Queering Japan:

Ignored and Forgotten, An Analysis of the Tōhoku 2011 Disaster, LGBTQ+ People, and The

Japanese Government

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Abstract: The intersection of disaster vulnerability and lived LGBTQ+ experience remains

critically understudied in sociology, particularly in the context of Japan and the 2011 Tōhoku

disaster. Queering—the act of examining and challenging heteronormative systems shaping our

understanding of disaster response—allows us to see how traditional frameworks of emergency

management have systematically overlooked and erased LGBTQ+ experiences (Tran 2021, pp.

13). Research into the sociology of disasters exists extensively in regards to earthquakes,

tsunamis, and subsequent nuclear crises; however, the experiences of LGBTQ+ survivors have

been systematically overlooked, creating a significant gap in our understanding of how disasters

amplify existing social inequalities and stigma. Heteronormative disaster response systems and

Japan's lack of LGBTQ+ legal protections created compounded vulnerability for LGBTQ+

survivors in rural Tohoku, where conservative social attitudes already pushed many to conceal

their identities (Yamashita, Gomez, Dombroski, 2017, pp. 64-67). This paper reveals how the

disaster forced many LGBTQ+ individuals into impossible choices: whether to out themselves to

access emergency services, separate from same-sex partners in temporary housing (Yamashita,

Gomez, Dombroski, 2017, pp. 69), or endure harassment in gender-segregated facilities

(Gorman-Murray, McKinnon, & Dominey-Howes, 2015, p. 29). The scholarly articles and case

studies referenced outline the barriers and hardships LGBTQ+ people in Japan uniquely face

during the disaster and post-disaster. The assumed neutrality of disaster planning and response

systems must be challenged, as without explicit consideration of the LGBTQ+ population, active

harm is done leaving vulnerable populations to face compounded trauma during times of crisis.

Keywords: LGBTQ+, Disaster Vulnerability, Social Inequality, Tōhoku Earthquake, Sociology of

Disaster

Introduction

On March 11, 2011, a large-scale earthquake of 9.0 hit the Pacific Ocean area of

northeastern Japan (Fuse and Yokota 2012, p. 314), on the coast of Honshu Island (Tikhonov

and Lomtev 2011, p. 978). The event of an earthquake triggered a large tsunami only within a

couple of minutes (Norio, Ye, Kajtani, Shi, and Tatano, et al 2012, p. 35). The tsunami poured

into the coastal areas of Japan, within a distance of 10 km. The tsunami wave was estimated to

have a height of 38m. According to the Port and Airport Research Institute, the tsunami was

24m, based on field observation. The disaster was officially named by the Japanese

Government, "The 2011 Tōhoku Earthquake and Tsunami" (Norio, et al, 2011, p. 34). The main

earthquake erupted at 2:46 in the afternoon in Tokyo's time (Fuse and Yokota, 2012, p. 314).

The earthquake and tsunami were an environmental disaster, a natural phenomena, and the

disaster damaged and ruined the medical infrastructure in Japan, impeding the healthcare

system's ability to care for a large number of people in need of care. This seismic event ranked

as the third-ever highest magnitude recorded (Norio, et al 2011, p 34). "This resulted in 13100

dead and injured, 17100 missing people, and over $300 billion in damages and material loss

(according to the official data of the government of Japan). The disaster became a national

tragedy" (Tikhonov and Lomtev, 2011, p 978). The great loss of people, infrastructure, and

material loss cost the government a great amount of money, and an estimated "two hundred

and twenty billion dollars" which makes this disaster both an economic and social disaster

(Shultz, 2015, p. 2). The incident of the earthquake and the tsunami was a natural hazard, the

Fukushima Dai-ichi nuclear disaster, was a manmade na-tech disaster because it was a

secondary effect of the huge tsunami that wrecked the nuclear facility, causing the nuclear

plant crisis (Norio, et al, 2011, p. 34). Not only that but the technological failures were caused

by the many failures of many social safeguards (Funabashi, 2012, p. 65) The power supply from

the nuclear plant, TEPCO, caused 4.4 million outages in eastern Japan. Radioactive materials

were also released into the atmosphere as a result of the nuclear disaster (Hasegawa, 2013,

p.1).

When researching how the LGBTQ+ population was affected by the disaster, there was

little information to be found in regards to LGBTQ+ people. Howes, Gorman-Murray, and

McKinnon (2013) "contend that one group largely absent from scholarly and policy agendas is

sexual and gender minorities, or lesbian, gay, bisexual, transgender/transsexual and intersex

(LGBTI) populations" (p. 905). Not only that, but the current model that is depended on

perpetuates a "depiction of vulnerability and 'disaster victims', while ignoring the predisaster

social factors that engender and perpetuate inequality, exclusion, and lack of access to

resources, serves to exacerbate the problem of postdisaster vulnerability" (Kadetz and Mock,

2018, pp. 215-230). The Fukushima Dai-ichi disaster needs to be analyzed for a more in-depth

sociological analysis to question how the LGBTQ+ people and the Queer-intersectionality

marginalized were affected by the disaster.

Body

History

Historically, Japan has been preparing for the next event of an earthquake and tsunami

for years (Hasegawa, 2013, p. 1). Culturally, Japan has become accustomed to these

environmental disasters. When a tsunami alert was put out, people knew where and how they

needed to evacuate. But when the nuclear accident happened, no large-scale evacuation plan

was available or prepared for the nuclear disaster, even though the nuclear power plant was

built in July 1967 and began its use on March 26, 1971. When fleeing the nuclear disaster, many

people were given no information on the radiation risk when evacuating and did not

understand the weight of the consequences of this nuclear power plant disaster, despite the

atomic nuclear incidents of Hiroshima and Nagasaki.

