

# **Continuity and change in longitudinal recovery: A photo-chronology method through the landmark of churches**

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# Abstract

This research attempts to analyse continuity and change, two critical dimensions of longitudinal recovery. The research will document the patterns of continuity and change in Napier and Hastings, the two main cities of Hawke's Bay, New Zealand, flattened by a large earthquake in 1931. It builds on a photo-chronological approach to track the continuity and change of churches, as a proxy for 'community' recovery, from 1931 to now. Exploration focuses on the initial recovery support from churches, occurrence of church activities over time and the role of churches in the recovery process and how it has continued or changed since the disaster. Hence, this research emphasises two lines of inquiry. First, it is posing a new method of recording longitudinal recovery through the use of visual images to depict social disruption or continuation. Secondly, observing and tracking the role of churches in the recovery process and their recovery over time. The photo-chronology approach further includes focus groups with key members of diverse churches as well as semi-structured interviews with church leaders to enable an in-depth analysis that support visual findings. This research will in turn attempt to support the theory of recovery being an endless and dynamic process rather than a process with an assigned end point.

**Keywords:** recovery, continuity, change, long-term, landmarks, churches

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“Victories are won usually through a great deal of patience, planning and perseverance, and rarely accomplished at a single stroke.” – Shoghi Effendi

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# Introduction

Disasters are a prevalent issue in society. Therefore, learnings are needed from the process of recovery to understand how different populations, individuals, religions and cultures evolve after an impact of a disaster. Disasters upset the balance of society (Oliver-Smith, 1977). But it is also an opportunity for the affected population to implement needed improvements. To return to a relative equilibrium state of balance after a disaster, and to restore critical social and communal fabrics, individuals and groups must make temporary adjustments, permanent changes and continuation of some functions of the social entity (Oliver-Smith, 1977). This describes the process of recovery.

There is limited research on longitudinal recovery as recovery has predominantly been the immediate response period rather than the ongoing process over a long period of time. Current academic research and recovery assessment projects lack strong tracking of long-term recovery. No tangible and practical methods have been developed in the current literature that give body to the analysis of continuity and change of a population. The reason for concern is that to implement effective disaster risk reduction, including recovery plans, there needs to be a collection of longitudinal data and analysis that adopts the understanding that recovery is endless. The long-term recovery learnings and reflections can then be shared to improve the understanding of the recovery process. Tracking landmarks over time creates a longitudinal documentation of recovery which can help guide and contribute towards how communities are truly recovering from disasters for an extensive period. This provides a new tangible way of documenting and analysing longitudinal recovery. This method will be informed by a theoretical framework which includes current concepts and theories in the literature. The theoretical lenses and indicators from current literature will be tools to gather a longitudinal analysis of church landmarks. The use of church institutions and their physical buildings as landmarks is because of their significant to the community. As well as the church landmarks ability to express the social, cultural and physical fabric of the community. Churches are integrated into the community and many individuals identify with churches especially in a region founded by European settlers and missionaries. By reviewing the current literature on recovery, its documentation, tracking and longitudinal analysis, the case study in Hawke's Bay can be asserted and provide a new framework for capturing continuity and change in long-term recovery. The collection of knowledge on the longitudinal recovery will attempt to support the theory of recovery being an ongoing process. The discussion will contribute to the collection of learnings, both empirical and methodological contributions to the literature.

# Chapter 1. Literature Review Analysis and Conceptual Framework

## *1.1 Recovery*

Recovery is a complex process which is difficult to define as the literature shows over time how the understanding of recovery has broadened and deepened. Disasters can be defined as a break in the normalcy of life. Cuny (1983) defines recovery as the time between the disaster occurrence and the point at which activities bring normality are active. Recovery is often viewed as a process which has a beginning and an end. This is evident in the early thinking of Kates and Pijawka model (Haas et al, 1977) conceptual model of emergency management which breaks it down into four clear stages as seen in Figure 1. The model at the time of its introduction advanced the theory that recovery had temporal elements which needed consideration. Since then it has come under criticism. Alexander (2007) argues that the model is an oversimplification of the disaster reality which ignores the interconnectedness of politics and the geography of damaged communities as well as the different vulnerabilities. Kates and Pijawka's (1977) model (Figure 1) only sees the economic development as a determinant for the speed of recovery; it does not account for the political factors which can drive the recovery process (Alexander, 2007). Further research on recovery shows that phases of recovery overlap and do not have a clear sequence (Alexander, 2007, Olshansky, 2005, and Davis & Alexander, 2017). Most literature now agree that recovery is about returning communities or businesses to the same or better state than what previously existed before the disaster event (Baird, 2010). This pushes communities back to the same exposure and level of vulnerability and does not empower communities to advance and reduce vulnerabilities. Thus, recovery is made to bring normality rather than allowing for enhancement and capacity building. This thesis will in turn argue against this dominant thinking of recovery and support the modern understanding of recovery. Recovery in current literature is starting to move away from the concept of recovery as an outcome and is now emerging as a process encompassing many elements including social reconstructions, activities and decision-making concerns (Nigg, 1995).

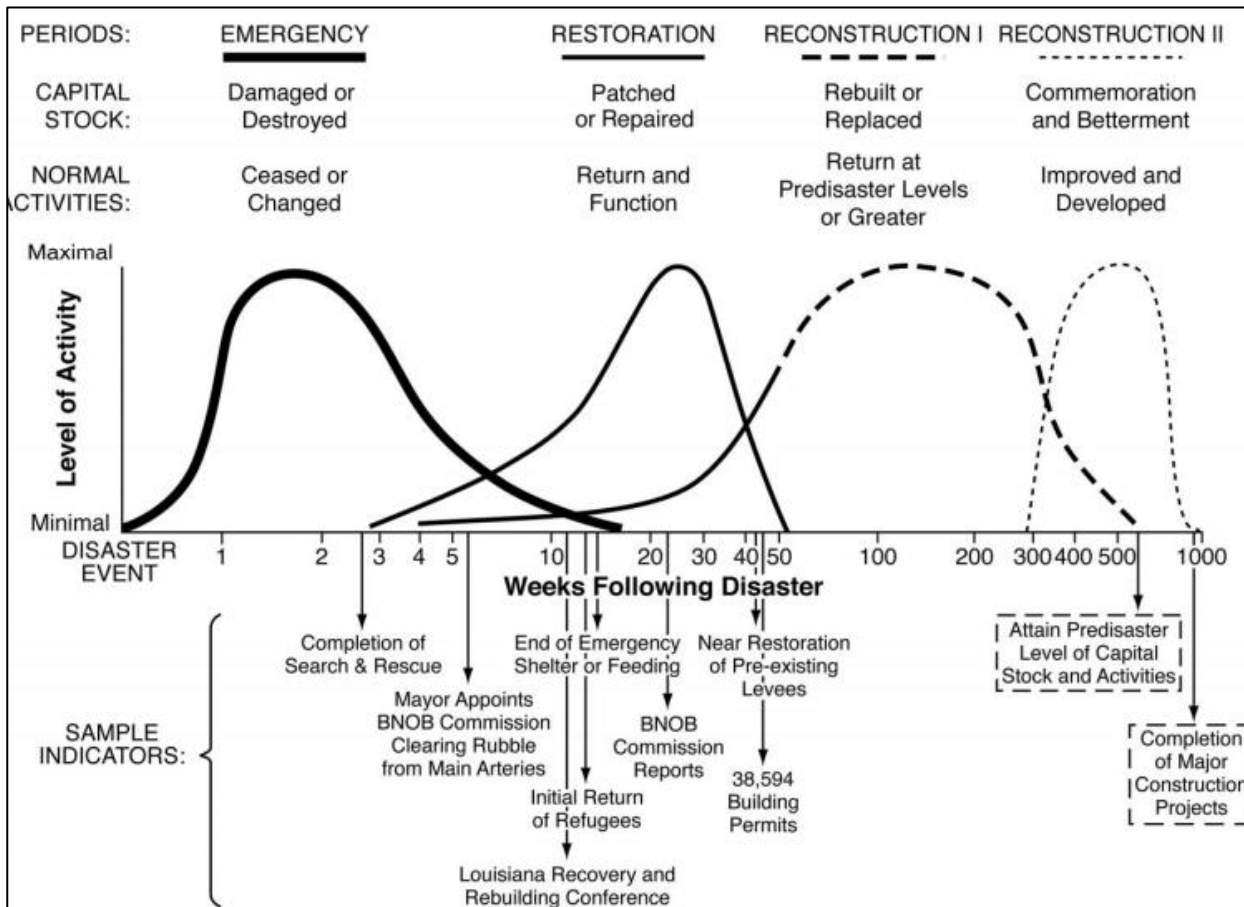


Figure 1. Kates and Pijawka recovery model (Haas et al, 1977, p. 280).

### 1.2 Recovery is endless and dynamic

As academic research progressed, recovery has been seen less in stages and more as an ongoing process. Olshansky (2005) identifies that there is no explicit end to recovery; it is instead a process which is gradually improving over time. Accordingly, the definition of recovery has advanced from a linear process to a dynamic system which accounts for more complexities, as opposed to the simplified view of clear phases (Brown et al, 2008). Recovery is seen more as a fluid process which focuses on the community level (Berk et al, 1993). The fluid process of recovery includes the social, economic and political aspects of the reality of the disaster vulnerable community. Extended links have been made with recovery showing variation over space and time due to political and socio-economic factors pre and post disaster event (Olshansky, Johnson & Topping, 2003, Miles & Chang, 2003, and Brown et al, 2008). Recent literature supports this view of recovery as a social process presenting themes of vulnerability, marginalisation, disparities and inequalities (Miles & Chang, 2003). Recovery now encompasses these themes conveying the recovery process as a response to stress, the larger the disaster impact on the built and social environments of the community, the more stress occurs on the system (Nigg, 1995). Recovery

does not just include response after the disaster but has links to the pre-impact conditions of the community determining how effective the recovery will be (Nigg, 1995). Connections are being made between vulnerable groups and level of recovery enhancing as they are more susceptible, ultimately recovery involves elements of time, space and society (Miles & Chang, 2003, and Brown et al, 2008).

