken these tasks with great seriousness and relative success on many levels, in particular after the shock of Kobe. However, while Japanese society has the benefit of historical memory, records, and recent past events to help guide their efforts, the agencies in the Pacific Northwest lack all baseline knowledge for how an earthquake will specifically effect infrastructures. Since the realization of the hazard, however, scientists and officials in the Pacific Northwest have conducted studies and begun to envision the different risks from a large Cascadia Subduction Zone earthquake in the urban core, on the coast, and in rural areas surrounding.

Adam Rothstein, a writer living in Portland, Oregon went through many stages of denial and acceptance of the Cascadia Subduction Zone when he began to understand the risk. After

reading Kathryn Schulz's *New Yorker* piece, he was fascinated by the history of how scientists came to know of the subduction zone and its earthquakes. However, in conversations with his friends and others in Portland, he realized that although people generally knew to expect a giant earthquake, no one really knew what to expect in the minutes, days, and months after the event⁹. Partly out of curiosity and partly out of a desire to quell the fear of uncertainty with facts, Rothstein began an intensive research project. He read hundreds of pages of reports, official documents, scientific papers, statistics, and other studies meant to delineate the aftermath of an earthquake unprecedented in the modern Pacific Northwest.

The outcome of this research was *After the Big One*, a series of five installments translating the overwhelming quantitative scholarship into a literary narrative. Taking a moderate estimate of the predicted earthquake at 9.0 magnitude (roughly the same magnitude at Tohōku), Rothstein focuses on the impacts in Portland, the urban center of Oregon, which is his hometown. Everything scientists and officials know about what is going to happen to infrastructure, transportation systems, and other aspects of the built environment that will be impacted by minutes of shaking is in terms of probability. Nothing is certain and the scenarios of each study differ slightly. Rothstein's claims his narrative scenario is a blend of these studies, and is "as plausible as it could possibly be" (Rothstein in Merchant 2016).

The installments were published on Terraform, a subsite of VICE's science subsite Motherboard that publishes futuristic fiction. An interviewer described the genre of Rothstein's piece as "reported speculative fiction." It is reported because it is researched in a journalistic way and seeks to translate a mass of scientific data and analysis to a popular audience. It's is speculative fiction because it imagines a future scenario alongside other pieces of fiction on Terraform that create fictional futures. Rothstein's speculative fiction, a look towards the probable and plausible future of Portland, Oregon, is as much a work of science as it is fiction. In this way, it might also be classified as hard science fiction.

The earthquake itself opens the first of five installments. The tagline reads:

Over the course of five minutes, one piece of the earth's armor grinds underneath another, and the reverberation of this tectonic motion project outwards for hundreds of miles through the core of a human culture living above it (Rothstein 2016).

⁹ In an interview with Brian Merchant, Rothstein remembers wondering if it would be like a nuclear bomb went off (Merchant 2016). Nuclear war is an enduring apocalyptic scenario in this study.

Already, the story is situated in the “core of a human culture.” There is a subterranean world, not animated like Murakami’s, but described in realistic, if imaginative, language. The earthquake is at the beginning of the installment and the narrative bears witness to its effects. The earthquake happens somewhere else: underground, in the Pacific Ocean, but the place of the story experiences the forces unleashed. Rothstein includes aftershocks in his narrative, as well as the huge number of emergency situations that materialize immediately after the event: people trapped in buildings, fires, car crashes, people stranded on bridges. He describes the experience of shaking as the experience of watching a city crumble around and the deafening roar of human structures. He writes: “by the time that the five minutes have elapsed, Portlanders find themselves transported to an entirely different city” (Rothstein 2016). The world Rothstein builds in his fiction is that different Portland. He aims to transport his reader to this place, which could be only five minutes away. The different place is not a different space. It is the nearly same on a map, except perhaps shifted a few feet east and a few feet lower in elevation. But the “core of human culture” is transformed drastically.

The piece has a complex conception of transformative time. The entire narrative is written in present tense and first person:

Along with many others, I set out on foot, through the Rose Quarter, looking for a path around the freeway collapses, which have come a labyrinth we now must wander (Rothstein 2016).

Instead of a futuristic tense (‘we would wander’) or past tense (‘we then wandered’), the choice of present tense creates the illusion that the events of the narrative are happening at the moment of reading. However, the piece is titled *After the Big One* and is set sometime – anytime – in the future. It describes a future aftermath as if it is occurring in the present. This requires temporal gymnastics on the part of the reader to transport themselves to first to the future, then to another world in that future, and then pretend as if they are currently in that place. The narrative perspective of the piece, while technically first person, is omniscient. Even events that are happening elsewhere in space are described as if they are happening. The reader accesses events happening outside of the city and the logic behind many different decisions: “A propane storage facility is on fire in East Portland. There is a Hazmat spill at the Airport” (Rothstein 2016). The piece moves back and forth from a panoramic view of shaken Portland to a street-view of the narrator moving through the city.