After the earthquake, in Tōhoku, the internet infrastructure did not work, preventing

people from reaching information that could help them in such a time of need (Fuse and

Yokata, 2012, p.314). These internet connections could have been a lifeline or a way of getting

help. The network data links should have been built to be more resistant to disasters and

general infrastructure damage. "Redundant or reach-back systems'' should have been

implemented, to reach out to people for information and help, but these systems were not put

in place (Fuse and Yokata, 2012, p.314). Redundant systems allow the ability to copy system

components (Hoagland, 2021), and reach-back systems allow the ability to strengthen

communication infrastructure, high-speed data transfer, secure information, and high reliability

(Newman, 2000).

The seismic event and the tsunami led to a na-tech event, a manmade disaster. The

nuclear power plant was also built on the coast, making the power plant vulnerable to a

tsunami (Funabashi, 2021, p. 6). The seawall was 10m tall (Lipscy, Kushida, and Incerti, 2013, p.

6083), too short to block and protect the nuclear power plant from a possible tsunami. The

numerous technological safeguards were ineffective causing the nuclear disaster. The nuclear

power plant type was old, outdated, and defective. The type of powerplant was a Mark I, which

was created by General Electric. Three engineers from General Electric had reported defects in

the original design. The units in the nuclear power plant have had many issues previously. Unit

1 has been functioning since 1971 and unit 4 has been functioning since 1978. Due to the age of

the units and the history of issues from the units, these units should have been replaced.

The towers that were supposed to hold up the power lines were not earthquake-

proofed enough (Funabashi, 2021, p. 66), this could be evidence of probabilistic thinking,

meaning, TEPCO did not prepare for the worst-case-scenario because thinking with the worst-

case-scenario mindset could be seen as irrational since the chances of such a scenario are seen

as improbable (Clarke 2008, p. 155). To TEPCO, a 9.0 earthquake and tsunami would have been

unlikely and deemed as the worst-case scenario situation. It is important to note that worst-

case scenarios are still possible and have happened in the past.

The earthquake destroyed the power lines, shutting down the electricity supply for the

nuclear power plant (Funabashi, 2021, p. 66). The diesel generators supplied emergency power,

but the diesel generators were built under the turbine buildings and were destroyed by the

tsunami, which left the emergency generators ineffective. These emergency power generators

should have not been built underground in the case of a tsunami, especially because the

nuclear power plant exists along the coast.

Many of TEPCO's poor decision-making was due to a lack of knowledge. TEPCO had

received nuclear reactors from General Electric without improving upon the nuclear reactors

with other technology because they had no knowledge this was needed. (Funabashi, 2021, p.

66) The Fukushima nuclear disaster lacked the measures against a seismic event and a tsunami,

especially considering the geography since Japan is both prone to earthquakes and tsunamis.

The prime minister of Japan at the time, had relied on the knowledge and advice of The Nuclear

Commission. The Nuclear Commission reported the nuclear reactor was safely designed, which led to the prime minister's authorization of the nuclear reactor. The Nuclear Commission did not foresee the extent of the power a seismic event and tsunami could have.

Although LGBTQ+ culture is becoming a more prevalent topic in Japan, LGBTQ+ people continue to face stigma and cannot fully express themselves due to the current policies at hand. According to Yamashita (2024), Japan is "the only G7 country that [has] not legalized marriage equality or gender expression at the national level, … [remain]ing an outlier with regard to what many Global North nations recognize to be the fundamental human rights of LGBT persons" (p. 74)

In the 2010s, the "cultural and political representation" of LGBTQ+ has become mainstream, compared to how LGBTQ+ people were represented prior. However, even though LGBTQ+ issues have been given scholarly attention starting from the 1990s, there are seldom scholarly articles in English focused on how LGBTQ+ people are today (Kawasaka & Würrer, 2024, pp. 215-230). As LGBTQ+ issues increase in visibility and begin to appear in mainstream culture and media, people have responded with backlash. For example, a lawmaker from the Liberal Democratic Party (LDP), Sugita Mio, wrote an essay that appeared in the magazine, Shinchõ 45, which said that "LGBTQ+ couples were 'unproductive' because they do not procreate, which is why LGBTQ+ related initiatives are not worthy of tax money". Although Sugita's anti-LGBTQ+ agenda did not gain traction, the LDP continues to hold the idea that LGBTQ+ people are harmful to the "social order as they do not form traditional families" despite the increased support from the general public for LGBTQ+ populations.

Studies have shown that in recent disasters, in multiple countries, "LGBT people are often discouraged from accessing counseling services, evacuation centres, or relief goods owing to the presence of discrimination, harassment, and stigma when attempting to do so… (Cianfarani by Gaillard 2017, p. 432) [in] Japan (Ozawa as cited in Gaillard et al, 2017 p. 432) Not only that, but financial compensation for losing a partner can only be given to spouses or husbands in Japan (D'Ooge and Ozawa as cited in Gaillard et al, 2017 p. 432). We have to also consider that many people may want to hide their LGBTQ+ partnerships because of the current stigma that is still held by families or some of the greater public in Japan. Specifically, rural Tōhoku is a place where LGBTQ+ people are more inclined to sheath their gender identity and sexuality (Yamashita, Gomez, Dombroski, 2017, pp. 64-67). Given the stigma in Tōhoku, it was seldom that LGBTQ+ people would request help during the aftermath of the Tōhoku disaster. In reality, many LGBTQ+ people continue to hide their sexuality to prevent "rejection by family and friends, losing a job or housing, and exclusion and isolation from the community" (Yamashita, Gomez, Dombroski, 2017, pp. 64-67).