### ***1.3 Recovery indicators***

Multiple factors have been registered to influence the recovery process which is now seen as dynamic and endless. Finding indicators and solutions to show the complex dynamics of recovery has proven challenging (Brown et al, 2008). Indicators are used to monitor, measure and evaluate recovery. Brown et al (2008) responded to the need for more applied research in longitudinal recovery process by analysing the requirements in aid agencies documents. From their research, indicators to measure recovery include livelihoods, including housing, natural environment and infrastructure (Brown et al, 2008). Similar indicators, such as replacement of physical losses, replacement of opportunity, restoration of economic losses and emotional recovery of those affected, have been used (Cuny, 1983). These are all aspects of change and or continuity, which itself becomes a key indicator to observe when tracking long-term recovery.

### ***1.4 Continuity and change***

Cultural continuity and change are at the heart of anthropology of disasters and hazards dating back to the 1950s (Faas, 2016). The anthropological perspective incorporates three different angles such as the holistic, development and comparative dimensions (Torry, 1979). The holistic dimension addresses the way society is viewed such as towns, tribes, neighbours and thus identifying the social integration of the population (Torry,1979). The developmental is concerned with the evolution and the way social change is occurring (Torry, 1979). The comparative dimension is about understanding the principles which influence change and social integration (Torry,1979). Torry (1979) advises disaster theory to foster all three dimensions as disaster theories are ultimately theories about communities.

In social anthropology, cultural ecology is a fundamental concept (Alexander, 2000). Cultural ecology includes the beliefs, imprinted history, behavioural patterns, as well as communal and individual achievements (Alexander, 2000). Anthropologists have determined two elements that are able to be seen that enable the ability to define the culture of the population (Alexander, 2000). These two elements are known as emic and etic values (Alexander, 2000). The emic value is the survival of culture and its traditions and attitudes that are ultimately intrinsic (Alexander, 2000). The etic value is the ability for

culture to adapt and change in attitude and traditions (Alexander,2000). These values assist in the understanding the movement, change and continuations in cultures.

Anthropological studies have explored the cultural meanings in extreme conditions such as disaster affected populations and their response in terms of loss, change, religion, encoding time, reconstruction, intercultural relations and individual and community identity (Oliver-Smith, 1996). Values and attitudes are analysed to determine the shape of the populations recovery by looking at key institutions such as marriage or religion being indicators of change (Oliver-Smith, 1996). An anthropological approach to disasters systematically investigates the social implications of natural hazards and identify disaster-related behaviours (Torry et al, 1979). The anthropological holistic approach to disasters starts with analysing the complexity between the interrelationships of humans, culture and their environment (Henry, 2005). The magnitude of disaster impact, the human actions, vulnerabilities and social-cultural adaptations of a population influence the complexity of the interrelationships (Henry, 2005). Theories and models have been developed on the psycho-social processes associated with disaster but lack the long-term recovery analysis (Torry et al, 1979).

The loss of significant physical structures is likened to the loss of community identity (Oliver-Smith, 1996). Changes occur at the level of the community and continuity emerges to bring normalcy into the lives of the affected community members. Disasters make people react and are catalysts for social action which enable change within communities (Hoffman, 2016). Causes of cultural change are identified by Hoffman (1999), such as the size or magnitude of the disaster event, if there is a focus on long-term or short-term change and if attention is to the deep or surface level of culture. Continuity and change can be seen at the level of culture in social structures, gender, law, literature, religion (Hoffman, 2016). Cultures are not static and will be subjected to change and some practices will continue (Hoffman, 2016). Evidence of cultural and social structures can be seen in religion. Post-disaster recovery in many cases shows disruption that requires changes to re-stabilise and continue the pre- impact state of the community (Oliver-Smith, 1996). Thus, continuity and change are significant dimensions in the recovery process of communities. This is due to continuity and change having many significant restricting decisions and influence of a recently affected community (Oliver-Smith, 1996). Culturally constructed infrastructure results in cultural practices that can change or continuity depending on the relationship between people and place (Oliver-Smith, 2011). Continuity, change and culture are quintessential indicators and trackers of recovery over time.

### ***1.5 Documentation of recovery***

The documentation of recovery over time has been weak as disaster recovery is still in its infancy stages (Nigg, 1995). Recovery is still the least understood aspect of emergency management (Baird, 2010). Usually recovery is documented through observations, interviews and interactions, however, this limits the kind of research long-term recovery collected. Visual documentation of long-term change and continuity will provide keen insight to these interviews. Current ways in which visual tracking of recovery is documented is through empirical research such as statistical analysis (Chang, 2010) and spatial satellite and ground-based monitoring of urban change (Jensen & Cowen, 1999). This type of visual tracking shows spatial changes however it does not show the social dimensions.

Alexander (2000) captures changes of culture and the physical environment through photos due to the impacts of disasters. Alexander (2000) asserts deductive measures through photos and goes beyond inductive reasoning such as GIS. Spatial models of disaster such as HAZUS (Alexander, 2000) use inductive approaches to disasters and give no evidence of using deductive principles for disaster modelling. Exploring landmarks through visual images are used to discuss impact in relation to the economic dimension of the society being investigated following a disaster (Alexander, 2000). This method can also be used to track behaviours of society and the evolution of culture which has been disturbed by disasters (Alexander, 2000). Oliver-Smith (1996) mentions the importance of place in the construction of identities for the community and individuals in recent research. Cultural identity is a way to track the changes and continuations of the social dimensions in a population. Shifts and changes have been documented in religious beliefs, symbols and rituals due to disasters (Oliver-Smith, 1996). Social institutions such as religion can display cultural change and give a continuum of change and continuity through practices, rituals and beliefs. Religious institutions are inherent ways to document the cultural memory on a population over time. So far there seems to be a shortage of current academic literature which explores landmarks, monuments as a mode/indicator of tracking long-term recovery. Accordingly, there is a valuable opportunity for more research in this field.

### ***1.6 Recalling recovery through landmarks***

Visual landmarks, monuments, anniversary events and symbolism assist communities and individuals to overcome trauma effects and move toward post-disaster recovery (Eyre, 2007). Permanent monuments and memorial structures are often built in the initial years following a disaster (Haas et al., 1977; Fig. 1). Such structures enable a constant reminder of the disaster event and the importance of remembering the past, the experiences of those who lived through the event, and the legacy for successive generations (Eyre, 2007). These activities and structures increase empowerment of communities after disaster and show how the community worked toward recovery (Eyre, 2007). The loss

of these infrastructure is usually followed by remembrance and commemoration which is evidence of recovery (Oliver-Smith, 2011). Thus, landmarks and monuments can serve as an indicator of psychosocial and cultural status of the community showing the continuity and change of the region's social fabric.

Remembrance contributes to the rebuilding of the community in context to pre-disaster state and the new normal of the post disaster state (Richardson, 2010). The process of remembrance gives meaning to the loss of place due to disaster events which have had psychosocial impacts on the community (Richardson, 2010). Erecting new landmarks provides a sense of recovery whereby the physical regeneration of the community and the environment signifies the start of the recovery process (Rotimi, Le Masurier and Wilkinson, 2006). The physical state of the community dictates the feeling of normalcy being restored in the region, the crucial role of landmarks.

Religion is within society and cannot be explored in isolation, it always interacts with social, economic and political constraints in contributing to the vulnerability of the population (Gaillard and Texier, 2010). Therefore, there is constant interplay between disasters and religion. The practices and ceremonies in religion connect the with people and place. These rituals or traditions are important in the recovery process of the community (Wisner, 2010). These practices support the wellbeing of individuals in the community. Churches are landmarks in the sense that the physical structure itself is significant, and that the church as a communal body has social, cultural, and spiritual importance. Churches can be significant landmarks in many populations. The reconstruction of landmarks such as churches or temples contribute to the psycho-social recovery of the community (Wisner, 2010). This is due to religious groups being integrated into the life of communities gaining strong levels of trust with community members (Gaillard and Texier, 2010). This is the social element of churches that assist with the psycho-social recovery of its community members.

### ***1.7 Theoretical framework for long-term recovery***

Theories and concepts drive the questioning and thinking in academic research. A conceptual framework assists to structure the investigation of the research and guide the discussion. The framework is informed by current literature theories and concepts. For this research, the theories and concepts include the relationship between people and place, the changes in communities' behaviours and the continuity in daily lives, the understanding that recovery is ongoing, that landmarks and monuments can be used to track recovery and serve as an indicator of continuity and change. Remembrance, memorialisation and commemoration are resulting indicators of recovery within a disaster-affected

community. Figure two below is a conceptual framework which has been generated for this research to inform the findings and discussion. The flow and interactions of the diagram have been characterised by the current academic literature.