This hybrid perspective and temporal multiplicity allows the piece to cross multiple tones and genres. Ozeki's blurs the boundaries of fact and fiction within the frame of a novel. Rothstein erases boundaries of fact and fiction by setting both in the future. The rules of the fictional Portland are the same rules that scientists believe govern Rothstein's present-day Portland. While placing scientific reports into narrative gives fiction the power to be just as plausibly real as science, it also works the other way. Rothstein's collapse of fiction and science demonstrates just how fictional, speculative, and fundamentally narrative science is.

After the Big One has an instrumental motive that contrasts the motives of the retrospective earthquake fiction. Rothstein's piece is meant to inspire people to prepare not only for the moments of earthquake, but for the predicted challenges that the city will face after the event. In response to the apocalyptic resignation Rothstein noticed in his circle, he aims to spread awareness that many, many people will survive the initial shaking. These survivors will be tasked with a prolonged emergency response in neighborhoods. "Instead of trusting in luck or throwing up our hands to fate," Rothstein wants to engage future survivors of Cascadia with a coherent, readable description of what they might expect to experience (Rothstein 2016). The underlying hope is that Rothstein's narrative will change readers' behavior. As for the writer, Rothstein admits that the research he conducted for the project allowed him to discover the same, and therefore calm his fear of uncertainty as much plausibility as exists. This authorial intention shapes the piece as an example of earthquake literature with an agenda to assist with disaster preparedness and mitigation efforts usually undertaken in a collaboration of government officials, advertisers, social scientists, and geologists. The effectiveness of *After the Big One* in this endeavor may yield future studies.

DISCUSSION

TEXTS IN CONTEXT

These examples of earthquake fiction depict seismic events in a variety of ways. Murakami and Galati bring the genre of magical realism to the peripheral representation of the Kobe earthquake. Murakami's re-imagination of Japan in this magical world is a statement of artistic responsibility to a nation both torn and connected by grief. The charitable literature of the Tohōku earthquake, tsunami, and Fukushima nuclear disaster emphasizes the loss suffered by the Japanese at the hands of earth, ocean, and human short-sightedness. This immediate artistic

response raised money and global awareness of the horrors of the worst earthquake of human history. Ozeki's Canadian novel recognizes the unsettling ability of disaster to be both near and far. Her book emphasizes the power of fiction to also transcend barriers of time and space to facilitate impossible human connection. Rothstein's depicts the future Cascadia earthquake as real and present in order to prompt preparation and quell the fear of the unknown and unprecedented event.

As demonstrated by these works, the narrative form can make disasters far in temporal and geographic space seem present, significant, and salient. This study finds that literature is a powerful place where one person's grief can resonate as a national example of earthquake culture, as Murakami demonstrates. Rothstein invests in the power of literature to incite some change within readership by creating an artifact of a missing earthquake culture. Ozeki's witness of distant disaster across the ocean informs the earthquake culture of British Columbia.

As an experimental foray in literary natural disaster, this study broadens the field of ecocriticism. While the fundamental task of ecocriticism is to reimagine the contours of nature and culture, the assumptions of a human culture separated from nature still underlie much of the work. This study shifts the conceptions of what is and isn't out of human control in the context of environment and disaster. Instead of examining works where human cultures and systems impact some conception of nature, this study examines works where earth systems impact human cultures and the art of those human cultures responds to those impacts. The impulse to blame human culture for self-destruction only dominates in the literary responses to the Fukushima nuclear disaster. As a whole, this study demonstrates the inseparability of nature and culture without assigning blame or grief to some separation of the two. The cause of the crises in this study is not as simple as being anthropogenic or non-anthropogenic. The texts don't attempt estimate which cause is, was, or would be more to blame. The authors focus on the human cultures unfolding around disaster and on their own role in this unfolding. While ecocriticism has many facets and motivations, this study gives pause to the clamor of environmental crisis the field inherits from classical environmentalism.

By responding to specific earthquakes with location markers like epicenters, the texts in this study represent space and place. The texts themselves, as contained worlds, create place within their language. Though all the texts engage with a boundary between fiction and reality, Murakami, Ozeki, and Rothstein especially blur and disintegrate this border. Each of these

authors include a version of themselves in their fictional world: Murakami's Junpei, Ozeki's Ruth, and Rothstein's first-person narrator. Rothstein does so by blurring his own reality with a fictional, but realistic and scientifically accurate, future. Murakami and Ozeki both insert a surrogate writer character in their fictional worlds to explore how writers function in psychological and social disaster worlds. Each of these writers ask what fiction writers can do for disaster. But this blurring of the fictional and the real also reminds us that disasters are narrated much like fiction. Rothstein's interpretation of scientific data and the dream world that bridges fiction and disaster in Murakami and Ozeki implies that what we see as reality is a kind of fiction.