Risk and Vulnerability

Before the 2011 Tōhoku Earthquake and Tsunami, eight hospitals and seventeen nursing care facilities were situated within a 20km distance from the Fukushima nuclear power plant. According to Tanigawa, Hosoi, Hirohashi, Iwasaki, and Kamiya, "The estimated numbers of hospital inpatients and elderly people in nursing facilities at that time were about 1240 and 980, respectively" (2012, p. 889). A State of Atomic emergency was issued and an evacuation plan was announced by the national government, telling the residents who lived only within a 2km radius of the power plant to evacuate. The following morning, residents within 10km were

told to evacuate, as the people within 20km of the area were not evacuated, until the evening.

When patients were transported out, medical professionals did not accompany them in the

vehicles. Many patients were falling off their seats in the vehicles and suffered trauma. The

next day, patients left via bus and could not be accompanied because the hospitals and care

facilities were not available.

> Twenty-seven patients with severe medical problems such as end-stage renal failure or
>
> stroke were transported more than 100 km to Iwaki city. At least 12 of them were
>
> confirmed dead at 0300 h on March 15, ten of whom seemed to have died in the
>
> vehicles during transportation. Later, it was reported that more than 50 patients died
>
> either during or soon after evacuation, probably owing to hypothermia, dehydration,
>
> and deterioration of underlying medical problems" (Tanigawa et al., 2012, p.890)

Japan's unpreparedness for the nuclear disaster had led to numerous deaths, due to

lack of organization with their evacuation plan. Instead of evacuating people in the areas of 2

km and 10km, they should have evacuated everyone in the 20km radius to begin with, saving

the lives of many patients. So many people died because there was no proper medical

evacuation plan and no large-scale evacuation plan for the event of a nuclear disaster.

The population of Japan is well aware of the risks of an earthquake and tsunami because

they are often victims of these environmental disasters (Hasegawa, 2013, p. 1). Seismic events

happen more often in Japan because of the surrounding volcanic regions. The population was

not ready when the Fukushima Dai-ichi nuclear disaster occurred, and was left as a disorganized

mess because they did not anticipate this na-tech disaster (Funabashi, 2021, p. 67), despite

their awareness of the atomic atrocities, which could be attributed to probabilistic thinking

(Clarke 2008, p. 155). The population of Japan had little to no risk perceptions of nuclear power

plant disasters, which is also why there was no evacuation planned or available for the people

escaping this disaster, despite their knowledge on the atomic nuclear bombs that were dropped

in Hiroshima and Nagasaki. Again, this could also be evidence for probabilistic thinking.

However, the Japanese government should have prepared a proper evacuation plan with the

knowledge that seismic events and tsunamis do occur in this region. Not only that but many

medical patients with life-threatening diseases and the elderly were put at risk due to a lack of

evacuation plan, especially since many of them reside within a 20km radius of the Fukushima

nuclear plant. Patients with life-threatening diseases and elderly people will need medical

assistance when evacuating because these populations are usually weaker. The Japanese

government should have proceeded forward with more hindsight and created a proper

evacuation plan considering the social vulnerability and risk of these populations. Perhaps, the

resources were not prepared because the preparation of resources is risk-based, and a nuclear

disaster was once thought of as improbable, a problem with probabilism. Similar to how people

who live in floodplains "will not choose to buy coverage as they neglect the potential impacts of

low-probability flooding" (Thistlethwaite, 2017, p. 746)

        Calling back to the information I have written out in the history section, many social

decisions were made that were ignorant of the technological defects since the type of power

plant was outsourced (Funabashi, 2021, p. 66). Many technological safeguards were also

ineffective, causing the nuclear disaster. The nuclear power plant type, Mark I was old,

outdated, and defective. The units in the nuclear power plant have had many issues previously.

Unit 1 has been functioning since 1971 and unit 4 has been functioning since 1978. The units

should have been replaced (66).

Analysis of Literature

　　　　The LGBTQ+ are marginalized by the hetero-normative and hegemonic values in daily

life, this is supported by Galliard et al, (2017): "hetero-normative values and norms in both

everyday life and during disasters make non-heterosexual people particularly vulnerable in the

face of natural hazards" (p. 432) LGBTQ+ people have been forced to identify as men or women

to receive protection and to access resources in the past. For example, in Nepal, people had to

identify as a "woman" or "man" to access the shelters (Knight and Sollum by Gaillard et al.,

2017, p. 432). Since the LGBTQ+ community is discriminated against because of their gender

identity and sexuality (Brown and Nash as cited in Galliard, 2017, p. 432), they may not be able

to access certain services. For example, disaster response agencies have adhered to policies and

processes that reinforce heteronormativity, marginalizing LGBTQ+ people from the aid they

need (Balgos et al, as cited in Gorman-Murray, McKinnon, & Dominey-Howes, 2015, p. 239).