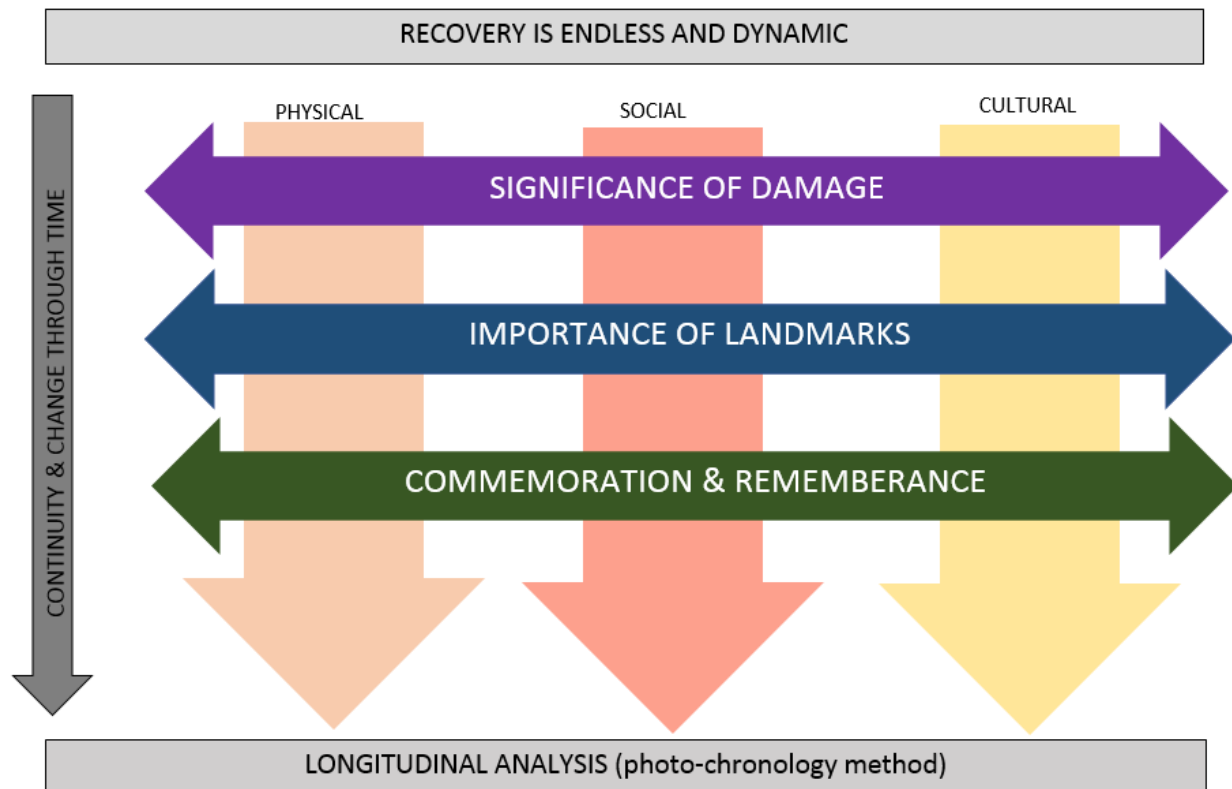


Figure 2. Conceptual framework for long-term recovery (Author’s own)

Figure two displays the core theoretical framework for this research. Recovery is endless and dynamic. Comparison is needed between space and time to show that recovery has no end. The spaces explored are the physical, social and cultural environments, these act as indicators of recovery. These spaces will be investigated over time using continuity and change as an added indicator for longitudinal recovery. Concepts from the literature bridge over the physical, social and cultural spaces. The three key concepts of significance of damage, importance of landmarks, and commemoration and remembrance will structure the observations and findings of long-term recovery.

The concepts and indicators will shape and inform the longitudinal analysis which will be presented as a photo-chronology method. The photo-chronology timeline will be created using the secondary data collected from archives, libraries and online databases. Also, primary data from interviews with the church leaders and a few church members. A photo timeline will be created to show the urban change from archival images as visualisation data is important to assess the growth of recovery

(Brown et al, 2008). The use of visual images will help assess the spatial dynamics of recovery (Brown et al, 2008), and the relationship between people and place (Silver & Grek-Martin, 2015). Application of Alexander's (2000) method of analysing visual images will be used as a foundation of critiquing the recovery process of Hawke's Bay over time. Primary data collection of interviews and focus groups aim to fill in the gaps around the continuity and change of church activities. Interviews and focus groups will also be carried out as Joakim and Wismer (2015) suggest that it allows for qualitative description of the recovery and exploration of issues and ideas. This will build a case of the significance and analyse the long-term recovery process.

## Chapter 2. Hawke's Bay Study Site

### *2.1 Site location*

Hawke's Bay is one of the top seismically active regions in New Zealand. It is located on the active Australian plate boundary approximately 150km west of the Hikurangi Trough at the subduction zone between the Australian and Pacific Plates (Civil Defence Hawke's Bay Emergency Management, n.d.). This active plate boundary has been recorded with activities for the last 160 years, with the 1931 magnitude 7.8 earthquake being the most prominent in living memory as it changed cities, physical landscapes and lives of the community (Civil Defence Hawke's Bay Emergency Management, n.d.). The research study location is the Hawke's Bay region which is located South-East of the North Island of New Zealand as shown in figure three. Napier and Hastings are the two main centres within Hawke's Bay located approximately 20-minute drive apart (Figure 3). Within these two cities the landmark of churches will be explored. Although the earthquake affected the entire Hawke's region, Napier and Hastings were the most significantly affected. Therefore, they have been chosen for this study to show continuity and change of long-term recovery.

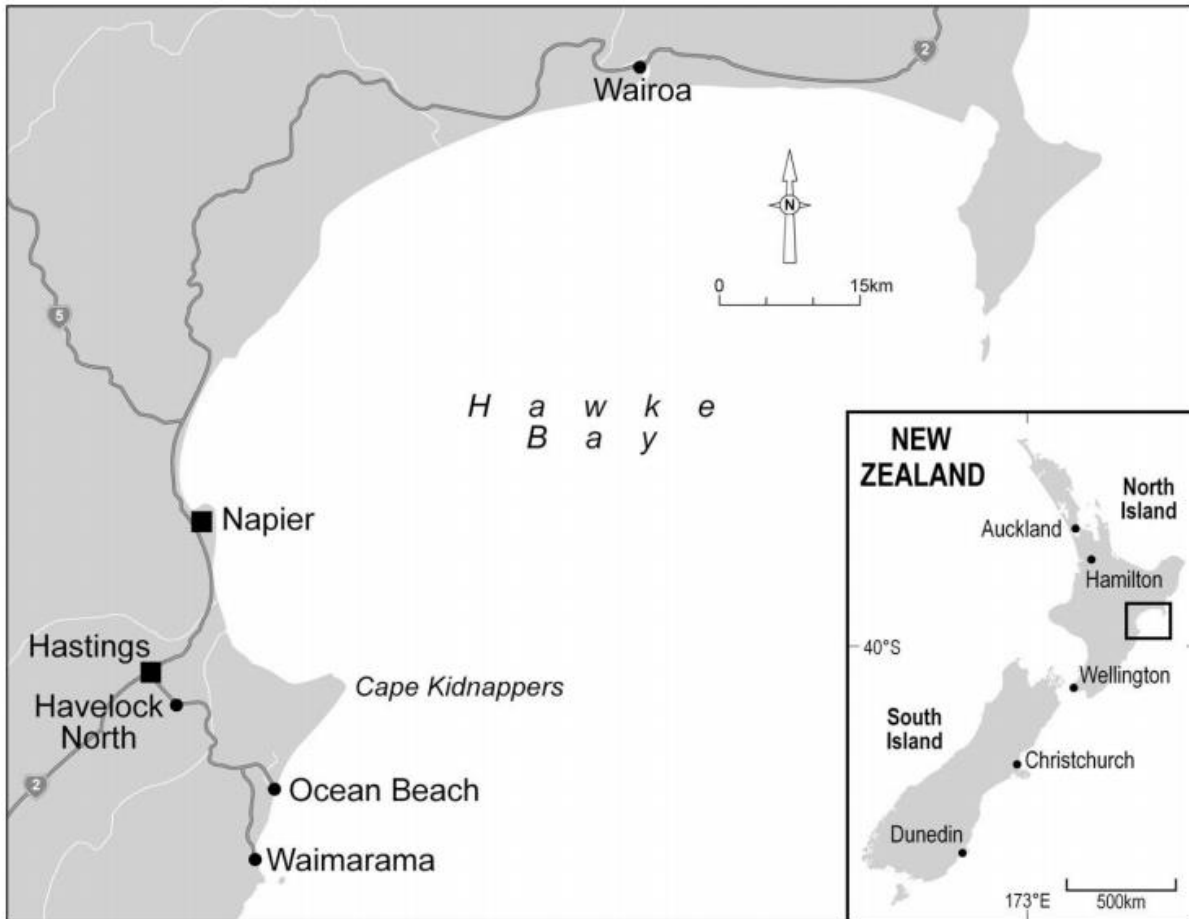


Figure 3. Hawke's Bay study site (Collins & Kearns 2010 pg. 436). The white regions mark the water and the grey areas indicate the land. The black squares show the two major cities.

## 2.2 History of churches in Hawke's Bay

The Hawke's Bay region encountered the European settlers in 1845 with the Napier area being purchased in 1855 for settlement (Grant, 1986). European settlers brought the Faith of Christianity to New Zealand. The first accounts of evangelisation in Hawke's Bay date to 1843, with the Maori hearing the gospel for the first time (Grant, 1986). Not until 1856 were the first church meetings and services established in Napier (Grant, 1986). The church was named The Diocese of Waiapu in 1858 and the majority of the initial church members were Maori (Grant, 1986). The first church building of St John the Evangelist was completed in 1862 (Grant, 1986). In 1886, the first foundations of a Cathedral were laid to meet the needs of the growing church community (Grant, 1986). The first Cathedral did not withstand the 1931 earthquake and a second Waiapu cathedral was built in 1967 after using a temporary church building in the interim years (Grant, 1986).

The first establishment of a Methodism in Napier was in 1861 with the effective teaching of the faith in 1870 (“History overview”, n.d.). The first church was built on Emerson Street (“History overview”, n.d.). The second church, the Trinity Methodist Church was constructed in 1876 and survived the 1931 earthquake (“History overview”, n.d.). The Trinity Methodist Church is the only church in the central business district of Napier that pre-dates the 1931 earthquake (“History overview”, n.d.).

