Rebuilding as Opportunity: Youth Engagement as Planning in Post-Tsunami Miyagi

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Abstract

This thesis explores the role that planners could play in supporting the engagement of youth in the physical and social reconstruction of cities that have experienced disasters. My research is focused in the Miyagi Prefecture of the Tohoku Region which was devastated by the Great East Japan Earthquake and Tsunami on March 11, 2011. The reconstruction process has been challenged by normative planning and community development practices, and demographic issues including rural isolation and a majority aging population. These challenges were brought to light and sometimes countered through the engagement of youth in the coastal towns of Ishinomaki and Onagawa. My analysis of how, and to what extent, these youth were engaged is carried out through interviews with employees of community-based organizations in Ishinomaki and Onagawa, formerly involved youth, and additional designers and researchers in the field. I analyze this data within a review of existing literature adjacent to youth engagement in disaster contexts, which includes the psychology behind the value of place attachment for youth in disaster contexts, community resilience and reconstruction theory and practice in disaster contexts, youth participatory action research, and social capital theory.

Throughout this paper you will see me refer to Japanese terms (nihongo) within the urban planning and disaster reconstruction practice. These words are often not literal translations but should introduce the reader to the concept of specific vocabulary in the Japanese language.



I remember exactly where I was on March 11, 2011, when the tsunami hit the northern coast of Japan. I was sitting in my college dorm and received the news that a 9.1 earthquake had triggered massive tsunami waves that were roaring through coastal towns in the Tohoku region. I watched in horror from the small screen of my laptop, knowing that nothing would be the same again.

The earthquake was the strongest-recorded seismic event in the history of Japan and would come to be known as the Great East Japan Earthquake. The epicenter was 15.2 miles in depth off the coast of the Miyagi prefecture of Tohoku, about 80 miles west of Sendai. The tsunami waves, which would reach as high as 300-feet, would devastate the population of the entire Tohoku region. Japan's Fire and Disaster Management Agency would estimate the number of deaths or missing people at around 22,000. The most impacted of the Tohoku region were the most populated prefectures; Iwate, Miyagi, and Fukushima. The Miyagi prefecture totaled the greatest number of people either dead or presumed missing (Fig 1).

Despite the scale of destruction, memory in a globalized, disaster-consumed world can be an unforgiving thing. Exposure to televised destruction of natural disasters have multiplied, and with it our numbness. After 2011, I regrettably moved on with my life for four years, occasionally getting updates from my grandparents in Tokyo (about an hour away from Sendai by train), about the impacts government scheduled brownouts had on their daily lives. I did not question that the devastation had been massive, but I trusted the federal and municipal governments were making strides on reconstruction.

It was not until the summer of 2015, when I was offered a position in Berkeley, California to teach high schoolers from the Tohoku region that I realized the extent of the destruction and its impacts in the region. This was the first summer I was hired as a Y-PLAN instructor for the TOMODACHI SoftBank Leadership Program. The Y-PLAN methodology, founded by Professor Deborah McKoy of UC Berkeley, teaches the importance of youth engagement in all aspects of planning and building our communities. Professor McKoy's work has spanned across 20 years and the globe. The goal of the program is to empower youth to tackle community development challenges within their cities and work with planning professionals and policy-makers to find solutions.¹ My job as an instructor was to work with a classroom of 25 students, teaching them about urban planning, leadership, and civic engagement. Through the intensive three-week program, students were expected to come up with "social action plans" for their home towns. Varying in scale and duration, the plans were intended to address and solve a problem that students saw as impacting their communities since 2011.

As my students brainstormed about the issues their communities were facing, I was shocked to hear that four years later, temporary housing was still in place and local trains had just started to run again. And it was not just the built infrastructure that had been lost; they also shared stories of the social infrastructure they had lost that day. School playgrounds that had previously been places of activity were now housing temporary structures, shopping districts were shut down so streets were lined with the cold metal of closed shutters (shatta-gai), and family members and neighbors they had known their entire lives were now gone. It was these lost systems of physical and social infrastructure that had previously connected their communities that the students were here to reclaim.

Great East Japan Earthquake and Tsunami

Iwate	Deaths	Missing	2010 pop	% dead or missing
Prefecture	4,673	1,124	1,330,530	0.44%
Miyagi Prefecture	9,541	1,236	2,347,975	0.46%
Fukushima Prefecture	1,613	197	2,028,752	0.09%
Total	15,894	2,561		

Fig 1: Data sources from Japan National Police Association

Introduction

The projects themselves varied in scale. One student from a colleague's class wanted to offer cooking classes of "hard to pronounce" recipes to his classmates so they could learn what it felt like to undertake challenges in the kitchen and feel empowered to make change outside of it. Another student wanted to re-imagine traditional economic development strategies and make her town a future wedding destination. It is to no one's surprise that both of these projects have been, or are on their way, to being implemented. The cooking classes have been a success and the student who started them is now on his way to study at a culinary institute in Australia. The other student is finishing her last year in wedding planning school in Tokyo.

U.S. based instructors were only part of the team that supported students' action plans. There was an additional group of "Adult Allies" who were members of their community who worked at community-based organizations (CBO) that supported youth engagement. Often they already had relationships with the youth who came and had originally encouraged their students to apply to the TOMODACHI program. The Adult Allies flew in the last week of the program to help students navigate the challenges of implementation of their projects back home.

The Adult Allies I worked with impressed me as much as my students. Their work ranged in responsibility and approach; however, this self-selective group in Berkeley shared a deep-seated belief that youth perspective was an important part of rebuilding communities.

And they had every right to believe so. We are approaching a pivotal moment in planning where we must redefine the concept of whom we are planning for. Our profession plans around tangible concepts available for implementation. We plan for climate change by engaging the taxpayers who are going to pay for the infrastructure.² We plan for city and town master plans with those who are the loudest in community meetings.³ Rarely do we take a moment to realize who we are overlooking and who we cannot hear.



Adult Allies and Students from the TOMODACHI program (top) and students on a field trip to San Francisco City Hall (bottom). Images courtesy of Softbank and author.

Youth may not pay taxes to fund public amenities, or be able to get themselves to a community meeting on a school night. Yet they are politically invested in how our communities' tackle some of the biggest issues in this political age. Of the many examples of youth activism, one of the most recent is worth noting. In March 2019 youth around the world took part in a rally for political action to address climate change. The #FridaysForFuture rally reached as far as Japan, where a few dozen high-school and university students gathered outside the National Diet in Tokyo⁴ (Fig 2).

Yet, youth are also a vulnerable population following a natural disaster. This point is evident in the research conducted by scholars exploring cases of Post-Traumatic Stress in youth who have been exposed to natural disaster. Withholding cases of direct injury or death, youth are impacted by proximity and can be vulnerable to "mass destruction, seeing dead or injured people, evacuating school, losing loved ones, viewing physical damages or being displaced from their homes".⁵ The impact of losing the social infrastructure that has kept the complex layers of youth identity in the home and community can last far too long. But it is important that the practice of youth engagement does not get caught in false dichotomies. Limiting the identity of youth to a narrative of vulnerability does not allow for potential, but leaning on advocacy does not fulfill the social support youth need to recover after trauma. We must claim both support and advocacy as part of the core identities and necessities for youth and ask ourselves: How do you empower youth to create change in the communities they could be living in?