Considering how hetero-normative and hegemonic values are still upheld, it can be understood

that there is a lack of English literature concerning LGBTQ+ survivors of the Tōhoku Earthquake

and Tsunami 2011 disaster due to the stigma LGBTQ+ people face, especially because they do

not fit the idea of those hetero-normative or hegemonic values (Yamashita, Gomez, Dombroski,

2017, p. 66). A power dynamic can be observed when understanding the hetero-normative

expectations upheld in society because trans people do not fit the hegemonic narrative of what

a man should be, they are discriminated against and seen as inferior compared to the

hegemonic standard. Moreover, hetero-normativity creates a stigma against LGBTQ+ people

because they are viewed as a threat to what people will consider as "normal social order"

(Kawasaka & Würrer, 2024, pp. 215-230). Without formal recognition or legal protection from

the Japanese public, "prejudice and discrimination against" LGBTQ+ people have risen

(Yamashita, Gomez, Dombroski, 2017, p.66). For example, after the disaster the prejudice and

discrimination LGBTQ+ people face became more apparent. After the disaster of Tohoku in

2011, 'post-disaster citizenship' became relevant:

> Post-disaster citizenship describes the ways that people make use of disasters to
>
> reconstruct meanings around social membership and citizenship. It includes a
>
> range of 5 responses across a spectrum of political positions, including attempts
>
> to reinforce the boundaries of exclusion (such as with the case of nativists) or to
>
> widen the terms of political and social participation (as is the case with
>
> multicultural nationalism)" (Shaw, 2018, p. 4-5)

Power dynamics have been put in play against those who are vulnerable through

political governance and capitalist extraction as a result of disasters, this has been documented

by scholars. These power dynamics separated people in Japan by race and gender, revealing

how LGBTQ+ were affected negatively and how LGBTQ+ people are stigmatized against. Not

only that, but the citizens of Japan have accused the government of abandoning its citizens. So,

instead of receiving the post-disaster help they needed, Japan had capitalized on the post-

disaster climate in order to create policies that were reactionary. These policies led the country

to develop a military and expand the national surveillance system (Shaw, 2018, p. 2). Japan has

not focused on providing LGBTQ+ policies that support LGBTQ+ people, especially post-disaster,

when the discrimination against LGBTQ+ people became more apparent.

More research on how LGBTQ+ people are affected by the disaster will help create

future methodologies, policies, and criteria for research that are more inclusive and enforce

equity. Without including LGBTQ+ research in disaster, LGBTQ+ people will continue to be

socially vulnerable because of the barriers that stop them from accessing resources: "Gender

studies of disasters thus face challenges similar to those of larger studies of vulnerability and

capacities in the non-Western world, that is, people's experience of disasters cannot always be

understood using standard criteria and methodologies designed by outsiders" (Bhatt as cited in

Gaillard et al, 2017, p. 432). For example, in Haney and Barber's study (2022), the only survey

criteria that LGBTQ+ people could pick between when identifying their gender was "male" and

"female" (p. 34). Furthermore, since the survey criteria measures were determined by another

organization, Haney and Barber (2022) wished they had more "inclusive and useful measures of

gender" (p. 34). By not allowing LGBTQ+ participants to choose the correct gender they identify

with, researchers could be harming participants by reminding participants of the ongoing

stigma against gender. For example, there is a narrative that no other genders exist outside the

binary and that gender is only determined by sex. This narrative is harmful because it is

othering people who exist beyond the binary gender. Not only that, but information about

people outside the binary gender is not being recorded because of these limitations. Therefore,

there is less research on LGBTQ+ people because they are not being included in the research.

Finding ways to receive information from participants without harming them after a

traumatic event is important, according to Browne and Peek (2014), when trying to "gain access

to disaster affected populations and/or relevant disaster response organizations, ethical

questions must be addressed." (p. 83). LGBTQ+ people may also have trauma regarding

stigmatization against their gender, either having been bullied or segregated before due to

their gender. An example of LGBTQ+ people facing stigma is when John Hagee, a senior pastor

of San Anthonio Cornerstone Church, had said to a conservative talk radio host, Dennis Prager

that Hurricane Katrina was an act from God and since there was a plan to have a "homosexual

rally" in New Orleans, God had punished the city for "planning sinful conduct" (Richards, 2010,

p. 522). Some people who hold strong homophobic beliefs against the LGBTQ+ community may

believe that LGBTQ+ people should suffer or perish at the hands of God. This explains why a lot

of LGBTQ+ people may experience trauma or fear concerning stigma, they may be in fear for

their well-being or life.

After the Tōhoku disaster of 2011, same-sex partners were denied visitation to visit their

partners in hospitals (Yamashita, Gomez, Dombroski, 2017, p. 69). Since marriage equality is not

legal in Japan, LGBTQ+ people were also not allowed to consult on medical decisions for their

partners, compared to their counterparts. Counterparts who were allowed to visit their spouses

and consult on medical decisions regarding their partners. Furthermore, LGBTQ+ people are not

informed by a healthcare worker about the passing of their same-sex partner. Sometimes,

LGBTQ+ people will hear about their partner's passing through family. Sometimes they will hear

about it from their friends, colleagues, or neighbours, who heard about the passing of the

same-sex partner from the family.

The lack of communal spaces and private spaces for LGBTQ+ people forces them into

heteronormative spaces where they may face harassment during and after a disaster (Gorman-

Murray, McKinnon, & Dominey-Howes, 2015, p. 29). Not only that, but LGBTQ+ populations will

face more vulnerabilities from "social stigma and policy neglect" (Gorman-Murray, McKinnon,

& Dominey-Howes, 2015, p. 239), for example, there is not policy against the discrimination of

LGBTQ+ people in Japan (Yamashita, Gomez, Dombroski, 2017, p. 66). LGBTQ+ have to face so

many barriers such as being unable to live with their partners in temporary housing due to

policy neglect. For example, since there is no marriage equality in Japan, same-sex couples are

not considered households or relatives, so they cannot live together. Yamashita, 2024, p.74)**.**

LGBTQ+ people may be forced to either pretend to be someone they're not, faking

heteronormativity, or they choose to be open about their identity while risking harm to their

well-being. Policies should include accommodation for LGBTQ+ communities to prevent mental

or physical harm. During the 2004 Indian Ocean tsunami, members of the LGBTQ+ were

physically harmed in the shelters. The arvanis of Tamil Nadu, are a group of people who are

either born as intersex or male who dress feminine but do not associate themselves with either

gender. They were victims of not only physical harm but also psychological harm in the shelters.