The Presbyterian denomination of Christianity established their first church in 1858 in the Napier area (“Brief history”, 2016). A strong church community grew within this church but an arson event burnt the building in 1929 and a new brick church built in its place (“Brief history”, 2016). The new building did not survive the 1931 earthquake and a temporary church was built in June 1931 (“Brief history”, 2016). The site of the first church is where the current St Paul’s Presbyterian church stands which is the extension of the temporary church structure built in 1931 (“Brief history on St Paul’s”, 2016).

The Anglicans were the earliest missionaries who travelled to Hawke’s Bay in 1823 (Central Hawke’s Bay District Council, n.d.). St Matthew’s Anglican Church was constructed in 1886 (Heritage NZ, n.d.). This church is one of the few buildings in Hastings which pre-dates the 1931 earthquake (Heritage NZ, n.d.). The four churches explored here will be the churches investigated throughout this research study.

### ***2.3 The 1931 Hawke’s Bay earthquake***

The Hawke’s Bay earthquake struck at 10:30am on Tuesday 3<sup>rd</sup> of February 1931 with a magnitude of 7.8. The earthquake caused uplift in the inner harbour of Napier, with the water depth decreasing by approximately 2.1 metres (Annabell, 2012). The exposure of Ahuriri Lagoon post-quake caused changes to the coastline and the increase the land available for development (Langton, 2012). About 10,000 acres of uplifted land was available for development (Annabell, 2012). Uplift in Hastings was also evident, with the current business area, Market Street, originally being swamp lands (Insurance Council of New Zealand, 1931).

Shortly after the earthquake, fires started in the central business district of Napier (Baird, 1997). The fire started at three different chemist shops, one on Emerson Street, the second on Hastings Street and the third on the block of the Masonic Hotel (Hollis, 2007). The large-scale damage of the buildings and infrastructure in Napier was due to the fires post-earthquake which was being spread by the wind (Thomas et al, 2006). The earthquake and fires destroyed gas, electricity, telegraph connections, roads and rail line infrastructure (Annabell, 2006). The extent of damage from the earthquake and fires centre

around Bluff Hill, the hill near the Inner Harbour (Baird, 1997). Ultimately, the fires caused more structural damage than the earthquake.

Reconstruction of Napier began a week after the earthquake (Annabell, 2012). Initial reconstruction efforts concentrated on the central business district, which had been significantly affected by the earthquake and subsequent fires. A temporary market built from corrugated iron was underway in Clive Square a week following the earthquake and a month later, Tin Town was open for business (Beattie, Megget & Andrews, 2008). A £10,000 government loan was used to re-establish 32 businesses and 21 professional offices in the temporary market of Tin Town (Langton, 2012). Tin Town allowed for economic growth without erecting permanent structures immediately after the earthquake. There was an economic boom after the earthquake due to the increase in economic activity and population in the Hawke's Bay region (Chapple, 1997). As the earthquake allowed for development that was not previously possible, new suburbs emerged and improvements to Marine Parade were carried out in late 1931 (Annabell, 2012). The main new suburb developed on the uplifted land was Marewa (Hollis, 2007). The construction of the Marine Parade started late in 1931 with the auditorium, paths, shrubs and trees being installed first (Annabell, 2006). The development of the Marine Parade was led by the Council and community participation from the Napier Thirty Thousand Club (Annabell, 2012). Other structures followed in the Marine Parade such as the colonnade, the sound shell, Veronica Sun Bay and the commemorative arches (Hollis, 2007). The redevelopment process had begun in Napier and Hastings with many of the redeveloped buildings influenced by the art deco and Spanish styles as at the time, this was the most modern infrastructure that was deemed as safe (Beattie, Megget & Andrews, 2008).

## Chapter 3. Methodology

The outline of this research is to investigate the continuity and change of long-term recovery in Napier and Hastings post 1931 Hawke's Bay earthquake. The research has been set up to track recovery over time through a photo timeline, interviews from churches and focus groups as well as secondary data from archives and libraries. A study by Cox and Perry (2011) adopts an ethnographic approach to understand the discourse and social-psychological processes of disaster recovery. This includes discussion around people and place incorporating narratives, cultural ideas and metaphors (Cox & Perry, 2011). This research will also attempt to provide similar analysis around the people and place relationship around the 1931 Hawkes Bay earthquake. The objective of this research is to support the theory that recovery is an endless and dynamic process. This will be shown through landmarks indicating

the progress of communities following a disaster. Physical landmarks will be analysed to attempt to show the social and cultural fabric of a community that is recovering from a disaster impact. This will also include the landmarks showing the continuity and change over time from a disaster event.

Monuments can be used as a marker of recovery over time as suggested by Eyre (2007). Thus, photos and visual imagery of significant landmarks such as churches will be used. This research will attempt to decipher continuity and change of recovery over time exploring the economic, environmental, physical and social indicators and their relation to the respective landmarks. A photo timeline will be created using the secondary data collected from archives, libraries and online databases. The timeline will show the urban change from archival images, as visualisation data is important to assess the growth of recovery (Brown et al, 2008). The use of visual images will help assess the spatial dynamics of recovery (Brown et al, 2008 and Alexander, 2000) and the relationship between people and place (Silver & Grek-Martin, 2015). Some images of churches were acquired through the churches giving private access to their archives.

Primary data collection of interviews and focus groups aim to fill in the gaps around the continuity and change of church activity, as well as reinforcing the photo timeline. Interviews and focus groups will also be carried out as Joakim and Wismer (2015) suggest that it allows for qualitative description of the recovery and exploration of issues and ideas. The photos will be used in the focus group to evoke memories and recovery experiences. Flexible interviews will be carried out with church leaders to give a deeper analysis of the long-term recovery in Napier and Hastings.

The interviews were carried out with Reverend Tony Franklin-Ross from Trinity Methodist Church, Reverend Alister Hendery and the church historian Sheryl Hilton from St Matthew's Church, Reverend Sally Carter from St Paul's Presbyterian Church, and Murray Mills from Waiapu Cathedral. The second space of the focus group included a few of the individuals above and three church members from Trinity Church. The objective of these spaces was to understand changes at the social and cultural level along a continuum from the 1931 earthquake to now. This objective was shared in these spaces and naturally information unfolded.

This research expects to show new methods of tracking long-term recovery by using key social activities such as churches creating a timeline of key landmarks, offering a tangible expression of continuity and change of recovery. It expects to demonstrate the triangulation of diverse research methods, namely the timeline itself, as well as interviews and focus groups, in order that it presents a

robust methodology. The overall method will be informed by the theoretical framework for long-term recovery (Figure 2).

It is important for research of this nature to follow ethical guidelines with respect both its participants and the institution represented by the researchers. For this research, the field work and data collection were undertaken in conjunction with a broader University of Auckland study funded by the Earthquake Commission. Therefore, the ethics for this research was already arranged.<sup>1</sup>

## Chapter 4. Findings

### *4.1 Longitudinal analysis*

The photo-chronological timeline below is informed by the theoretical framework (Figure 2). The photos are accompanied by the exploration of the significance of impact and an analysis of recovery. The information was collected over a two-week period in the Hawke's Bay region. The visual images were chosen based on whether it showed change or continuity relating to the physical, social and cultural environments. The selection of images was also classified by what was shared to be important in the interviews with the church informants.

This section includes the key overall findings determined by the photo-chronology timeline shown in Tables 1 to 4, using the theoretical framework shown in Figure 2. The findings will be explored through the lens of the significance of damage and occurrence of change reporting on the physical, social and cultural impacts on the four investigated churches. Through the lens of the importance of landmarks, this report will look at the physical, social and cultural impacts on the churches. Through the last lens of commemoration and remembrance, this research will observe the physical, social and cultural impacts on the church communities. The empirical findings will be discussed for each church under each concept. The interactions of physical, social and cultural spaces will be identified over time for each church, with an emphasis on continuity and change.

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<sup>1</sup>EQC project 'Exploring long-term disaster recovery trajectories in New Zealand' (Approved by the University of Auckland Human Participants Ethics Committee on 16 December 2016 for three years; reference number 018409)

## Trinity Methodist Church








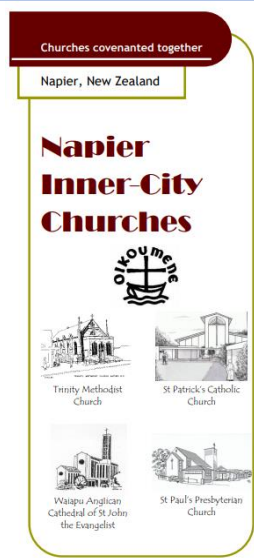

	1930	1931	1932	1934/1935	1959/1960	1987	2018
<b>PHOTOS</b>	 (Trinity Church, 2018)	 (Trinity Church, 2018)	 (Trinity Church, 2018)	  (Trinity Church, 2018)	  (Trinity Church, 2018)	 ("Napier Inner-City Churches", 2017)	 ("Worship", n.d.)
<b>DESCRIPTION</b>	Napier before 1931 earthquake damage. Trinity Methodist church can be seen in image.	Church survived earthquake shaking.	Sunday School teachers gathering a year after the earthquake.	Easter Camps three and four years after the earthquake.	Church Sports clubs. Men's Wesley Hockey Club and the women's Wesley Netball Club.	The inner-City Church Covenant document logo.	Documents of sermons given by the Dean in the photo above.
<b>SIGNIFICANCE</b>	A place of worship for Methodist Christians in the inner city of Napier.	The building was able to function as a life line e.g. water supply	1 year after the event, the church activities are back to normalcy with Sunday School teacher gatherings.	Hosting of regular Easter camps were happening 3 years after the event.	The sports clubs signify the returning to normalcy.	This involves the unification of church activities such as Lenten observations, annual Civic Service and an annual luncheon, also one-off events.	The sermons mention the influence the 1931 earthquake has on the community now. As well as the learnings, changes and resilience of the community.
<b>RECOVERY</b>		Trinity Methodist Church was able to restore minor damage and give support to others in the community.	This shows the strong culture of getting over the set back and establishing activities again.	Resilience and strength shown to get back to normal.	Social activities from the church are already starting up again. This represents the spring forward in the development and recovery of the church.	One could assume that the coming together during the 1931 earthquake has repeated itself as the churches from around the mid to late 1990s have struggled with church attendance. In the past it has been valuable to work together, thus again the churches have joined forces to overcome an obstacle.	This is a way of the church community now sharing the experience and learnings to the new generation. Also shows how the earthquake shaped the current community that is expressed.