The youth I met in the classrooms in Berkeley were empowered. Fueled by the power of knowledge and support of the adults around them, they believed they could help their communities rebuild and grow. I wanted to understand how far this energy took them. What happens when they arrive home: would they stay in their homes, becoming active members of their communities for decades like the generations before them? Would the feeling of support be enough to make a full mental recovery after the trauma of the earthquake and tsunami? My research seeks answers to these questions through analyzing the experiences of youth



Fig 2: Youth gathered in protest for climate change action outside the National Diet in Tokyo (Source: Mainichi Daily News)

who have been involved in post-disaster reconstruction in the Tohoku region and the community-based organizations that have engaged them. Through this process I hope to understand how communities facing similar demographic issues such as the Tohoku region can plan to include youth as part of their formal planning process.

The research for this project was performed three-fold. First, I performed an in-depth literature review on the practices of planning, psychology, and sociology that are at the intersection of youth engagement in a disaster context. Given that the literature was largely domestic to the United States, I also engaged with additional demographic literature to apply the context of the Tohoku region's challenges within Japan. Second, I conducted interviews with employees of CBOs to understand their approach and reasoning for engaging youth, as well as their embeddedness in the communities they operate. Finally, I interviewed young adults who were formerly youth engaged by community-based organizations in social and physical reconstruction of their communities. These layers of analysis have allowed me to shape my research question as the following: In cities impacted by natural disaster, how can planners work with existing and visiting organizations to engage youth (ages 13-18) in the act of physically and socially rebuilding communities?

It should be noted that for the purposes of this research, I defined youth separate from the United Nation's definition, which is "persons between the ages of 15 and 24 years".⁶ The reasons for this are particular to the case I am using in my analysis, my former students who were involved in the TOMODACHI Leadership program. When I started working as a teacher the summer of 2015, the students whom I taught ranged from ages 15-18 years old, making them at the youngest 11, when the Great Eastern Japan Earthquake occurred. Anecdotally, I came to understand that for many of my students, 11 was too young of an age to be involved in reconstruction work, but 13 seemed an acceptable age to be engaged. However, many of the scholars and researchers and CBOs I spoke to have engaged youth across all ages until they left for university at the age of 18, and the work to a certain extent can be applicable to a wider range than my own research notes. So for the purposes of my research I will be defining youth from ages 13-18, which puts them in primarily middle school to high school.



The subject of my research in the context of my site, engaging youth in the act of reconstructing cities in Japan, has yet to be covered explicitly in the field of urban planning. However, the subjects of youth and community engagement in disaster contexts are widely discussed through many different fields of literature. In order to fully understand the impact that engagement has had on the youth in Ishinomaki and Onagawa, it was important that I both draw from the existing array of literature as well as identify where my own scholarship could contribute to it. The below chart briefly outlines the sections where I foresee my own research sitting within these fields.

Urban Planning: History, Critique, and Participatory Reconstruction

Urban Planning in Japan and beyond

In order to understand the urban planner's capacity to engage youth and community-based organizations in reconstructing Tohoku, it is important to understand the evolution of the profession as a whole and its history in Japan.

Urban planning, more formally known as city planning (toshi-keikaku) in Japan, was the traditional mode of practice until the late 1960s. The role of city planner focused on maintaining a centralized top-down practice⁷ within the levels of federal or municipal government. However, the last twenty years has shifted the profession to rethink the scale of practice with a new emphasis on community development (*machi-zukuri*) in the neighborhood.

The practice of community development is a direct reaction to past urban planning practices and focuses on four specific components (1) public participation, (2) decentralization of planning power and respect to local individuality, (3) soft welfare and identity-oriented aspects of planning, and (4) incremental advancement without disrupting communities.⁸ The formalization of community development as a practice in Japan can also be traced to post-disaster planning. Murakami and Wood (2014) identify the introduction of community development into Japanese policy by the occurrence of the 1995 Great Hanshin Awaji

Earthquake.⁹ The reconstruction efforts of Tohoku have held the same spirit. As part of the larger "recovery *machizukuri*," movement, planning practitioners have brought participatory processes to the region's recovery process.

Yet it should also be noted that an increase in participation does not necessarily mean a stronger community. Paul Davidoff (1965) wrote his foundational piece "Advocacy and Pluralism in Planning," following a dark period of US-based urban renewal in the 1960s. Davidoff calls for a reorganization of the planning profession's values to shift from political apathy to advocacy. He justified his call due to a need, or more so a demand "for [...] political and social equality [...] to establish the bases for a society affording equal opportunity to all citizens".¹⁰ His model of planning would be representative of community investment, as the planner would be a true "advocacy planner." Sherry Arnstein (1969) followed Davidoff's manifesto with a challenge of her own to measure the value of participation in terms of a ladder of citizen power.¹¹ While both Davidoff and Arnstein set an admirable framework for both the state and community to work reflectively, the reality is that the current state of community planning across global scholarship has not moved even to their visions.

Our current domestic system of engagement relies heavily on the very division of state and public for political momentum. The standardization of engagement stems from its incorporation into the agenda of municipal governments.¹² The true spirit of civic engagement has gotten lost somewhere between officials reacting to concerned citizens and public agencies learning that proactively incorporating community engagement agendas will prevent political outcry at a later date. This point can become increasingly important in the event of engagement for cities that have undergone natural disaster. The power dynamics between political agencies that retain structures of regulatory power following disasters and citizens who have sometimes lost property and family are complicated, and any engagement that happens must provide agency to both sides.

Current scholars have undertaken updates to Davidoff and Arnsteins' frameworks to address these problems. Innes and Booher (2007) challenge the impasse between state and public by offering an adaptive model that would focus on collaboration between not only community members but also a range of stakeholders invested in a similar cause including "profit-making and non-profit organizations, planners and public administrators in a common framework where all are interacting and influencing one another and all are acting independently in the world as well."¹³ Healey (1999) also proposes new forms of government through this collaboration labeled as institutional capacity, which combines social, intellectual and political capital.¹⁴

Participatory Reconstruction

Traditional engagement frameworks have been revised similarly as a solution for "building back better" in postdisaster communities as participatory planning. Ganapati et al. (2008) references the failed reconstruction of housing in northwest Turkey after the 1999 earthquake as caused by the exclusion of local government and community-based organizations.¹⁵ A similar approach is taken by Lawther (2008) in his analysis of the British red cross recovery program of the Maldives, where he argues that institutional processes of reconstruction need to be reworked into involve community.¹⁶ And while these studies focus on the empowerment of community to change course of reconstruction and current disaster risk practices, it falls short in that there are still gaps where parts of populations are left out of the process, such as youth.

The issue stems back to the same tensions present in the divide between formal urban planning and community development in Japan. Since the introduction of community development in the 1960s, activist planners who have been primarily involved in community development practices have contended with the governments attempting to appropriate the idea of citizen autonomy.¹⁷ Evans (2002) marks two case studies in which he sees top-down planning persist even in community development plans.¹⁸ The existence of government control has taken the shape of formal *machi-zukuri* councils or *machi-zukuri* public

corporations. Therefore, despite community development being the core of the planning and reconstruction process for Tohoku there is still a hierarchy in place.