The discrimination they faced had increased their vulnerability and is evidence that policies

need to be made to protect LGBTQ+ people. In Japan, a member of the LGBTQ+ community was

called a "cross-dressing deviant f[*]g" by a volunteer at the emergency shelter (Yamashita as

cited in Gorman-Murray, McKinnon, & Dominey-Howes, 2015, p. 249) In a space like the

emergency shelter where people are supposed to be protected, LGBTQ+ people are faced with

stigmatization, psychological harm, and physical harm, proving that they are more socially

vulnerable.

       To address these issues related to policy neglect, new policies should be created with

the involvement of all stakeholders, the government, and LGBTQ+ people. According to

Balachandran et al, (2022) all of the stakeholders should be involved in the risk decision and

relocation planning, to ensure the relocation process considers how they could help get the

residents to value the new location they will reside in, as much as possible (p. 300). Moreover,

the stakeholders should reproduce and protect the values the relocated people had with their

old home. LGBTQ+ people should be allowed a space where they can properly function.

LGBTQ+-friendly spaces should be included in temporary housing, washrooms, and

communities. Organizations and volunteer-specific roles should be focused on helping the

livelihood of LGBTQ+ people. The government should make a disaster plan for LGBTQ+ people

to prevent the psychological and physical harm they may face in these heteronormative spaces.

Specific criteria should be created before deciding where LGBTQ+ people should be relocated.

Not only that, but the physical environment, cost, and accessibility of the environment should

be considered too. Communities function as economic and social networks. These physical

spaces in which these networks take place have symbolic, cultural, and emotional significance

to the residence (Balachandran et al, 2022, p. 299). Having these places taken away can lead to

a deep sense of distrust for the community members and affect their ontological security

(Erikson, 1998, p. 160). For example, after a flood in West Virginia, Buffalo Creek, the displaced

residents felt a sense of deep distrust for their new neighbours. They reported their friendships

with their new neighbours were artificial and unnatural. The more connected the residents of

Buffalo Creek were to their community, the more emotionally disturbed they felt in the place

they were displaced at. For LGBTQ+ people, many of them may feel the most at home with

people like them. Oftentimes, LGBTQ+ people have to hide their gender/identities because of

stigma and so, being with people in the LGBTQ+ community gives them a sense of home

because the LGBTQ+ community will accept who they are. When relocating LGBTQ+ people,

understanding their needs and ensuring that they are with their community that understands them should be a priority during planning for a disaster evacuation plan. Having multiple options and a discourse about what would better suit LGBTQ+ people is important. To make decisions that would work best for the LGBTQ+ community, the government and stakeholders should discuss with the LGBTQ+ community.

Certain characteristics of gender can create difficulties during the disaster and the ongoing aftermath of the disaster, making LGBTQ+ people more vulnerable to more risks, especially after relocation: "Disaster vulnerability [is increased] by pushing certain groups further to the margins and into hazardous areas and structures and by making it difficult for such populations to exercise agency in the face of risks" (Vickery 2017 p. 136). For example, in the past, same-sex couples were denied access to temporary housing or were forced to live separately because same-sex couples are not legally recognized as a family or couple (Yamashita, Gomez, Dombroski, 2017, p. 69). Same-sex couples do not qualify for public housing either because they do not meet the criteria of what is deemed to be a household or who is considered relative. Although denial of access to temporary housing was not publicly documented, same-sex couples have reported in the past that they would either move out to their own private apartment to live together or live separately in public housing (Yamashita, Gomez, Dombroski, 2017, p. 69). The government did not make LGBTQ+ rights a priority during the disaster, especially considering their social vulnerability: "The impact of a disaster on an area differs depending on one's vulnerability, as 'the characteristics of a person or group and their situation … influence their capacity to anticipate, cope with, resist and recover from the impact of a natural disaster' (Wisner as cited in Yamashita, 2024, p. 78). For example, Japan,

most of the LGBTQ+ community was "reluctant to come out publicly" because of the stigma in

rural Tōhoku; however, the Tōhoku 2011 disaster "forced numerous individuals to reveal their

gender identity, particularly when confronted with life in shelters, the lack of supply of

medication and so on" (Yamashita, Gomez, Dombroski, 2017, pp. 64-67). LGBTQ+ people were

forced to use washrooms, public baths, and more, which reinforced the binary gender. This

negatively affects the health of LGBTQ+ people because being forced to adhere to the binary

gender can cause humiliation (69). A trans man reported that he avoids public baths because he

wears women's underwear as a high-passing trans man (Yamashita, 2024, p. 81). To avoid

making the other men in the public bathhouse feel uncomfortable, he would go to a private

bathhouse much farther away than the public bathhouse. For other people, going further

distances to a public bathhouse may not be an option because of a disability, lack of

transportation, and lack of money for the bus or for gas. It is important we make accessible

options available for LGBTQ+ people. Many LGBTQ+ people were forced to use the binary-

gendered washrooms in evacuation shelters (Yamashita 2024, p. 80) Access to gender-neutral

washrooms allows the people who need those spaces to live with dignity and protects them

from harm's way (Yamashita 2024, p. 81), as being LGBTQ+ have been assaulted in washrooms

in the past (Hasenbush, Flores, & Herman, 2018, p. 78). Having gender neutral washrooms and

places LGBTQ+ people can go to without being discriminated against, can help LGBTQ+ people

"anticipate, cope with, resist and recover" from the disaster ((Wisner as cited in Yamashita,

2024, p. 78).