Table 1. Trinity Methodist Church longitudinal analysis (Author's own)

## St John's/ Waiapu Anglican Cathedral








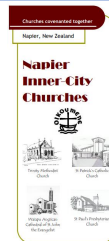


	Pre-1931	1931	1931	1931	1932	1958	1967	1987	2018	2018
<b>PHOTOS</b>	 ("St John's Anglican Church," 1908)	 (Grant, 1986)	 (Grant, 1986)	 (Waiapu Church, 2018)	 (Schrader, 2010)	 (Exton, 1958)	 (Grant, 1986)	 ("Napier Inner-City Churches", 2017)	 (own photo, 2018)	 ("Cathedral worship", 2018)
<b>DESCRIPTION</b>	The church before the earthquake struck. Known as the St John's Cathedral	Photo of the rubble of the cathedral.	The temporary church building, constructed in October.	The combined church service in Clive Square. A visit from Lord and Lady Bledisloe was arranged a week after the earthquake.	Renaissance painting of the destroyed cathedral.	Centennial parade in Napier in remembrance of the earthquake. Waiapu Church have a float of their temporary church building.	Final construction of the second cathedral. This building continues to stand currently.	The Inner City Church Covenant	A displayed timeline of the recovery from the earthquake.	Church Service program indicating the regular gathering on Tuesday 10:30am. (Napier Cathedral, 2018)).
<b>SIGNIFICANCE</b>	A cathedral in the city for communal worship. A place of religious traditions including weddings, christenings, funerals.	Lost cultural heritage. Loss of gathering place, a place for religious traditions.	Allowed for church services to start again and the building back to normalcy. Arranging to extend boundaries and purchase more land due to site being too narrow (Grant, 1986).	Many of the churches affected by the quake joined the combined Sunday service as their facilities were not functioning. Lord Bledisloe conducted the Sunday service in Clive Square which gathered all the churches for communal worship. (Grant, 1986).	The painting symbolises renewal through the depiction of the fern tree and the art deco buildings.	The church part of the community, being involved in the celebrations of the centennial for Napier city.	It is the only NZ cathedral that has replaced a former cathedral and has been started and completed within the office of a single bishop.	This involves the unification of church activities such as Lenten observations, annual Civic Service and an annual luncheon, also one-off events.	In 1978, Dean Brian Davis became aware of the need to develop a tourist guide as the number of tourists visiting the church was increasing (Judy Mills). Currently there is a display that extends to the guide with detailed info stands.	The time and day is in remembrance of the earthquake as it occurred when the communion service was happening. As a church they have decided to continue a service at this time to remember this part of their church history.
<b>RECOVERY</b>		The church community forced to respond to disaster impact and make changes to the building infrastructure at least.	The structural building was an important milestone toward the recovery process and rebuilding the church community.	This shows different church denominations coming together to prayer during a difficult period. The forgetting of difference and the uniting of all the church people.	The painting marks a point of hope in the renewal of Napier city after the impact of the disaster. It captures a moment of change toward recovery.	This parade is a form of memorialising and celebrating the strength and success of the city and its 'resurrection' and rebirth.	The physical architecture marks the recovery of cultural heritage and practices. The rebuild of the second cathedral allows for the religious traditions to take place again such as weddings, christenings, and prayer services. The second cathedral marks are new heritage for the church community as a new resurrected landmark is formed in Napier.	One could assume that the coming together during the 1931 earthquake has repeated itself as the churches from around the mid to late 1990s have struggled with church attendance. In the past it has been valuable to work together, thus again the churches have joined forces to overcome an obstacle.	This keeps the remembrance of the event and sharing of knowledge alive.	The continuation of church service at the same time as the when the earthquake struck is a form of memorialisation. The church community are incorporating this into their daily lives showing that the continuing service is a way of recovering and not forgetting what they have experienced and learnt. Many of the church members are elderly and either experienced the earthquake or close family was affected by the event.

Table 2. St John/ Waiapu Cathedral longitudinal analysis (Author's own)

## St Paul's Presbyterian Church

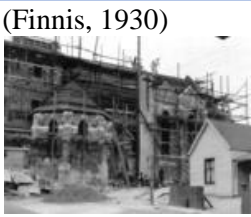




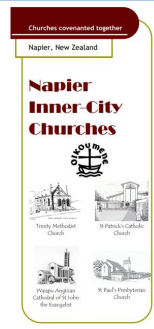

	1930	1931	1931	1952	1958	1987	2018
<b>PHOTOS</b>	 <p>(Finnis, 1930)</p>	 <p>(Tong, 1931)</p>	 <p>(St Paul's Church, 2018)</p>	 <p>(St Paul's Church, 2018)</p>	 <p>(St Paul's Church, 2018)</p>	 <p>("Napier Inner-City Churches", 2017)</p>	 <p>(St Paul's Church, 2018)</p>
<b>DESCRIPTION</b>	Constructing new brick church. Pre-earthquake	Destroyed church building from the fire post-earthquake	Temporary church built in June 1931 and slowly strengthened, and extensions made.	Asher Hall was built with high ceilings accommodating for sports activities like badminton.	The final state of church building after a few re-builds.	The Inner-City Church Covenant document logo.	2018 current church. The donut stand outside the church has become a part of the social dimension of the church.
<b>SIGNIFICANCE</b>	Pre-impact state. Had not been used as a church facility yet.	The newly constructed Church building was destroyed. Along with the school-room, Bible classrooms, the caretaker's cottage.	Various additions to the church structure show the variation in the interaction between the church life and wider community.	Diversifying in building type, first time since losing all buildings in 1931.	27 years on, the church building, and restoration is completed. The church community able to feel relieved of the rebuilding burden.	This involves the unification of church activities such as Lenten observations, annual Civic Service and an annual luncheon, also one-off events.	Interaction of the wider community with the church place and community members.
<b>RECOVERY</b>		All of the churches structural existence was wiped. Disturbance of religious activities such as prayers, sports, social events.	The temporary building physically represents the recovery occurring. The relationship between people and place is rekindled. The church practices can continue again bringing normalcy and the spiritual and psycho-social support needed.	A hall formed to cater for the social aspect of the community to hold events. The construction of this building makes a milestone in the church recovery as the facilities accommodate to growth.	This indicates a slow recovery process, possibly due to resources and finances of the church. This displaced the community for a long period of time as the place of gathering was incomplete for a long duration. In parallel, it shows the contribution of the church to the rebuild of the central business district.	One could assume that the coming together during the 1931 earthquake has repeated itself as the churches from around the mid to late 1990s have struggled with church attendance. In the past it has been valuable to work together, thus again the churches have joined forces to overcome an obstacle.	It shows merging of the space and starts to re-identify this place with influence from wider societal interactions. Possibly the donut stand is symbolic of post modernism and the postmodern interactions with churches. The donut stand also represents an unorthodox amenity for a church and is met with different reactions amongst the churchgoers.

Table 3. St Paul's Presbyterian Church longitudinal analysis (Author's own)