My research starts to imagine a broader, more inclusive participatory process for urban planning in the Tohoku region. While the impetus for this work has arisen out of tragedy, organizations such as the Japanese Institute of Architects (JIA) are pushing for the voices of lessrepresented community members' concerns to actually be heard the planning process. This was evident from an interview I conducted with a practicing architect from JIA. He reflected on the planning process for rebuilding homes for a displaced community in 2011 and said "Before it was all about professional technique. [Rebuilding after the earthquake and tsunami] made me think about what the client wants, how we have to meet the need of the community. I've realized now that is more important."

It should be noted that my critique of the formal city planning vs. community development process is within a specific set of parameters, specifically involving postdisaster planning within rural areas and generational bias. It is my hope that by adding advocating for the inclusion of youth in the post-disaster planning process, isolated areas such as Tohoku that face demographic challenges will be able to plan long-term. To investigate opportunities for youth engagement in the planning process in postdisaster Tohoku, I am focusing on community programs in two geographically isolated communities, Onagawa and Ishinomaki, which will be explained later in the case study section of this paper.

Youth: Negotiating Participation, Mental Health, and Place Attachment

Youth Participatory Action Research (YPAR)

A proposal to engage youth in the community change is not a new concept by any means. The field of youth participatory action research (YPAR) explores the value of youth engagement in the current landscape of planning literature. YPAR is a strand of research methodology from participatory action research (PAR), which focuses on the democratization and transparency of knowledge and decision-making in community change.¹⁹ Current scholars explore the success of YPAR through the "design and management of their environments,"²⁰ such as community centers and educational reform. Traditional qualitative research for planning community spaces has focused on making "adult lives more comfortable"²¹ so YPAR aims to challenge that norm.

While the literature is limited in its scope for its applicability to the post-disaster and Japanese context, it is important to note that YPAR emphasizes the facilitation of youth empowerment as core to its methodology.²² By including the opportunity for youth to recognize themselves as assets to the community through the participation process the traditional norms of power and civic responsibility²³ can be challenged. However, as we reflected earlier, it is important to not lean into one side of youth support too heavily.

PTS and Youth

There is extensive literature on either historical or current medical studies being used to analyze the mental and physical repercussions amongst populations following conflict in their cities and towns, and there is a small yet powerful contingent of psychologists who write on the impact to youth. Akbulut-Yuksel (2009)²⁴ analyzes long-term health effects of WWII on German youth including stunted growth and lower self-reported health-satisfaction in adulthood. She cites several scholars who have worked in a similar capacity to measure lower educational attainment amongst youth in post-genocide Rwanda

(Akresh and de Walque 2008)²⁵ and through exposure to civil conflict in Tajikistan (Shemyakina 2006).²⁶

While the previous studies provide the historical precedent for focusing on the well-being of youth during times of conflict, there has also been similar work done for youth affected by natural disaster. Lai et al. (2017) explores the correlation between social support systems and long-term signs of distress in youth who experienced Hurricane Katrina.²⁷ Previous to this article there had been no research on the correlation between distress and post-disaster children. The article summarized that peer support and parental support can affect distress at a later point in time, although this is all on a cascading scale and earlier testing needs to be completed.

Within this scholarship on long-term health repercussions, I believe there is room to benefit from incorporating the frameworks of youth engagement. This work is currently observational, but there could be potential for professionals to be making recommendations on how to incorporate more social support through engagement with rebuilding processes of communities.

Youth Place Attachment

An important thread to connect the practice of post-disaster planning to youth is the field of place attachment. Place attachment focuses on the bond between an individual and a particular socio-physical environment. Scannell et al. (2016) has explored this work through the lens of children and youth in disaster contexts.²⁸ Scannell implies that place attachment disruption for any age can be devastating and disorienting but particularly harmful for youth. And place attachment focused rebuilding can be a healing force that allows a community to physically and psychologically repair, but youth are often excluded.²⁹ Kirschke and van Vilet (2005) research on the media portrayal of youth³⁰ in post-disaster settings may contribute to this exclusion. They describe the media pigeonholing youth after Hurricane Katrina as "human interest" stories that "offer tales of tragic losses or celebrating happy reunions with re-found family members, with video clips and photos providing visual testimony."31

While the reasons for engaging youth in post-disaster settings can be strengthened by place attachment research, there is still a question of what this means for youth who in Tohoku who have built a social attachment but maybe not physical one. Or when the physical connection does not allow youth to stay because of socio-economic reasons or demographic determinants.

Post-disaster Recovery: Resilience and Social Capital Theory

Resilience Theory

At a global level, the approaches towards post-disaster reconstruction and recovery can be understood from the framework of resilience theory. For the purposes of my research it was important to understand the theoretical framework that Ishinomaki and Onagawa are working within so I can refer to the main drivers and influences.

Davidson et al. (2016) lays out the framework of different definitions of resilience and the conceptual traditions as including engineering, social-ecological, urban, disaster and community.³² Comparison of definitions indicate that there is a tension between equilibrium and non-equilibrium views of resilience. The former disallows for urban systems to adapt and instead relies on recovering the very systems and structures that built urban spaces to prior to the disaster. This equilibrium approach has long been connected to disaster resilience as it focuses on working methodologically to bounce back. In the past decade many critics have argued for the non-equilibrium approach to urban resilience being more appropriate to account for dynamic urban spaces. Community resilience may also be driving a factor in post-disaster recovery for Tohoku given that it focuses on psychological resilience and disaster management.33

Social Capital Theory

The literature of the effects that social capital and have on disaster-affected communities is expansive. Daniel Aldrich has notably explored social capital theory in the context of Japan. He has researched extensively the 1995 Great Hanshin Earthquake in Kobe to discuss the active role that social capital plays in neighborhoods that were rebuilt. In his more expansive research, he frames the type of social capital available to disaster-affected individuals as falling into two categories: bonding social capital and bridging social capital.³⁴

Bonding social capital refers to ties created between either families or individuals with similar demographics and is closely linked to non-formal aid being available to victims closely following a disaster.³⁵ Bridging social capital refers to ties created between formal channels that may manifest in social organizations that are integral to long-term recovery.³⁶ Disaster-impacted communities must utilize both types of social capital in order to succeed in successful immediate and long-term.

While Aldrich and his colleagues do not explicitly focus on youth, I interpret their research to understand that there would be difficulty incorporating youth into an explicit category given the normative planning processes currently in place. My research will explore whether social capital theory is appropriate framing for including youth in the post-disaster recovery process. When you arrive in Ishinomaki by train you find yourself in the main transit terminal which is on the periphery of downtown. The terminal is busy, with commuters bustling in and out to the only train line to Sendai and any surrounding towns. You can leave the terminal and in just a few blocks reach the center of town. Downtown is lined with dense streets and alternating active storefronts to closed metal shutters. Every few feet you come across a wall that has a mural; an artistic depiction of children playing or a more visceral collage of various metaphors for strength that you can imagine is meant for a city that suffered so much loss just a few years ago (Fig 3 and 4).