Discussion has arisen concerning the vulnerabilities that LGBTQ+ people are dealt with

because of their "sexual orientation, gender identity, and gender expression" (Yamashita,

Gomez, Dombroski, 2017, p. 67). The government of Japan has paid little attention to the issues

of LGBTQ+ people, contributing to the "isolation and invisibility of LGBTQ people: "While Japan

does not criminali[z]e transgenderism or consensual same-sex acts, there is no anti

discrimination law inclusive of gender identity or sexual orientation, and no same-sex

partnership recognition at a national level" (Yamashita, Gomez, Dombroski, 2017, p. 66). Trans

people are only allowed to change their gender under specific conditions, they must receive a

"diagnosis of 'Gender Identity Disorder' and sterilization", revealing how the government has

created barriers for transgender people in the past (Yamashita, Gomez, Dombroski, 2017, p. 64)

Transgender people are forced by the government to other themselves through these labels of

'Gender Identity Disorder' and sterilization if they want to change their gender. By forcing the

label of sterilization on LGBTQ+ people, especially to access resources, they are othering them

and violating their human rights, which the World Health Organization supports: "The WHO and

other UN agencies have criticized the requirement of sterilization for legal gender marker

changes, as it violates one's human rights and is against international human rights standards

(WHO as cited in Yamashima, 2024, p. 80).

Government, researchers, non-profit organizations, stakeholders, and all alike should

understand LGBTQ+ from an intersectional lens to understand their vulnerability. Vickery

(2017) explains how researchers should utilize the paradigm of intersectionality as a "critical

lens [to explore] the interconnected, overlapping systems of disadvantage and oppression, as

well as the intersecting identities of individuals and populations on the basis of race, ethnicity,

gender, socioeconomic status, as among other characteristics" (p. 136). LGBTQ+ people may

not only be marginalized by their gender but also by their "race, ethnicity, socioeconomic

status, [and by] other characteristics (Vickery, 2017, p. 136). An example of this is when same-sex couples could not afford their own private space to rent after the Tōhoku disaster and had to live in temporary housing, separate from their spouse because they did not meet the definition of who were deemed "relatives" or a "household" or (Yamashita, Gomez, Dombroski, 2017, p. 69). They were marginalized by class and their gender, in turn, they were isolated from their partners. To reduce risk for LGBTQ+ people, the characteristics that negatively influence their reaction to the disaster must be considered to understand vulnerability: "'the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard'— is critical to reducing risk" (Wisner as cited in Oulahen 2015, p. 940).

　　　To reduce a negative reaction to the disaster, where LGBTQ+ people are displaced should be a priority by the government, non-profit organizations, emergency management, and in mainstream media (Gorman-Murray, McKinnon, & Dominey-Howes, 2015, p. 249) In New Orleans, after Hurricane Katrina, Caldwell had went home and yearned to see his neighbours who were also LGBTQ+ residents (Caldwell as cited in Gorman-Murray, McKinnon, & Dominey-Howes, 2015, pp. 255-256). Although other residents had returned, he was specifically waiting for the return of people just like him, people of the LGBTQ+ community. Caldwell was unable to feel a sense of ontological security until he witnessed his neighbours which were a part of the LGBTQ+ community come back to the neighborhood. However, when LGBTQ+ people are able to stay together after a disaster, the disaster can actually help bring them closer together. For example, after an earthquake in Christchurch, LGBTQ+ friends and family were able to become closer than they were before, signifying that the understanding of home and belonging goes

beyond space. The people they know and are surrounded by in their neighbourhoods take significance in their lives. Without their LGBTQ+ community or neighbours, their ontological security will be affected. So, when researchers are responding to the LGBTQ+ community, understanding the stigma that they have faced can prevent LGBTQ+ people from leaving the study and not having visibility in research.

Conclusion

In conclusion, LGBTQ+ people continue to be affected by the marginalization, stigmatization and policy neglect of LGBTQ+ peoples. Disasters exacerbate the stigmatization and make them more visible to the public. This was evident during the Tōhoku earthquake and tsunami disaster, where so many LGBTQ+ people had to out themselves, and in turn they were judged. LGBTQ+ people have been called a "f*g" in emergency shelters, a space they are supposed to be safe in (Yamashita as cited in Gorman-Murray, McKinnon, & Dominey-Howes, 2015, p. 249). Instead of becoming more secure in an emergency shelter, LGBTQ+ people are harassed and forced to go into heteronormative spaces with strangers they may feel distrust for.

The lack of policies, evacuation plans, and support systems that could help LGBTQ+ people are lacking in Japan. When inclusive policies are not made to support them, their ontological security could be negatively affected. Considering that LGBTQ+ people can face harassment and assault in gender-binary washrooms, gender-neutral washrooms should exist as a third place where LGBTQ+ can feel safe together (Hasenbush, Flores, & Herman, 2018, p. 78). Evacuation plans should also consider the safety of LGBTQ+ people and ensure they have a third place they can go to in all situations. For example, LGBTQ+ volunteer-led workshops to

help LGBTQ+ people through recovery can be made available. Temporary housing that is LGBTQ+-friendly should exist as well. LGBTQ+ disaster counseling can also be utilized.