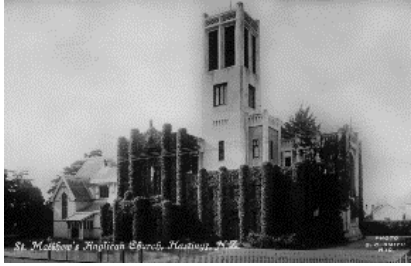


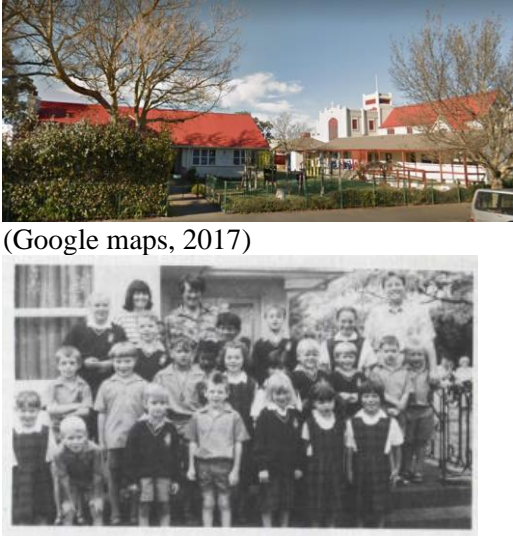

St Matthew's Anglican Church						
	1924	Post 1931	1987	1988-1994	1995	2018
<b>PHOTOS</b>	 <p>(Smith, 1924)</p>	 <p>("St Matthew's Anglican church", n.d.)</p>	 <p>("Napier Inner-City Churches", 2017)</p>	 <p>(Carding, 1995, p. 75)</p>	 <p>(Google maps, 2017)</p> <p>(Carding, 1995, p.75)</p>	 <p>(Grover, n.d.)</p>
<b>DESCRIPTION</b>	St Matthew's Church before the earthquake struck. The prominent feature of the building is its tall tower.	The church structure post-earthquake showing reduction in the height of the tower structure	The Inner-City Church Covenant document logo.	Early childhood centre in the old vicarage building leased by the Department of Social Welfare.	The top image is of the current church site with the school facilities. The bottom image is of St Matthew's Primary School with their first students in 1995.	The clock tower in Hastings City Centre. A significant landmark rebuilt after the earthquake and still standing. This image was taken post 1995.
<b>SIGNIFICANCE</b>	Place of worship and the centre of the community. The church is known for its structural tower feature.	The church after the earthquake with the only physical modification being loss of tower structure.	This involves the unification of church activities such as Lenten observations, annual Civic Service and an annual luncheon, also one-off events.	The church extending a service to the wider community of the education of young children.	After suffering from low church attendance in the 1990s, a global trend, the Primary School has integrated the church into the life of community members. The primary school was an education system following on after the early childhood centre emerged.	Originally there was no organized commemoration around the clock tower. Over time it became a place central place to gather for remembrance. St Matthew's church participated in the commemoration at clock tower.
<b>RECOVERY</b>		Having to adapt buildings to new building codes and standards.. Able to continue use of the building reasonably quickly after disaster impact.	One could assume that the coming together during the 1931 earthquake has repeated itself as the churches from around the mid to late 1990s have struggled with church attendance. In the past it has been valuable to work together, thus again the churches have joined forces to overcome an obstacle. This covenant has been renewed of the years and the agreement continues to exist.	This shows the role churches can have on the development of the community. Providing a facility for the education of children.	Church becoming more integrated in the modern community life. The church becoming more than a place of prayer and worship, now a place of education and schooling, thus deeper embedded into the wider social and community fabric.	Over time, memorialisation has developed. The Clock tower was not used as a place of commemoration but over time it has become a place for the church and the Hastings community.

Table 4. St Matthew's Anglican Church longitudinal analysis (Author's own)

## *4.2 Significance of damage*

Trinity Methodist Church experienced the least amount of damage with no significant structural impacts. The minimal damage that occurred to the church building meant that the church community was able to give support to others. Trinity Church was able to assist with water supply as this utility was still functioning in their facility. As the level of damage was low, the church over time did not undergo many structural changes, and its basic structure remains to this day. Consequently, social and recreational activities, such as Sunday school teacher gatherings, Easter camps and sports clubs, suffered relatively minimal disruption. These activities were able to continue, and new activities were established. The cultural traditions and activities continued as the church venue was able to facilitate a space for gatherings. To that end, the relatively minimal structural damage suffered by Trinity Methodist Church meant that the process of continuity was easier; less effort and expense was needed to repair damage, and the church community could continue activities and religious traditions swiftly.

Waiapu Cathedral suffered the most physical damage of all the investigated churches in the research. The brick Cathedral structure collapsing meant the loss of a space for church services. The loss of building reflected the loss of continuity of activities, as well as a loss of architecture. The Cathedral collapse occurred during church communion. Falling building materials and rubble upon parishioners in the church at the time resulted in two lives lost. This caused the Waiapu Cathedral church to gather with other churches with structural damage to have collective prayer service together in Clive Square. Because of the members of the church community and their religious traditions, prayer is an important aspect of life. This was a religious practice which needed to occur even though a physical space was not available. The collective prayers allowed the church groups to feel supported as the community was unifying in the distress and praying. A visit from Lord and Lady Bledisloe was arranged a week after the earthquake. Lord Bledisloe conducted the Sunday service in Clive Square which gathered all the churches for communal worship. This prayer gathering was facilitated as a memorial and thanksgiving service (Grant, 1986). The damaged physical structure impeded the social interactions and cultural traditions of religion in the church facility. The cultural significance of the cathedral structure being completely damaged is the loss of cultural heritage for the community. The building was old and reflected the period it was built in. It was known landmark

for many locals and held significance of calendar days of Christmas, Easter, christenings, weddings and funerals. In October of 1931 a temporary structure was erected providing a source of social and cultural stability for the church community. Over time, the church community redesigned a new cathedral being the only cathedral in New Zealand that has replaced a former cathedral. The significance of damage for Waiapu Cathedral shows more levels of change than continuity. The new cathedral, Waiapu, continues to stand as new landmark of this church community for the last 51 years.

St Paul's Church structure was completely destroyed by the fire that occurred post-earthquake. Construction of the new brick building had been completed only days before the earthquake. Its loss saddened many church members as they looked forward to the prospect of a new building. The loss of the new brick church was more devastating as there was no opportunity to use the structure and the church had to start over again following the earthquake. The place of social gathering was disturbed, and church services changed to gathering in Clive Square with other affected church communities. Similar to Waiapu Cathedral, the loss of cultural traditions in the church building was lost. A temporary structure was built approximately 6 months after the earthquake. Over time, this structure was added and extended resulting in the current physical building that stands in place.

St Matthew's Church had minimal structural damage post-earthquake with only the tower collapsing. Other aspects of the building, such as the stained-glass windows and wooden framing, survived. Their survival ensured that the cultural heritage of the church remained intact. The church site over time grew as more services from the church were offered to the community such as early childhood education and primary school facilities. This process unfolded through the old vicarage building in 1988 being leased by the Department of Social Welfare (Carding, 1995). Development of school facilities continued through to 1995 with the construction of primary school buildings. This development allowed the St Matthew's Church community to adapt to the social changes of society toward post-modernism and created its own dynamic community encompassing the school, with the school strengthening the interaction between the wider community and the church. The interaction of the church building and church community with the school is the use of the architectural structure and the practicing and teaching of Anglicanism. Transition into initiatives after the earthquake were smooth, similar to Trinity

Church. As both St Matthew's and Trinity Church has less initial damage meaning less initial expense and labour in repairs.

Each church has different patterns of continuity and change due to the differing extents of structural damage and differing experiences amongst the respective parishioners in the years and decades following the earthquake. Out of the four churches, the Trinity Methodist Church in Napier had the least amount of structural damage. Followed by St Matthew's Church in Hastings with only the tower of the church concaving. Lastly, the two most affected in were St Paul's and St John's/ Waiapu Church. The latter two churches had to start from scratch again, whilst the former two could continue with relatively little disruption. The level of change and continuity between churches was different as depicted by the photo timeline. The less affected churches (Tables 1 & 4) seem to continue church life with not many drastic changes. These two churches suffered minimal damage which resulted in less repairs and more concentration on continuing the usual activities and establishing new initiatives. This concentration on continuity was possible because no time or resources needed to be given to the rebuilding, allowing to continue as normal and expand their church. Whereas the churches worst affected (Tables 2 & 3) had to adapt to overcome the structural damage and make significant changes to the life and activities of the community. The badly damaged churches had greater initial costs, time and labour spent on reconstruction. Losing the whole church structure set them back further than the other churches. The loss of church buildings resulting in loss of continuity such as sports events, Sunday school, church services, weddings, funerals. The magnitude of damage to the church structure halted the social and cultural environments. This is due to the strong relationship between physical structures and the social interaction of people. When the structural facilities are impacted, so are the social and cultural interactions of the people. The more affected churches seem to have implemented new initiatives as they were probably more vulnerable to loss of church members than the churches that continued as normal. This is a response to the disaster disturbance creating a window of opportunity to make significant changes to the church social and cultural structures.

It is seen that church activities such as Easter camps, Sunday class teacher gatherings, and church sports groups have diminished and eventually stopped in the passage of time. This is observed across all investigated churches. This could relate to the global social trend of less

involvement in the church community and the central business district becoming the heart of the city rather than the church (Barro and Mc Clearly, 2003). This suggests that the church activities are competing with the central business district growth. This competition may have re-centred the values of society hence the decrease in church attendance. All churches in the 1960s onwards have experienced a significant drop in church membership, this is also reflected as a global trend in churches. Clear shift in perspective of the role of churches from the majority of the population since 1930s to now. In the 1930s the church buildings were the centre of the community therefore the community prioritised the rebuild of the inner-city church structures. As society has evolved toward post-modern individualism, the churches have moved from the centre of the community to the periphery. A few causes of the movement away from churches is the central business districts in cities and technology. In the interviews with the church leaders, it was mentioned that all four churches have struggled with the attendance due to the rise in technology. The television screening of church services has deterred people from coming into church. Then the relationship between the church and the people becomes disassociated because of a loss of personal interaction. The television services encourage people to stay at home; they compete with the Sunday services at the church landmarks themselves. The economic and technological dimensions of society have, to that extent, overshadowed the intimacy and communal nature of church life, and pushed it to the periphery of communities.

#### ***4.3 The importance of landmarks***

Trinity Methodist Church Building survived the 1931 earthquake. The stability of the church landmark facilitated the psycho-social recovery of the church community. As the church building allowed the continuation of activities and religious traditions, the level of social and cultural change within this church was minimal. The landmark was not destroyed thus the church community was not hindered. The continuation of social and cultural practices continued shortly after the earthquake impact. The social fabric of the community was less disturbed as the church landmark assisted the psycho-social recovery by allowing the continuation of social and cultural norms of the community. This shows that the way landmarks are viewed is not always explored through the way in which they exist to the community. The landmark extends to the wellbeing of individuals unknowingly as many would only view a landmark in as a physical space, and that such buildings may be taken for granted.