As you leave downtown and head west towards the water, the scene dramatically changes. You can see the sprawl. The density of downtown Ishinomaki leaves you and you are surrounded by larger swaths of parcels under construction, including the new national park on Minamihama-cho. The harbor itself is quiet albeit a few school-age children riding their bikes which is in stark contrast to the fortified walls lining mountains along the water (Fig 5 and 6).

Ishinomaki has changed since 2011 when Ishinomaki was home to 160,286 people.³⁷ In June 2011, three months after the tsunami there was estimated to be 5,000 presumed dead or missing persons.³⁸ Ishinomaki received national attention due to the coverage of the tragedy at Okawa Elementary School, a public school that had lost three-quarters of students and staff due to the tsunami. Parents sued the school after hearing that teachers had not immediately evacuated students to higher ground and had instead waited to go to a further location and then drowned in the subsequent tsunami. Given the city's strong coastal presence, the 9.0 earthquake triggered multiple tsunamis that would completely wipe out most of the residential and working port, Ayukawa. And if you climb to the top of Mount Hiyori, a site where many residents evacuated you can see a barren site where homes must have originally stood (Fig. 7).

While the physical devastation to Ishinomaki in 2011 was severe, the City itself has long suffered from an aging population. Prior to the 2011 Great East Japan Earthquake the City's primary industries were fishing and shipmaking, labor-intensive work that had already started to decline in the last decade.³⁹ Unemployment combined with an increasing aging population put Ishinomaki in a difficult spot of having an "increasing number of abandoned buildings, downtown stagnation and inertia, as well as an overall lack of prospects, before the disaster".⁴⁰ Currently the city's majority population rests in the 60-80 years old range, with no indication of that changing in future years.⁴¹

Located on the last train stop of the Ishinomaki Line, Onagawa has a different story. Regarded as a *hisaichi* or disaster zone, the sea-side town is currently home to almost 7,000 people⁴² according to 2017 census data and lost nearly 4,000⁴³ individuals in the earthquake and tsunami. In some ways the town is similar to Ishinomaki, the primary industry is fishing and 35.3% of the population is aged 65 years or older.⁴⁴ Where these two communities diverge is their decision making-process for reconstruction.

In Ishinomaki the rebuilding process was led by traditional planning and community standards. Any public engagement or community development came from older members of the community, a story repeated to me in multiple interviews. However, in Onagawa the younger generation led the process.⁴⁵ Given the intensity and timeline for reconstruction, the president of the commercial and industrial association asked the senior members of the association to excuse themselves and give way to the younger members.⁴⁶ This decision paved the way for Onagawa to become a leader in the reconstruction process with unprecedented development such as an award-winning train station built only four years later (Fig 8).

Despite having these demonstrated issues of rural isolation and aging demographics and differences in approach to community development, Ishinomaki and Onagawa have continued to become spaces of support for community-based organizations that support youth engaging in the planning process. My research will explore how this engagement happens in the face of these larger demographic challenges.













In my research, I was interested to what degree youth who had been involved in the process of post-disaster reconstruction with CBOs had felt their lives impacted. Interviewing former-youth would be an important part of uncovering to what extent they felt their work had changed their connection to their hometowns and mental health. Additionally, interviewing the CBOs that they had worked with helped me understand the layers of intentions and complications that the work encounters. Given the trust and relationships I had already built with the former participants and employees of the TOMODACHI Softbank Leadership Program, my initial interviews were with former-youth and individuals who had been or are currently employed by CBOs involved in the program. From there, I used the "snowball" technique to gain additional recommendations for interview participants. Formeryouth who were interviewed met the following criteria: (1) they were from originally from, or were still, living in the Tohoku region and (2) they had been involved to some extent with local CBOs to participate in physical or social community reconstruction. CBOs interviewed met similar criteria: (1) they work with youth in some aspect of social or physical reconstruction and (2) are based in the Tohoku region. I decided to use the modified multiple case study approach47 to engage with "interesting, openended inductive research with dense and copious details" yet simultaneously allowing for additional depth and framing through multiple secondary sources. This approach intended to apply similar depth and framework to draw attention to the individual experiences of youth who were formerly engaged in reconstruction while also drawing connections between themes present across experiences. Subjects that were previously familiar with my position as an instructor with the TOMODACHI program were given a disclaimer that I am no longer employed with the TOMODACHI organization and told that this interview was part of my own research for my graduate thesis.

I conducted semi-structured interviews in Japanese with former-youth and CBO employees. Most interviews with CBOs were conducted in person when I traveled to Ishinomaki and Onagawa in January 2019 over an hourconversation. Interviews with any former-youth were conducted either virtually over Skype or by phone given my familiarity with most interview participants, and ranged from 30 minutes to one hour. Interview questions were designed to provide initial concrete descriptions of the ways in which youth were engaged or CBOs engaged youth. Following these shorter answers there were questions that provided more opportunity for subjects to provide additional thoughts on the subject of reconstruction. Understanding that social dissensus, not social consensus, can often shed light on the systemic issues that are at the root of broader challenges,48 I encouraged my interview subjects to be honest when describing their experiences.49 All interviews were recorded, and the transcripts are stored in a personal computer that is password protected. I am the only one with access to these recordings.

In addition to interviews, I also relied on my personal experience as an instructor working with former-youth in 2015 and 2017. These experiences were acknowledged intentionally and treated as both a bias during the interview process and then as a way to frame my research.

By combining multiple primary and secondary data sources as well as my own experience, I was able to understand the complex layers of social issues and hierarchy at play during the reconstruction process. Relying on one group solely to explain the mental and physical impacts that this work took would not have been enough. The below chart outlines the CBOs and former-youth I interviewed by location (Fig 9).

Location	Organizations	Former-youth
Ishinomaki, Miyagi	Ishinomaki 2.0	1 former-youth
	1 employee	
	Itonabu Ishinomaki	
	2 employees	
	Machizukuri Mambo	
	1 employee	
	LIGHTS	1 former-youth
	1 employee	
Onagawa, Miyagi	NPO Katariba, Onagawa Kogakukan	1 former-youth
	1 employee	
Kesennuma, Miyagi and Sendai,	Anonymous organization	
Miyagi	1 employee	
Entire Tohoku region	Great East Japan Earthquake Recovery	
	Initiatives Foundation	
	1 employee	
Iwanuma-Shi, Miyagi		1 former-youth
Miyako, Iwate		2 former-youth
Fukushima, Fukushima		1 former-youth
Koriyama, Fukushima		1 former-youth

Fig 9 A chart outlining organizations and number of individuals interviewed by location.

While conducting interviews, it was not surprising to hear that these CBOs were all equally invested in engaging youth in the rebuilding processes of their hometowns. Similarly, former-youth mostly acknowledged the impact that the earthquake and tsunami, as well as the subsequent engagement they participated in, had changed the trajectories of their lives. This was not surprising given that I was working with a self-selecting group of individuals who had expressed interest in the subject in the past. The data I sought and the answers I dug deeper into were those that indicated how and why former-youth and CBOs felt compelled to invest so much time and energy into changing their community. The following are a survey of notable results.

"The kogakukan entered this space between me and Onagawa. I probably couldn't have done anything alone. I learned more about the planning process, and I was able to make relationships with adults. It made me do things I couldn't have done alone."