By understanding the vulnerabilities of the LGBTQ+ people through an intersectional lens and paradigm, we can understand how to help them (Vickery 2017 p. 136). LGBTQ+ people are marginalized and may often be discriminated against because of their gender identity. Sometimes, LGBTQ+ people are intersectionally marginalized. For instance, low-income same-sex couples in Japan, after the Tōhoku disaster, were forced to live in temporary housing without their partners, because same-sex couples do not fit the definition of "relatives" or people of a "household" (Yamashita, Gomez, Dombroski, 2017, p. 69). By allowing marriage equality and/or changing the definition of what a "household" or what "relatives" are deemed to be to a more inclusive policy, LGBTQ+ can be together with their partners during a tumultuous time.

Disasters make discrimination visible and can even cause more discrimination during the disaster and post-disaster (Spring, 2011, pp. 1169-1188). LGBTQ+ people were forced to come out with their identity as LGBTQ+ people when they did not want to, considering the more right-leaning political stances of rural Tōhoku, where they are more likely to face discrimination compared to the rest of Japan (Yamashita, Gomez, Dombroski, 2017, pp. 64-67). By making discrimination illegal, less people are more inclined to not openly and freely discriminate against LGBTQ+ people.

LGBTQ+ people are more vulnerable during and post-disaster because of issues of inequality, lack of power, and marginalization in society. By not having the same amount of rights to marry, they are treated as unequal (Yamashita, 2024, p. 74). The government does not

give LGBTQ+ people the right to change their gender unless LGBTQ+ people identify as having

being 'sterilization' or having 'Gender Identity Disorder', denying their human rights

(Yamashita, Gomez, Dombroski, 2017, p. 64). By altering these policies to be more inclusive,

granting marriage equality and the right for LGBTQ+ people to freely choose the gender they

want without limitations, LGBTQ+ people's social vulnerability will be lessened, giving them a

higher quality of life.

      LGBTQ+ people are left disempowered and left to fend for themselves, especially in a

heteronormative space. After the 2011 disaster of Tōhoku, LGBTQ+ people were isolated from

each other, especially when the double marginalized low-income and LGBTQ+ people were

forced into temporary housing (Yamashita, Gomez, Dombroski, 2017, p. 69). Being isolated

from what is known can disrupt ontological security, causing a long-term emotional disturbance

(Erikson, 1998, pp. 153-161). For example, after a flood in Buffalo Creek, West Virginia,

residents were moved beside strangers/acquaintances, whom they felt a deep distrust for. This

hindered their recovery and prevented them from reobtaining their ontological security.

      At the moment, there is a lack of research and English literature on LGBTQ+ people in

Japan, especially concerning the Tōhoku 2011 disaster (Yamashita, Gomez, Dombroski, 2017, p.

66). By doing more research on LGBTQ+ people and those who are affected by disasters in

Japan, the government can create a disaster plan and evacuation plan that considers the

vulnerabilities of LGBTQ+ people. More qualitative and quantitative studies should be done on

how LGBTQ+ are affected by disasters for future disasters. In sociology, we continue to see

more and more inequalities, which are exacerbated by disasters. To help people reach equity in

everyday life, research must be done to identify where the inequalities lie. LGBTQ+ are forced

to be 'resilient' because they have to, not because they have a choice, this is the human

condition, a reason why research on LGBTQ+ people, especially regarding disasters, is of the

essence.

References

Background and scientific explanation for the discharge of treated water. Tokyo Electric Power

Company Holdings, Incorporated.

https://www.tepco.co.jp/en/decommission/progress/treated-water-lan/index-e.html

Balachandran, B., Olshansky, R. B., & Johnson, L. A. (2022). Planning for Disaster-Induced

Relocation of Communities. Journal of the American Planning Association, 88(3), 288–

304. https://doi.org/10.1080/01944363.2021.1978855

Browne, K. E., & Peek, L. (2014). Beyond the IRB: An ethical toolkit for long-term disaster

research. International Journal of Mass Emergencies & Disasters, 32(1), 82–120.

https://doi.org/10.1177/028072701403200105

Dominey-Howes, D., Gorman-Murray, A., & McKinnon, S. (2014). Queering disasters: On the

need to account for LGBTI experiences in natural disaster contexts. Gender, Place &

Culture, 21(7), 905--918.

https://doi.org/10.1080/0966369X.2013.802673](https://doi.org/10.1080/0966369X.20

13.802673

Erikson, K. T. (1998). Trauma at Buffalo Creek. *Society*, *13*(6), 58–65.

https://doi.org/10.1007/bf02802909

Funabashi, H. (2012). Why the Fukushima nuclear disaster is a man-made calamity.

International Journal of Japanese Sociology, *21*(1), 65–75.

https://doi.org/10.1111/j.1475-6781.2012.01161.x

Fuse, A., & Yokota, H. (2012). Lessons learned from the Japan earthquake and tsunami, 2011.

Journal of Nippon Medical School, *79*(4), 312–315. https://doi.org/10.1272/jnms.79.312

Gaillard, J. C., Sanz, K., Balgos, B. C., Dalisay, S. N., Gorman-Murray, A., Smith, F., & Toelupe, V.

(2016). Beyond men and women: A critical perspective on gender and disaster.