The Waiapu Cathedral, the first cathedral known as St John's Cathedral built in 1888 was a landmark of religious heritage for the community (Table 1). The significance was the buildings status as a cathedral. Losing this landmark resulted in loss of cultural identity. The relationship between place and people forms an individuals' cultural identity. A religious church landmark is an emblem of cultural identity for parts of the community. The church landmark speaks to the community values, beliefs, the way of life and the certain type of person. The renaissance painting from 1932 in table two marks the importance of the cathedral as a landmark to the community as well as symbolising the renewal of the religious landmark and the city. Paintings often depict events from a romanticised perspective and would be associated with many other stories within it. Shortly after the earthquake, in October 1931, a temporary structure was built in place of the collapsed cathedral. The temporary church building physically represented the recovery of the community. This showed the lengths the community went to recover from the initial impact of the disaster. To build a church structure it requires a lot of resourcing and man power and this temporary building represents the resilience and the fast recovery of the population. For Waiapu church, the temporary church was only to be a temporary church whilst waiting for a second cathedral to be rebuilt (Grant, 1986). Land was purchased around the original building site, fronting Hastings and Browning Street, as the current space restricted the new cathedral designs (Grant, 1986). The re-establishment of a church structure shows the occurrence of change and the cultural re-identification with a new church structure. This is evident in 1958 during the centennial parade in Napier where the Waiapu church participated in the celebration. On the Waiapu float for the parade the temporary church structure was displayed as the representation of their church. This shows the church community changing and developing a relationship with a new place and landmark.

St Paul's Church had only recently been completed when the landmark came down in the earthquake. Similar to St John's Cathedral, the church community built a temporary structure several months after the earthquake. The temporary structure symbolises recovery in a point in time. This is reinforcing the notion of the role of temporary structures signifying the strength and resourcing ability of the population. As well as the first step in the rebuilding process of the church structure. The temporary landmark brought back normalcy and the social and spiritual support provided by religion. St Paul's church continually added to the temporary structure which has resulted in the finalised building around 1958. The temporary church landmark acted

as a frame for development of this church community. It gave them the momentum to continue their recovery. Over time the landmark site had extra buildings constructed to accommodate for social activities. The development of these buildings around the landmarks were of physical, social and cultural importance to the community. The community were seeking to identify with landmarks. Therefore, the landmarks are important in facilitating cultural and social recovery of a population as well as the significance and role of the temporary church.

St Matthew's Church over time grew in its identity and landmark. Excluding the tower, the church structure survived. The building was able to continue use as normal a lot faster than the other churches. The church landmark was reconceptualised when the early childhood centre began. The St Matthew's church was now also a place for education. This then extended to a primary school facility being developed on the property in 1995 for the education of children. The social and cultural aspects of the church landmark have diversified into more than having a religious monument but also providing a service to the wider community and increasing the social interaction around this landmark. In this instance, a space for education in proximity to the church fosters spiritual growth just as much as it provides conventional schooling.

Temporary structures allow for continuation of activities. Their relatively quick construction allows the functions of a given building or amenity to be carried out whilst a more permanent structure is developed and constructed. This keeps the social activity surrounding the churches alive. This continues to place importance on the church and its role in the community thus, allowing for the recovery process to begin, as churches are restored, fixed, and additional buildings added. The temporary structures allowed people to continue to connect to the place, the place being the churches, despite the level of change that has occurred. This interrelationship between people and place is dynamic allowing churches to recover.

#### ***4.4 Commemoration and remembrance***

The churches in Napier congregated together to share resources such as church services at Clive Square as two of the three churches in Napier did not have buildings safer enough for these events initially. The church community were creating opportunities for the continuation of the Sunday services weeks after the disaster event. This was crucial to the community as the church was the heart of the town at the time of the quake. The loss of church structure was enabling reliance on the strength of the church members no matter the denomination. Trinity

Methodist Church participated in the Clive Square church service with the other denominations. This was the beginning of the interactions leading to the Napier Inner City Church Covenant. These interactions were significant to the social and cultural dynamic. There was a shift from the separation of church denominations to a unifying effect through the establishment of the Covenant. This Covenant unites the four inner churches in their religious practices that they all share. One could assume the interactions from the church services in the Square lead to this ongoing Covenant which is continually being renewed. The Covenant then could be assumed to represent the initial joining of church activities post-quake. The Covenant has been renewed over time since the agreement and continues to be in effect. More recently the commemorations can be seen in the content of the sermons which incorporate the remembrance of the church history and the reminder that the church landmark survived the earthquake. As the Trinity Church did not suffer any major damages to the physical structure, the level of remembrance and commemoration is not strong within the church daily life but can be seen in the cultural memory of the community. The majority of them are the older generation that either experienced the earthquake or had someone close to them affected by the event. The magnitude of damage affects the level of change in the recovery process. Therefore, if a church community is not affected hugely then the need for commemoration is not as important. The commemoration and remembrance are forms of grieving and its used when a community has experienced tragedy (Eyre, 2007). Therefore a few churches have used these forms of remembrance and commemoration in the process of recovery.

Waiapu Cathedral on the other hand has experienced significant structural damage and loss of life from the collapse of the Cathedral. In remembrance, the church holds a daily service on the day and time in which the earthquake struck, Tuesday, 10:30am when the communion was held. Due to the extent of the damage and loss of lives that St John's/Waiapu Cathedral experienced, the need to memorialise the deaths of the church members is more vital and significant. The relationship between people and the church landmarks was shared in the interview as the loss of the building as a loss of memories but ultimately the 'church is the people, not the building'. Thus, recovery from the earthquake illumines the understanding that the church is about the people and not just the buildings. This shows the need of the church to remember its people lost in the earthquake due to the collapse of the church building. Facilitating remembrance for the church members assists in the psycho-social support of the people affected

by the loss. This supports the previous notion mentioned that the reason for commemoration is for collective grieving (Eyre, 2007). Waiapu cathedral experienced tragedy and therefore used the forms of remembrance to recover from the psycho-social impact by having ongoing weekly commemorations for the lives lost in the church from the earthquake. The weekly commemorations are thus a weekly opportunity for the church to express collective grief.

Conversely, St Paul's and Trinity Methodist Church do not have a specific commemoration unique to their church that they carry out. Similar with St Matthew's Church in Hastings, they join in with the wider community but do not seem to have a regular ongoing commemoration associated with their Church. Whilst the St Paul's, Trinity Methodist and St Matthew's Churches did not experience direct loss of life in the Church facilities, they therefore have not incorporated a memorial into their daily services. When this was brought up in the interview with St Matthew's Church Leader, Reverend Alister, he said this discussion has made him think about how their church community is remembering the past and passing on learnings in Hastings. Yes, these two churches experienced impact but not tragic losses of life and therefore the commemoration activities and practices will look different compared to the churches experiencing tragedy.

## Chapter 5. Discussion

The discussion here is comparing the research findings to the current literature and the ways in which it is different, new, and similar to what is already known. This will be explored through theoretical lenses supported by findings from the conducted research. The key lenses that will be used are magnitude of damage relating to the occurrence of change, the relationship between people and place, the psycho-social recovery, and the reinforcement of modern recovery theory. These lenses follow and go deeper into the three concepts in figure two which overarch the social, physical and cultural environments.

### *5.1 Magnitude of damage relating to occurrence of change*

The differences in the continuity and changes between the churches seemed to be dictated by the level of impact on the particular church community. The more severe the impact, the more changes were seen at the functioning level of the community. Continuity was more prominent in

the less affected church buildings and the church place was able to continue to facilitate the cultural practices. Oliver-Smith (1977) states that cultural buildings are place holders for cultural practices. Therefore, if the buildings are disrupted and damaged, the practices will change in response. Churches have a cultural role as the building holds religious traditions and practices. The practices were halted as the building damage made a few church structures in the Hawke's Bay region uninhabitable. This was evident in the damaged churches as they were no longer able to hold their own prayer service. A communal worship was held at Clive Square as the buildings were not fit for purpose. Hoffman (1999) mentions the importance of magnitude of damage as the amount of change seen is dictated by how huge the calamity for that population was. This is very clear in the Tables 2 and 3, as those church communities experienced extensive structural damage which resulted in both physical and cultural changes apparent in their recovery over time. Whereas those churches in Tables 1 and 4 had less structural damage and minimal level of change occur. The level of damage of the church building affects the relationship between the people and place. People seek familiarity to rebuild what was there before but also change in terms of building code and regulations to make safer buildings (Hill and Gaillard, 2013).

### ***5.2 Relationship between people and place***

Similar to Alexander (2000), the visual images were able to show physical and social structural changes and continuity. The photo-chronological method in this research was able to extend beyond the images and can view the impact, changes and continuity of buildings over time including physical structures and social dimensions of churches. This is evident in damaged church structures followed by temporary buildings, additions to these structures, buying extra land, designing a new cathedral, and additional facilities on the church property such as schools and halls. The photo timeline allows the observation of changes and continuations between the people and place. It tracks only the key points in which the image is relevant to the recovery process. Though, not in architecture alone can recovery been seen but also through cultural practices and activities of the community (Oliver-Smith, 1977). The religious traditions and practices also change and, in some cases, continued depending on the magnitude of the church structural damage. Changes and continuations express the social and cultural memory and fabric

of the community. This can be observed in the landmark and its significance and relationship with the population.

The limitations of the photo-chronology are that some impacts are invisible and are difficult to show through images. The photo timeline method restricts the inclusion of the invisible impacts that communities may face such as the wellbeing and in-depth social and political conditions. However, the timeline is effective in showing continuity and changes of a community at a glance. It also allows linkage between infrastructure recovery and the anthropological analysis. The method in this research was different to Brown et al (2008), Alexander (2000) and Silver & Grek-Martin (2015) as the element of tracking over time was included as well as photos of changes and continuities. The longitudinal analysis is also limited by not being able to include interviews from survivors affecting the portrayal of earthquake events. There is a need to be sceptical in the accounts from second and third-hand portrayal of the initial events. However the limitations from not enough first-hand accounts actually enables better understanding of the relationship between people and place such as the legacy of the disaster and its influence on the social and cultural fabric of the community. To that end, the photo-chronology approach pieces together snapshots over time in order to discern continuity and change.