Former-Youth Interviews

Mediating Institutions

"The kogakukan entered this space between me and Onagawa. I probably couldn't have done anything alone. I learned more about the planning process, and I was able to make relationships with adults. It made me do things I couldn't have done alone."

Interviews with former-youth indicated that there is a wide variety of work that youth consider to be part of the reconstruction process. The former-youth I interviewed who is quoted above, worked on updating emergency preparedness plans with her fellow middle school students. She worked directly with the Onagawa Kogakukan and her project involved creating signs for the neighborhood that indicated evacuation routes to higher elevation and then a compiled book of experiences of her and her classmates. Reflecting back she felt that the Kogakukan allowed her an opportunity to engage with the reconstruction process in a way that made her see Onagawa differently.

Additional interview subjects felt similar. A graduating high school student from Ishinomaki, came up with the idea of conducting a tour of the central shopping district to bring some economic prosperity back to impacted small businesses. She worked with Ishinomaki 2.0 to implement the idea that she came up with back during her summer spent in the TOMODACHI program. She felt that working with Ishinomaki 2.0 positively impacted her outlook on the future of her community. She said "before volunteering I had not looked at what was around me, my environment. I had just gone to school every day and lived my life. But seeing the adults work hard around me made me want to get involved. I wanted to make things happen too. Seeing all these people work hard has made me more positive about the future of our town." A student in Miyako, Iwate a prefecture farther north of Miyagi, ran emergency preparedness workshops for elementary and middle schoolers. He felt supported by his local CBO, Miyako-base that was created specifically to help high school students engage with the reconstruction process. He reflected back that when he started working with Miyako-base and "other high schoolers, I realized that working together, we could achieve our goals. Miyako-base has allowed us to find our motivations."

Additional projects included the following and are detailed in the appendix section:

- Creating a youth city planning club that worked on composing maps of the local shopping districts to support economic growth
- Conducting cooking classes that focused on building confidence by working on "hard to pronounce" recipes
- Creating a volunteer organization that supported abandoned animals following the tsunami, and advocated against euthanasia
- Making Miyako a wedding destination

The variety of projects shows the flexibility in which engagement can be acted on and the impact shows the value of the democratization and transparency of knowledge and decision-making in community change.⁵⁰ Youth empowerment is not the only outcome of engaging youth in post-disaster reconstruction, the bridging of gaps between community services and individuals⁵¹ starts to build a stronger fabric that will have the power to withstand future disasters.

Defining Recovery and Mental Health

"To me, reconstruction means three things. The first is to rebuild broken buildings and have housing for the community. The second is to rebuild the sense of community, communication, and create places for people to gather. The third is we have to help people heal."

There is a word called *fukkou* in Japanese. It is often used in the context of disaster-affected communities. It means to revive, not just in a physical sense but also in a social sense. All of the youth I interviewed agreed that fukkou was the appropriate term for the type of work they were doing given that both physical and social reconstruction was necessary for a community following disaster. However, some subjects suggested that it was also necessary to address mental health, confirming the notion that the impact of engaging youth can go beyond the physical and social realm. When the same subject was asked how they felt their mental health had evolved during the reconstruction process they described the emotional labor that went into facing the reality of their circumstances every day implying that the mental health support was not available to her during that time.

Place Attachment and Demographics

"I don't think I could stay in my hometown unless the right opportunity came up. I want to work for the federal government, and you can't do that there."

The field of place attachment often focuses on the opportunity to keep individuals connected to their sociophysical environments but does not necessarily address what it means for communities that can no longer host those individuals. While most of the former-youth I spoke to felt strongly for their hometowns and wanted to stay if given the right opportunity, they implied that those choices were limited as they discussed going outside the region for university and coming back indicated that they would want to be in a similar role as the CBOs they work with now. The question of whether or not demographically challenged towns like Ishinomaki and Onagawa will have the resources to support this work moving forward are discussed in the following section.

Community-Based Organizations

Navigating Structures of Support

"The City of Onagawa told us that there was nowhere for youth to do schoolwork. They wanted us to create a space that they could do schoolwork with support. So, we created this space and opened it in July 2011."

-NPO Katariba, Onagawa Kogakukan

The results of my interviews indicate that the structure of support offered by CBOs is important to consider. Interview subjects suggested that after-school support spaces have become important to provide for youth, from both their own perspective and demand they hear from youth themselves. Lai's research on the importance of social services in a post-disaster setting to mitigate posttraumatic stress informs this assertion that having a space that provides educational opportunity could be filling a gap left in the wake of disaster.

From the youth interviews themselves, the need for academic services was never suggested. This may be due to two reasons. The group of individuals whom I interviewed are already self-identified as being interested in rebuilding their communities, as evident by their original involvement in the TOMODACHI program. The second reason could be that this space is part of a necessary circle of services, as academic pressure is very strong amongst school-age youth in Japan⁵², and the organization may have presented itself as accessible in that way.

Normative Planning Standards

"I want high schoolers involved in the decisions about planning the downtown shopping district. The problem is the language high schoolers use to talk about the issues. They talk about dreams they have, and the adults don't like this. But we have to find a way for adults to learn how to facilitate these discussions."

-Machizukuri Mambo

The CBOs Linterviewed indicated that there was room for community participation within the post-disaster reconstruction process. The question is whether this participation elicited true decision-making from the community or youth. The former reflects the tensions that exist between city planning (toshi-keikaku) and community development (machi-zukuri).⁵³ Other organizations I spoke to indicate a model of engagement from the municipal government that suggested reaching out to the community through public meetings was part of the process but there was no room for community input in the final decision-making. Evans (2002) reflects on this being the appropriation of community development as a practice. Within this model of community development, there is still a bias for older generations to be the formal "community," most clearly depicted in the earlier case of contenting rebuilding practices in Ishinomaki and Onagawa. Literature suggests that machizukuri councils are often an integral part of the community development process, leaving little room for youth to participate in formal community development.

However, following normative planning standards in an area that has to combat demographic challenges such as an aging majority creates path dependency for communities to battle the same issues in the future. Interview subjects suggested that youth are already starting to lose interest in the reconstruction process given that as more time passes from 2011, fewer youth feel the impact of the disaster on their lives, thus feel less motivated to participate in changing the community. The declining interest of youth combined with community agency given exclusively to older generations who will eventually not be around, leaves a community that will not feel valued enough or even around⁵⁴ to participate in helping reconstruct the next disaster.

Future Funding Challenges

"Because of funding we know that we are going to have to start planning after the 10-year mark. Right now it's free for high schoolers. Maybe we can charge college students. Or schedule more adult programming."

-Anonymous CBO employee

Earlier in the interview process, an interview subject indicated that federal reconstruction process would be ending in 2021. Many of the non-profit institutions have been funded by the second-phase of the federal reconstruction plan which spans a decade after the initial disaster. At risk of losing the main source of operating costs, some CBOs were considering adding to their programming more profit-making measures so they could continue their youth engagement work.