Transcendence of the barriers of fiction and reality occurs simultaneously as the texts transcend cultural and physical barriers between Japan, the Pacific Northwest, and the world that bears witness. From Murakami's experience and depiction of viewing the Kobe earthquake from afar, he reminds us that disasters in one place travel across the world through many avenues. As demonstrated by Jay Rubin's 2002 English translation of the stories and Galati's American stage adaptation, the literature of disaster in likewise folded into other cultural pockets. *March Was Made of Yarn* and the other charitable works source funding and artistic material from the global arena that bears witness to Tohōku. Ozeki collapses both time and space to demonstrate just how poignantly the Japanese disaster of 2011 can resonate into both the future and the past on either side of the Pacific. Earthquake culture is dependent upon place as the relationship between seismic activity and humanity. However, even though these texts respond to a specific earthquake impacting a specific location, the international and transpacific perspectives of the literature seem to indicate that earthquake culture is not strictly bound. Ruth's witness of a Japanese earthquake transforms her knowledge of seismicity in the Pacific Northwest. Murakami's speech "Speaking as an Unrealistic Dreamer" addresses a Spanish audience. In a world where disasters become international news, defining earthquake culture by nation or region doesn't account for the cultural and scientific knowledge and narrative that flows in between. Ozeki's novel and the discovery of the Cascadia Subduction Zone are examples of earthquake culture flowing between the Pacific Northwest and Japan. While their connection has unique circumstances such as a shared ocean and a history wrought with war, this study suggests that disaster cultures can evolve through international exposure. People looking in from the

outside, such as Murakami and Ozeki, can impact the culture of the affected place; but the responses from that affected place may also transform the cultures looking in.

The texts in this study accomplish more than just catharsis on the part of the reader or the writer. The philanthropic texts, in particular *2:46: Aftershocks*, come closest to a cathartic intention, intense release of emotion under the weight of tragedy. However, Murakami, Ozeki, and Rothstein move beyond catharsis to imagine the role of literature in earthquake culture. While catharsis is contained within the text and follows the trajectory of the plot, self-conscious fiction imagines itself in a broader context that its own confines. For Murakami, the role of fiction and storytelling is to seize creative power when one would feel powerless and inert when confronted with the havoc of the earth's motion. For Ozeki, the role of fiction is to dismantle borders between people to foster connection. Rothstein uses fiction to communicate science in order to glimpse the future and quell the fear of the unknown. In a way, each of these authors uses fiction gain leverage over something inaccessible: the workings of the earth, the past, the future, an author on the other side of a story. The authors accomplish this technically: through narrative perspective, through dream space, through metaphorical writers, through the conventions of genre.

By utilizing the technical tools of fiction to reimagine and reconstruct place, Murakami, Ozeki, and Rothstein assert that fiction has power to transform worldviews and conceptions of place in the context of earthquakes. In a discussion of power, authors become human actors and texts become non-human actors, drawing from Latour's ANT theory. I track how the texts and the elements contained within their pages, such as characters or dream space, imagine and new relationships between human culture and natural systems. In her essay "Context Stinks!" Rita Felski ponders the discourse surrounding textual agency:

We inflate context, in short, in order to deflate text; while newly magnified social conditions dispose and determine, the artwork flickers and grows dim. Why are the producers or recipients of culture afforded such exceptional powers and the individual text afforded little or none? (Felski 2012, pg. 582)

While Felski is skeptical of using context to analyze text, my study demonstrates how context can reveal the "exceptional powers" of fictional texts. By connecting these texts through their shared engagement with seismicity, place, and fictionality itself, I find that a degree of context is necessary for deriving environmental meanings from literary texts. The intentions and the experiences of the authors matter for being able to understand the messages and metaphors

contained within the texts of my study. So too do the physical properties of the places where the stories are set. My reading of these texts demonstrates how human actors can leverage narrative to grapple with tumultuous physical systems. Just like other kinds of technology, fiction is created by humans but operates as a nonhuman actor on the lives and cultures of humans. Recognizing this aspect of literature allows us to see the how texts and their contexts act upon one another, with neither necessarily overpowering the other. By blending close reading with ecocriticism, biographical criticism, and a hint of historicism, my study realizes a kind of methodological hybridity.

The transpacific scope of my study also enters disputed territory in literary studies. Felski discusses the labels that tie literature to time and place:

Period, in other words, serves much the same function as nation; we assign texts and objects to a single moment of origin in much the same way as we tether them to a single place of birth. Both period and nation serve as a natural boundary, determining authority, and last court of appeal. The literary work can only be a citizen of only one historical period and one set of social relations; border guards work overtime and any movement across period boundaries is heavily policed (Felski 2012, pg. 579).