Eyre (2007) shares that the establishment of new landmarks after the loss of the original structure brings about recovery. This is seen in the Hawke's Bay earthquake for both St Paul's Church and Waiapu Cathedral as they quickly erected a temporary building after the disaster impact. This would have established the activities of the church to start again around the temporary structure, a step forward in the recovery process post-earthquake. Traditions and practices were restored, and the temporary structure allowed the community to continue to connect shortly after the disaster event. These temporary structures can also mark the change in the social and political fabric of the community. Especially the new church structures as they act as a place for psycho-social recovery of the community offering the spiritual and social support to its members. This can extend to the church community implementing their role to assist with relief efforts such as donations, food, water, and prayer meetings (Eyre, 2007). The physical church structure itself is significant in ways of offering solace, sentiment, reflection and spirituality for the community (Eyre, 2007). Temporary structures were an interim church

building to continue the dynamic relationship between the people and the place. This enables the establishment of familiarity again which provides reassurance, comfort and encourages efforts towards rebuilding. The role of the temporary church structures post-quake is the facilitation of the initial recovery and enabling steps towards development and psycho-social recovery.

Visiting a church building and participating in the church service is another aspect of the relationship between people and place. Attendance at churches immediately following a disaster impact is often due to initial spontaneous expressions of grief (Eyre, 2007). Religious beliefs during times of difficulty can become important to individuals especially from non-practicing or secular societies (Eyre, 2007). Disasters bring change and loss causing individuals to re-identify with themselves and turn to church institutions. Church services were held succeeding the earthquake allowing all impacted community members to attend a spiritual space. The loss of a culturally significant building such as churches can also cause a loss of identity (Oliver-Smith, 1996). The church place holds importance to people as individuals associate their beliefs, identity and community with these structures. When the place is lost this is usually accompanied by grieving and can be seen in the actions of commemoration and remembrance. This demonstrates that post-disaster impact church landmarks are valuable beyond just the churchgoers as everyone is searching for a place of identity in difficult times. As recounted before, the ‘church is the people, not the building’ this can be seen in the attendance and the overall move away from churchgoing life. People make up the church and over time all four churches have been affected by the decrease in church members due to the correlation or economic growth (Barro and Mc Clearly, 2003). This demonstrates the greater relationship between the church and society and its influence between the people and the place of the church.

### ***5.3 Psycho-social recovery: commemoration and remembrance***

The impact of the 1931 earthquake is still evident in the churches as many commemorations exist and continuation of bonds established during initial recovery. Communal remembering is a way of grieving and is connected back to early twentieth century sociological and anthropological links (Eyre, 2007). This relates to distinguishing what is social from what has been lost and changed (Eyre, 2007). Commemorative activities are associated with broader changes in the community, such as safety and resilience to vulnerable and unsafe environments (Eyre, 2007). Remembering is a form of recovery (Herman, 1997). This addresses the psycho-

social recovery of a population by creating a safe collective environment for support. Waiapu Cathedral is an explicit example of commemorations representing and marking the vulnerability of their church community as many lives were lost during the communion on the day of the quake. In remembrance of this tragedy, the church holds a regular communion at 10:30am on Tuesday, the day and time the earthquake struck. This marks a point of change for the Waiapu Church community in recognizing the vulnerability of their environment. Grief is a social process (Eyre, 2007) which is fundamental to the recovery process of a collectively impacted community. As the other churches do not experience loss of lives directly from the church venue, the response through commemoration is not as prevalent. Commemoration that occurred sometime after the disaster event can be seen in the formalising of memorial services on a local to national scale (Eyre, 2007). This is seen in Hastings as the Clock Tower was not originally used as a location of remembrance until later in 1995 when the District Council installed memorial plaques. Originally, the intention of the Clock Tower rebuild was to symbolise the recovery of the city. It has since become a site for the public to have post-impact services and memorials (Eyre, 2007). The St Matthew's Church community has joined this commemoration, as has the wider public. Ultimately, commemoration symbolises the continuity through the past, present and future, and generating unity (Eyre,2007).

During disasters, lines of social separation are unseen, and people come together (Eyre, 2007). This was evident in Hawke's Bay with the communal prayer service at Clive Square a couple weeks after the earthquake displaying the unification of many church denominations. This reinforces the understanding of churches being well integrated in the life of the community and offering psycho-social recovery (Gaillard & Texier, 2010). This is known as the 'honeymoon' period post-disaster (Eyre, 2007) however, Napier churches in the inner city decided to form a Covenant which united the efforts of all four different denominations of churches for certain practices together. The shift from separate church denominations before the earthquake and united in practices after the disaster event shows the social and cultural dynamics of the church landmark under recovery. This notion goes against the 'honeymoon' theory and shows the continuation of bonds formed between churches post-earthquake impact still evident now.

#### ***5.4 Reinforcing modern recovery theory***

The timeline and supporting discussions on the significance and analysis supports the modern understanding of the recovery process showing that recovery is continuing over time and there is no distinctive end. The Kates and Pijawka model assumes that the recovery process has an end at approximately 500 weeks (Haas et al, 1977) however, the modern recovery process understanding is that there is no end and the process is always ongoing. This is clear in the church case study where the changes and continuations of activities and structures are still evident approximately 87 years on. Two of the church buildings both survived and stand today proving its strength. And other church buildings have been rebuilt and show the resilience of the community. The initial changes and remembrance gatherings post-earthquake, such as the school at St Matthew's Church, the uniting of the four inner Napier city churches Covenant, and the communion services in remembrance at Waiapu Church, are still evident.

Disasters act as a catalyst to re-adjust culture, surroundings and habits, this can be short-term changes in response to the event, or long-term shifts that are continued (Hoffman, 2016). A fluid process of recovery is the modern understanding (Berk et al, 1993), reflected in the church case study showing remnants of changes or continuations post-earthquake in the cultural memory of the community. This notion opposes Hoffman's (2016) statement that disasters are and will be forgotten and not a part of the cultural memory. In the analysis of the Hawke's Bay earthquake around the church landmarks, the 1931 earthquakes were not forgotten, and many have incorporated remembrance and sharing of history into the church buildings, activities, services and sermons. For the Waiapu Church has clearly evolved to share the recovery process with the public through the organization of self-guided tours, information displays, and pamphlets (Table 2). The connection with the disaster and its impact on the church continues to be shared with tourists and the public, ingraining into the cultural memory of the church this event that has shaped their current condition. As the cities of Napier and Hastings were rebuilt, this part of history has become significant to the culture of the cities evident in the photo-chronology of longitudinal analysis. This disaster has been imbued into the culture and practices of the community, demonstrated by the evolution of the church buildings and interactions. However, Hoffman (2016) suggests that the remembrance can be at a level of legend but not ingrained as conscious knowledge in the community. This could be apparent in the Hawke's Bay context. Changes and continuations have occurred in the churches but the expression of conscious knowledge in the community especially in the young generation was not investigated.

# Chapter 6. Conclusion

Long-term recovery can be better appreciated when viewed through a lens of continuity and change. The photo-chronology method highlights the points in change and continuity in the churches studied. It is clear that the magnitude of the damage correlates with the amount of change seen in the churches' physical, social and cultural structures. The degree of damage is seen to dictate what recovery and change is observed as crisis brings development.

The key findings associated with the first line of inquiry of posing a new method of tracking longitudinal recovery is as follows. This research pushes against the once accepted theory of the recovery process having an end and shows that the recovery process is ongoing and dynamic. Today, remembrance and development of the church community continues as a placeholder for the recovery process. The photo-chronology demonstrates the continuity and changes of the recovery over several decades. This reinforces that the recovery process is not bound by time and is not limited to an end. This theory was the baseline of the theoretical framework which motivated the analysis of the longitudinal findings. A critique from this study on the first line of inquiry about how the photo timeline method was used. The longitudinal analysis as a photo timeline is flawed in terms of the heavy reliance on the tangible change of the physical landmarks. Great assumptions from that which is not explicitly observed and therefore relying on church informants. There are huge differences between first-hand and second and third hand accounts. The narrow focus of this research investigating a small sample of churches means that the learnings should be applied to the context and should not be applied grandly. The photo-chronology does not account for the invisible and slight changes or improvements to the recovery of an area. More development is needed around the method to visually track the continuity and change within long-term recovery.

The key findings associated with the second line of inquiry being the observation of the role of religious institutions and landmarks over time. This was explored through the indicators of social, cultural and physical environments as well as the occurrences of continuity and change. Church landmarks can show the physical, cultural and social structural changes and continuation within a population. The temporary religious landmarks were an influential element in the recovery process for the heavily damaged churches. The temporary facilities allowed for

continuations and changes to occur. Also, the erection of a physical church temporary structure assists the community with the psycho-social recovery. The church landmarks are a useful index to explore change and continuity at the level of culture, society and the physical environments. The churches' recovery process was evident in the memorialisation and commemorations which continue through to the present day. However, this was only a strong correlation with the churches that had a high magnitude of physical damage experienced. This is a key finding supporting the baseline theory of recovery as an endless and dynamic system. Many of the present church activities and changes reflect the elements of the recovery process. The ignoring of the separations between church denominations initially occurred post-disaster and continue between the four inner-city churches that were investigated. All four committed to a covenant and one can only assume the traumatic disaster event of 1931 initiated the union of these churches. Again, supporting the notion of the limitless recovery process. A question that arose out of the discussion section was how to discern that the learnings from the earthquake are engrained into the conscious knowledge of the local population. More research is needed in understanding the levels of conscious knowledge around the consequential changes in community due to the disaster impact of 1931 earthquake. Ultimately, what can be concluded is that disasters allow a window of opportunity for change as crisis brings victories.

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