Disasters, 41(3), 429–447. https://doi.org/10.1111/disa.12209

Hasenbush, A., Flores, A. R., & Herman, J. L. (2019). Gender Identity Nondiscrimination

Laws in Public Accommodations: A Review of Evidence Regarding Safety and Privacy in

Public Restrooms, Locker Rooms, and Changing Rooms. Sexuality Research and Social

Policy, 16(1), 70–83. https://doi.org/10.1007/s13178-018-0335-z

Hoagland, M. (2021). *3 steps to effective it system redundancy: SIOS*. SIOS Technology Corp.

https://us.sios.com/blog/3-steps-to-effective-it-system-redundancy/

Haney, T. J., & Barber, K. (2022). The extreme gendering of COVID-19: Household tasks and

division of labour satisfaction during the pandemic. Canadian Review of Sociology =

Revue Canadienne De Sociologie, 59(S1), 26–47. https://doi.org/10.1111/cars.12391

Hasegawa, R. (2013). Disaster Evacuation from Japan's 2011 Tsunami Disaster and the

Fukushima Nuclear Accident. *IDDRI SciencesPo.*

https://orbi.uliege.be/bitstream/2268/195804/1/STUDY0513_RH_DEVAST%20report-

1.pdf

Kawasaka, K., & Würrer, S. (2024). Beyond Diversity: Queer Politics, Activism, and

Representation in Contemporary Japan. Walter de Gruyter GmbH & Co KG.

Lipscy, P. Y., Kushida, K. E., & Incerti, T. (2013). The Fukushima Disaster and Japan's

Nuclear Plant Vulnerability in Comparative Perspective. Environmental Science &

Technology, 47(12), 6082–6088. https://doi.org/10.1021/es4004813

Newman, R. J. (2000). *Reachback*. Air & Space Forces Magazine.

https://www.airandspaceforces.com/article/0600reachback/#:~:text=Reachback%20wo

uld%2C%20in%20effect%2C%20make,More%20Tooth%2C%20Less%20Tail

Norio, O., Ye, T., Kajitani, Y., Shi, P., & Tatano, H. (2011). The 2011 eastern Japan great

earthquake disaster: Overview and comments. *International Journal of Disaster Risk

Science*, *2*(1), 34–42. https://doi.org/10.1007/s13753-011-0004-9

Schulz, K. (2015). *The earthquake that will devastate the Pacific Northwest*. The New Yorker.

https://www.newyorker.com/magazine/2015/07/20/the-really-big-one

Rhodes, C. J. (2014). The Fukushima Daiichi Nuclear Accident. Science Progress, 97(1), 72–86.

https://doi.org/10.3184/003685014X13904938571454

Shaw, V. G. (2018). Post-Disaster Citizenship: The Politics of Race, Belonging, and Activism After

Fukushima (Order No. 28166171). Available from ProQuest Dissertations & Theses

Global. https://www.proquest.com/dissertations-theses/post-disaster-citizenship-

politics-race-belonging/docview/2478803413/se-2

Spring, Ú. O. (2011). Social Vulnerability, Discrimination, and Resilience-building in

Disaster Risk Reduction. In H. G. Brauch, Ú. Oswald Spring, C. Mesjasz, J. Grin, P. Kameri-

Mbote, B. Chourou, P. Dunay, & J. Birkmann (Eds.), Coping with Global Environmental

Change, Disasters and Security: Threats, Challenges, Vulnerabilities and Risks (pp. 1169–

1188). Springer. https://doi.org/10.1007/978-3-642-17776-7_72

Takada, Y., & Fukushima, Y. (2013). Volcanic subsidence triggered by the 2011 Tohoku

earthquake in Japan. *Nature Geoscience*, *6*(8), 637–641.

https://doi.org/10.1038/ngeo1857

Thistlethwaite, J. (2016). The emergence of Flood Insurance in Canada: Navigating institutional

uncertainty. *Risk Analysis*, *37*(4), 744–755. https://doi.org/10.1111/risa.12659

Tikhonov, I. N., & Lomtev, V. L. (2011). Great Japan earthquake of March 11, 2011: Tectonic and

seismological aspects. *Izvestiya, Atmospheric and Oceanic Physics*, *47*(8), 978–991.

https://doi.org/10.1134/s0001433811080111

Tran, T. T. (2021, August). *Queering disasters: Embodied crises in post-harvey houston*. TRACE:

Tennessee Research and Creative Exchange.

https://trace.tennessee.edu/utk_gradthes/6141/

Oulahen, G., Shrubsole, D., & McBean, G. (2015). Determinants of residential

vulnerability to flood hazards in Metro Vancouver, Canada. Natural Hazards, 78(2), 939–

956. https://doi.org/10.1007/s11069-015-1751-5

Vickery, J. (2017). Using an intersectional approach to advance understanding of

homeless persons' vulnerability to disaster. Environmental Sociology, 4(1), 136–147.

https://doi.org/10.1080/23251042.2017.1408549

Yamashita, A. (2024). Being LGBT in disasters: Lived experiences from Japan. In K.

Kawasaka & S. Würrer (Eds.), Beyond Diversity (pp. 73–98). De Gruyter.

https://doi.org/10.1515/9783110767995-008

Yamashita, A., Gomez, C., & Dombroski, K. (2017). Segregation, exclusion and LGBT

people in disaster impacted areas: Experiences from the Higashinihon Dai-Shinsai (Great

East-Japan Disaster). Gender, Place & Culture, 24(1), 64–71.

https://doi.org/10.1080/0966369X.2016.1276887