Closing up shop is not an option for many of these organizations as they indicated that their work is not just about communities building back what has been lost. Instead, cities like Ishinomaki and Onagawa must build back in a way that is sustainable for the future, suggesting that the former is the predominant mode of thought for the older generations spearheading much of the decision making in the process. The idea of reclaiming pre-existing structures fits within the framework of urban resilience theory, which has long been associated with disaster resilience literature's focus on getting back to stability and resisting change in the aftermath of a disaster.⁵⁵ Given that this was the predominant mode of theory-based practice in post-disaster recovery until very recently, the tension between the two generations approaches to post-disaster reconstruction in the Tohoku region makes sense.

"I want high schoolers involved in the decisions about planning the downtown shopping district. The problem is the language high schoolers use to talk about the issues. They talk about dreams they have, and the adults don't like this. But we have to find a way for adults to learn how to facilitate these discussions."

-Machizukuri Mambo

When I started my research, I framed it with the following question: In cities impacted by natural disaster, how can planners work with existing and visiting organizations to engage youth (ages 13-18) in the act of physically and socially rebuilding communities? However, as thesis processes go, it is clear that this question does not capture the story my interview subjects have to share.

CBOs in Ishinomaki and Onagawa are struggling with the balance of making space for educational support while allowing room for youth to ideate ways to revitalize communities. And this is where the two groups meet in consensus -- a mutual desire to structure and engage with organizations in a way that expands the community in both a physical and social sense. Every single one of the CBOs I interviewed had a mission that emphasized either the support or engagement of youth. The work to accomplish this goal involves support through the connection of youth to adults or other community members that could foster and grow their interests. It is clear that youth felt the positive impact of CBOs supporting their empowerment and transparency of the planning process. However, given that these spaces have not been successful in changing the normative planning practices of community development driven by older generations or appropriated by municipal government, there are still issues outside of engagement that must be tackled.

While increasing bridging social capital might start to address the question of simply engaging youth, it does not change the landscape of economic development necessary to increase the educational and workforce opportunities for youth to stay in the region. And while CBOs are well aware of the limits that simply focusing on urban resilience and recalling the same systems and infrastructure that have been lost have, the process of engaging youth needs to be scaled up to include visioning for future economic and workforce opportunities. However it can be a struggle to involve youth in that conversation given the preconceptions of youth not being able to contribute beyond visions and dreams at this point. To tackle this challenge, one interview subject implied that maybe it requires scaling up the conversation: "There is a lot of isolated thinking that we need to rebuild but regional thinking is needed, we could achieve more."

Tackling the systemic issues at play from a regional scale would allow for communities that are impacted, to rethink systems that were challenges prior to the earthquake and tsunami. Maria Kaika's research on the shortfall of technomanagerial solutions for cities to become "resilient" calls out the need for change in the system versus a reactionary approach that implies the need for communities to suffer the same abuse at a later date.⁵⁶ Kaika says that we "need to focus instead on identifying the actors and processes that produce the need to build resilience in the first place. And we would try to change these factors instead".⁵⁷

And it should be noted that I made an intentional choice not to use the word "resilient" to describe the communities of Ishinomaki and Onagawa. When Tracie Washington, President of the Louisiana Justice Institute led the public campaign for policymakers and media to stop calling her community resilient she said: "'every time you say, 'Oh, they're resilient, [it actually] means you can do something else, [something] new to [my community]. ... We were not born to be resilient; we are conditioned to be resilient. I don't want to be resilient [I want to] fix the things that [create the need for us to] be resilient [in the first place]' [emphasis added]".⁵⁸

The push back against "resilience" recalls the layers of complexity former-youth and CBOs expressed when I asked them to define *fukkou* which translates to the physical and social recovery of communities. Resilient and *fukkou* are terms that imply that the completion of the process of recovery can be defined by a particular point in time or the end of a process. Yet people who work and live in Ishinomaki and Onagawa are aware that the process of reconstructing their communities is never complete. One former-youth put it directly: "Reconstruction to me is completed when people learn to love Fukushima again."

Earlier interviews about the defining *fukkou* suggested that there is also a need for stronger mental health support in the face of a disaster. Much of the research in the fields of place attachment for youth in disaster contexts and PTS also implies there must be stronger collaboration between industries in order for the work to have a positive longterm impact on the mental and physical health of youth. However this work is not as straight forward as simply requiring that youth engage with reconstruction and have adjoining therapy, because there is no direct path to youth feeling empowered from that process. One former-youth from implied that the reconstruction work for her harder the more time had passed:

"Sometimes, I think that I can turn away from it [all] for my mental health. Before I had to literally reconstruct my house in order to live. Or stand in line for 3 hours to buy food. These things had to be done. I had to face it, the tsunami, it was right in front of me. But these things are done now. And now there is not a need to look at these hard reminders. I have a choice to not see, and maybe that's good because it means moving ahead."

The intersection of mental health support and active engagement in community change is a delicate balance to keep, especially when exploring the institutionalization of policy or planning practices. We must address that even within a structure meant to empower youth, there are power dynamics at play. If youth do not feel that they have agency to also step away, then we are falling into the same normative planning standards that have become problematic within the traditional community development model. Mental health support must focus on empowering youth to feel that the work they do for their communities is representative of their vision and values.

There are examples of organizations tackling this challenge in other parts of the world. During my research process I had the opportunity to speak with Resa O'Reilly, founder of Project Promise in the US Virgin Islands. She has been working with a small group of youth on community service projects since Hurricane Maria and Irma devastated the island of St. Croix. Her approach is to not only have youth work on physical rebuilding work such as replanting coconut trees at the local beach but also guiding her students through a process that helped them understand the trauma they had experienced. Her goals was to "Focus on the people. Once people were mentally, physically, and emotionally safe we could focus on rebuilding" She cites her holistic approach as being part of her philosophy that her community is part of a larger world, and she is not alone.

Given my analysis of the current landscape of strengths and challenges for the youth engagement community in postdisaster Ishinomaki and Onagawa, some may assume that path dependency has led Tohoku to a situation in which the physical and social infrastructure in place cannot easily be re-imagined. I do not agree. I think that there is opportunity for a similar model of youth engagement to advocate for the challenges I have highlighted above. And some community members are already doing so. One former-youth indicated that volunteering with local fishermen made him realize how little progress had been made to repair the local economy. He said "There has not been as much attention paid to people living along the ocean. The marine industry has become worse. The prices of fish have gone up. I really want people to come back and live here like before 2011, I think it would strengthen our economy." Similarly, there was recognition that new types of businesses can help communities grow and accept new people. A formeryouth in Miyako worked on creating a guest house for out of town visitors to his hometown. He sees it as part of his giving back to his town (machi-koukou) and said he "owed his upbringing to his city, and now that I am older I want to give back to my city."

If CBOs moving forward are able to find the financial means outside of disaster relief funds to continue the work of rebuilding communities aided by the vision of future residents there should be opportunities to engage in topics not directly tied to rebuilding because of the earthquake and tsunami. It is clear that there needs to be a stronger effort by municipal government to provide community-based organizations the support and structure to allow youth work on projects that engage them on the demographic challenges that face their hometowns, as well as challenge mental health stigmas before the next earthquake and tsunami. As a I wrap up this stage of my research, it may be clear that I am battling an existential question that must be confronted. How long does post-disaster planning have relevance? Hearing from CBOs in Ishinomaki and Onagawa the anxiety that is drawn from nearing an end to federal funding but also the mental memory of the impacted youth as they move further away from 2011, leaves me with more questions than when I started my research: **Why does disaster have to be the catalyst for change?**

The simple answer should be that do not have to wait for disaster to implement mental health, social, and physical processes for youth to feel involved in their community. Or fund CBOs that can help youth engage in conversations about the future of communities they want to stay in. If we, as a planning community, could start to advocate for policy to get these organizations and their work underway before the next disaster hits, this may actually mitigate the impacts of post-disaster recovery and rebuilding the physical, social, and mental health of communities.