The title of this thesis compares “Japanese” literature with “Pacific Northwest” literature, comparing a nation to a region spanning two nations. My study doesn’t make generalizations about “Japanese” literature as a whole or “Pacific Northwest” literature as some sort of genre with common characteristics. It would be presumptuous to extract something about “Japanese literature” from my reading of a translated version of Murakami’s collection. This could require a much fuller understanding of Japanese literary history than I possess. Just as Starrs questions the concept of a national disaster culture, this study acknowledges the shortfalls of discussing literature as “of” nation. By discussing specific works of literature, situating around text, I allow the identification of text to be hybrid and multiple. *after the quake* is Japanese, translated into English for the English-reading audience of which I am included, written from the perspective of a Japanese person living in Boston, Massachusetts, writing to Japan as a nation. All of these contextual details create the text; I don’t magnify any one of these aspects as the primary way to understand the text. My seismic lens incorporates place, nationhood, and time period, but is not limited by those categories. My study is limited by my own narrow knowledge of Japan and perspective looking east from Portland, Oregon. I’m certainly not trying to argue that by studying literature through the lens of seismicity, national borders are rendered invisible or

unimportant. National origin and period do unite texts in important ways. But my study suggests that aspects such as seismicity *also* unite texts across such borders as national origin and period. That my study implicates the concerns of comparative and world literature is worth interrogating and exploring further.

This project engages in the potential of fiction as revealed by their authors and the content of the texts themselves. This does not account for the actual reception of the texts by audiences. This would require a different critical lens of reader-response and implicates psychological studies about reading. Of course, to establish an instrumental function for disaster fiction, the next step would be empirical studies of reader response and perhaps a more qualitative study of distant reading.

At a theoretical level, my study seeks to make meaning out of ruptured barriers between fiction and reality alongside ruptured plate boundaries rendered in fiction. In a clarifying follow-up article on Actor-Network Theory, Bruno Latour discusses an application of ANT to semiotics, the study of meaning-making and signs:

If one now translates semiotics by path-building or order-making or creation of directions, one does not have to specify if it is language or objects one is analyzing. Such a move gives a new continuity to practices that were deemed different when one dealt with language and "symbols", or with skills, work and matter. This move can be said either to elevate things to the dignity of texts or to elevate texts to the ontological status of things. What really matters is that it is an elevation and not a reduction, and that the new hybrid status gives to all entities both the action, variety and circulating existence recognized in the study of textual characters and the reality, solidity, externality that was recognized in things "out of" our representations. What is lost is the absolute distinction between representation and things - but this is exactly what ANT wishes to redistribute... (Latour 1996, pg. 375)

My study attempts to both “elevate things to the dignity of texts” and “elevate texts to the ontological status of things.” My map of *after the quake* attempts to represent this in an actor-network, where texts are simultaneously objects and fictions. This simultaneity helps diminish the “absolute distinction” between representation and things. Once we acknowledge this distinction is weak and see how texts and events can pierce through the boundaries that attempt to maintain distinction, we gain meaning both for the literary endeavor of understanding fiction and for the sociological endeavor of understanding modernity and its disasters.

IMPLICATIONS FOR ART, DISASTER, AND CHANGE

Unlike Voltaire, unlike *Frankenstein*, and unlike the paintings of the sunsets after Mount Tambora spouted ash and debris into the atmosphere, these examples of earthquake literature do different types of work. Voltaire's poem attempted to place the Lisbon earthquake in an early modern, European philosophy of reason and divinity. *Frankenstein* was inspired by a mood created by aftermath of the disaster, quite distant from the immediate effects on the surrounding population of Mount Tambora, who perished. The paintings of the event depict the event. While these examples respond to, depict, and take inspiration from earth's events and the disastrous effects thereof, our earthquake literature does something more. Murakami's stories, Ozeki's novel, the philanthropic literary collections, and Rothstein's installments each impact the very definition of a natural disaster. By incorporating disaster into the fabric of literature and narrative, these works reinforce Wisner's notion of a natural disaster being a social and cultural event. The collapse of "nature" and "culture" within the language Murakami, Rothstein and Ozeki complicates the "natural" of a natural disaster. The disasters of the texts are cloaked in the milieu of social interactions, of enigmatic symbols, of animated underworlds, and in the frameworks of space and time. This locates the disaster not within the earth, but within the culture and society in which these literatures operate as actors. These works alter the conception of both terms: natural and disaster. They transform culture as they represent it, pushing forth earthquake cultures from both the earthquakes and the cultures.

Fundamentally, these earthquake literatures confront change. Their depiction of change, the technically artistry of that rendering, has profound implications for that change. Social, natural, cultural, artistic change may all be impacted and altered by the art that adopts it as its subject while transforming the cultures grappling change, as we all must.

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