The value of civic education cannot be stressed enough as an underlying motivation for this work. Programs that aim to educate and empower youth on civic opportunity like Y-PLAN are few and far between. Much of this work could occur at a larger scale if public education involved civic education as a core tenant of its agenda. Civic education integrated to our public education systems could create more channels for authentic intergenerational discourse. Many of the issues that the Tohoku region faces such as future disasters because of the impacts of climate change, are about intergenerational justice.⁵⁹ We must level the platform for youth to voice their concerns that building back simply what has been lost leading to long-term risk for the same issues to arise after the next tsunami and earthquake. And to do so they must first be aware and empowered to take that opportunity to step up. Having an opportunity for equal representation and equal voice will start to address the current tensions that exists between generations and instead pave a way for solutions that are representative of larger community goals.

Additionally, as academics and practitioners we must challenge ourselves to stop thinking about the industries within and around us in silos. In the vast of world of professionals interested in post-disaster recovery and reconstruction, there is expertise at every level. Youth participatory action research could start to dive deeper into the impact the framework for youth empowerment and transparency of knowledge could have in a post-disaster and pre-disaster context. Or social capital theorists could to work into their visions for effective community building pre- and post-disaster, the role of youth who may not carry the same weight of capital but are an important part of the equation for rurally isolated communities.

Finally, there may be opportunities for the us as a community of planners across industries to revisit why we seek recovery from disasters. Similar to how fukkou requires an end date, attaching ourselves to a process limits our opportunities to dream about the future. So, what if we removed from "recovery" from the equation all together? Recovery is naturally a backwards looking path; it relies so heavily on historical data that it can limit our imagination. In many ways, the former-youth and CBOs I spoke to are already aware of this. But they are bounded by the limitations of techniques of recovery and the processes that fund them. In order to fulfill the vision of this work we may need to abandon recovery-driven frameworks all together and instead seek a path that empowers youth to reimagine what it means to be part of a community.

So if I were to continue this research, I would hope to engage a larger group of individuals across sectors in my research question. Interviewing CBOs and former-youth, I have come to understand the direct work and its impact associated with youth-driven reconstruction in Ishinomaki and Onagawa. However, by interviewing municipal and federal employees as well as individuals of older generations I hope to add layers of context and ultimately reimagine our social infrastructure that drives recovery all together. So while this may be the end of a chapter of my research, I hope that it inspires others in the field of urban planning and beyond to continue exploring the value of youth, the future, in our communities.



Every conversation I have had since 2015 has led me here to this opportunity to dedicate time to research a topic that has had such a profound impact on my life and understanding of urban planning as a profession. Here I would like to acknowledge the key individuals who guided me and supported me through this process.

Abby Spinak, my thesis advisor and biggest cheerleader. When I wandered in to her office hours more than a year ago, I did not realize that she would fundamentally change what I thought was possible within the field of urban planning. Even time I doubted myself through this process, she pushed me to keep trying. There are not enough words in the world to thank her.

Deb McKoy, my academic mentor. She may not know this, but I still dream of being Deb when I grow up. Working with her during my two summers at the TOMODACHI program, I realized how many lives she has already changed with her Y-PLAN methodology. My own being one of them. This research would not have been possible without the years of important work she has done before in the field of empowering youth through civic education and planning.

My fellow colleagues and dear friends: Katie, Natasha, and Sidra. They have been exposed to my many tears, frustrations, and devastation during this process, but I will never forget that we shared moments of joy and laughter through this journey. They are each brilliant in their own way, and I can't wait to see what they accomplish in their own journeys.

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Interview Questions: Community-Based Organizations

- 1. Please state your first and last name. 姓名を明記してください。
- Please state your hometown.
 あなたの出身地を明記してください。
- Please state your age.
 あなたの年齢を教えてください。
- If you are currently employed by an organization or an agency, please state the name and your position. あなたが現在働いてる組織の名前とポジション を教えてくだいさい。
- If you are currently in school, please state your year and institution.
 今大学生か高校生だったら名前と学年を教えて

ください。

- Were you involved in the relief and/or reconstruction efforts of your region following the 2011 Tōhoku earthquake and tsunami? あなたは2011年の東北大震災の後地域の救済 や復興活動に関わりましたか?
- Please describe the capacity in which you were engaged in the above efforts.
 どのように関わっていたか説明してください。
- Can you describe how your organization has aided in the reconstruction effort of the impacts of the 2011 Earthquake and Tsunami? あなたの組織がどう2011東北大震災の復興 に関わったか説明してください。
- 9. Can you describe your role in your organization?
- 10. あなた自身の役割はなにでしたか?
- 11. Has this role changed the way you feel about your community?
 - この役割はあなたとあなたの町との関係を変え ましたか?
- In what way has engaging with youth impacted your feelings about your community? 若者との仕事はあなたの町への考え方を変えま
 - したか?
- 13. How has your role evolved from 2011 [or whenever you joined] until now?
 - 2011年から今までで組織でのあなたの役割 は変わりましたか?

- 14. How has the mission of your organization evolved from 2011 [or whenever you joined] until now? 組織のミッションは2011年から(それとも あなたが働き始めてから)どう変わりまし たか?
- 15. Can you describe the successes you have had in your work with local youth? What about the challenges? What do you wish your org did (around engaging youth) that it doesn't currently?
 - 若者との関わりで成功したケースがあったら 教えてください。難しいことはありました か? 今自分の働いている組織がやってい ないことで これからやってほしいと思う ものはありますか?
- 16. Can you recommend any additional organizations from the Miyagi prefecture that I should reach out to?
 - 宮城県の中で他にこの研究に協力してくださる 組織を知ってますか?
 - もし知っていたらご紹介をお願いできますか?

Interview Questions: Community-Based Organizations

- If you are currently employed by an organization or an agency, please state the name and your position. あなたが現在働いてる組織の名前とポジション を教えてくだいさい。
- If you are currently in school, please state your year and institution.

今大学生か高校生だったら名前と学年を教えて ください。

- Were you involved in the relief and/or reconstruction efforts of your region following the 2011 Tōhoku earthquake and tsunami? あなたは2011年の東北大震災の後地域の救済 や復興活動に関わりましたか?
- Please describe the capacity in which you were engaged in the above efforts.
 どのように関わっていたか説明してください。
- Can you describe your relationship with your community both when you resided there, and now? あなたの出身地への思いを教えてください。住 んでいた時と引っ越してからその気持ちに 変化はありましたか?
- 6. Can you describe any organizations you worked with when you were involved in the reconstruction efforts following 2011?
 - 2011年の東北大震災の復興を支援するため に参加した組織(団体)
 - があったら教えてください。
- Can you describe your role and any projects you worked on with these organizations?
 その団体がどんな活動をし、あなたはその中で どんな役割を担ったかを教えてください。
- 8. How has your involvement with these organizations impacted your outlook on the future of your community (town or city)?

あなたが参加した団体とその活動に関わったこ とは出身地への未来に対するあなたの考え 方にどう影響しましたか?

9. How has your involvement with these organizations impacted your outlook on the future of the Tohoku region?

参加した団体とその活動への関わりは東北の未 来に対するあなたの考え方にどう影響しま したか?

- Can you describe to me your mental health during the reconstruction efforts? 復興支援をしている時のあなたのお気持ちの状 態を教えてください。
- Can you describe to me your mental health after participating in the reconstruction efforts? 復興支援した後のお気持ちの状態を教えてくだ さい。
- 12. [if the individual is not living in the region] Do you plan on returning to the Tohoku region after you finish school?
 - (もし今現在東北に住んでいない場合)学校を 卒業した後に東北に戻りたいと思っていま すか?
- 13. Do you have any additional thoughts about your time spent in your community? Or about the way it has been rebuilt/recovered since 2011?
 - 出身地について他に何か伝えたいことがあった ら教えてください。それと2011年以降の復 興状況について何かご意見があったら教え てください。

Additional projects by engaged former-youth

Project	Location	Organization	Key quotes from project reflection
Creating a youth city planning club that worked on composing maps of the local shopping districts to support economic growth.	Ishinomaki, Miyagi	LIGHTS Children's Center	"I realized that I was motivated by being able to do something. I realized that adults were tired. And now I could help the reconstruction. It was an important moment for me."
Creating cooking classes that focused on building confidence by working on "hard to pronounce" recipes and volunteered with local fishermen.	Iwanuma-Shi, Miyagi	Interview subject worked separately form CBOs for the cooking class, but had relationships with individuals from the TOMODACHI program. The volunteer work with fishermen happened through a separate CBO that the interview subject could not recall the name of.	"Before volunteering I had really only thought about my town. But I met more people from Tohoku through my work. I realized that I wanted to help the wider region grow."
Creating a volunteer organization that supported abandoned animals following the tsunami and advocated against euthanasia.	Fukushima, Fukushima	Bridge for Fukushima	"The TOMODACHI program and the project I worked on really changed the way that I think. I need to think harder about how I can help people. Even though I had to evacuate from my own home, I need to be help people."
To make Miyako a wedding destination.	Miyako, Iwate	Interview subject worked separately form CBOs but had relationships with individuals from the TOMODACHI program.	"My involvement with CBO organizations has impacted my outlook on the future of Miyako because they take me seriously and they encourage me to do more all the time. Even if I am not currently living in Iwate. I still want to stay connected with them."

Appendix

Notes from CBO interviews

Organization and Location	Mission or Intent	Engagement Method	Success and Challenges
Machizukuri Mambo Ishinomaki, Miyagi	To empower citizens to change Ishinomaki. They want to make it possible for everyone to be involved in the planning process, including youth.	 Keeping the community updated on the progress of reconstruction Bringing feedback from community to administration Supporting landowners who are interested in co-op buildings Supporting business owners who want to start pop-up businesses on vacant land Programming and organizing community events 	A successful example of youth engagement was when the organization was able to advocate for local businesses to not be destroyed by the city. They engaged city planning students from Yokohama University and then local CBOs such as Ishinomaki Gakkou and LIGHTS to hold events in the shopping district. A challenge is a project like the national park, that has not involved many people or youth.
Great East Japan Earthquake Recovery Initiatives Foundation Various areas	To put together a program for youth to realize dreams in the face of loss.	 Giving out scholarships for high schoolers if they didn't have money to attend school after-school college-prep classes Funding NPOs that do similar work for youth engagement and reconstruction broadly 	Success is when youth can challenge themselves and feel that their impact stretches far beyond their own position. An example is a student who decided not to go to Tokyo but instead decided to go to education and work in their home community.
			The biggest challenge is working with youth who have lost so much. Even if students were able to open up in certain settings like the TOMODACHI program, they are not necessarily able to do so back in Japan. Organizations have to provide institutional support because without it, it is much harder for youth.
Itonabu Ishinomaki Ishinomaki, Miyagi	The original mission in 2011 was to create 1,000 IT professionals by 2021. Now the mission is to reach the entire country and create educational and training spaces for IT professionals.	 Teaching programming to youth Programming educational projects for youth to use their skills 	Success is when the organization is able create a space of learning that youth are able to work independently. Youth do not necessarily need to stay in Ishinomaki but if they go out into the world say Ishinomaki is amazing to 100 people and then those 100 people want to come to Ishinomaki that is more impactful. They do not expect youth to even succeed in just the IT field, as long as they are learning what they want. A challenge is pinpointing exactly what youth are interested in and growing as an organization. A future challenge will be fundamentally shifting the way people perceive their world. Many people talk about the world and possibility as existing outside of Japan, however there must be an investment in professional development within Japan.

Organization and Location	Mission or Intent	Engagement Method	Success and Challenges
Ishinomaki 2.0 Ishinomaki, Miyagi	Supporting high schoolers who want to organize community building projects through programming.	 Creating an educational space for youth explore their projects they bring back from the TOMODACHI program called Ishinomaki Gakkou. Hosting Standup Week, a community event that focuses on generating new ideas for Ishinomaki to grow and rebuild as a community. 	Success is when youth believe that they are supported by their community to work hard. Youth do not necessarily need to stay in the community, but the organization would rather have them go out into the larger world. The biggest challenge is scheduling time to work with youth. The organization reaches out them one-by-one through messaging apps to prevent last-minute cancellations. Another challenge is funding and building more connections with local business and industry.
Katariba NPO: Mypro project in the Onagawa Kogakukan Onagawa, Miyagi	To create top-down relationships with youth that are not instructional but lateral and supportive.	 Working on with small topics from youth who are interested in things in the community Afterschool homework help 	Success comes in different scales. A small success is when youth take ownership of their life and become stronger. A bigger success is when youth see their project as a catalyst to a relationship with their community. Some challenges are that youth don't always know what they want to do or if their goals may not be aligned with the organization's. A future challenge is increasing educational support for students in Onagawa.
LIGHTS Children's Center Ishinomaki, Miyagi	To meet the needs of local children.	 Creating space for youth of all ages to come play City planning club Filed trips to understand local business 	Success is when children come to LIGHTS and have the opportunity to talk about their community or if they are able to engage with adults. A challenge is defining what reconstruction should look like. The organization feels that people and their needs change over time. This is reflected in the children who attend the center, they change every year.
Anonymous organization Miyagi	The original mission was to help youth with schoolwork. Overtime it has evolved to support youth who want to get involved in their community.	 Afterschool homework help Career development Supporting implementation of action plans from the TOMODACHI program 	Success is when a high schooler who previously had no connection with adults realizes their interests after being introduced by community members who could support them. This allows youth to trust more and see the good in people. A challenge is that sometimes youth only want use the organization as a resources to study for university or do not feel inspired by any projects. Then they leave for university without realizing what is good about their community.

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