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Social Engagement in the Aftermath of a Natural Disaster

A case study of post-earthquake Christchurch

Melanie Bakema
March 2013

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"If you are seven floors in the air, you cannot hear what we breathe downstairs" (Anonymous respondent X5, 2012)

Melanie Bakema
Groningen, March 2013

Master Thesis Research Master
Regional Studies; Spaces, Places, Analysis and Intervention

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Preface

When I started my Research Master in September 2010, one of the first courses was to write a research proposal. I started looking at international literature related to urban renewal processes. Soon, I found two cities in the world with a planning focus on gentrification projects: Liverpool in the United Kingdom and Christchurch in New Zealand. However, in September 2010 the first earthquake hit Christchurch, one of the cities that by that time might become the focus of my research. Although I initially thought that I could forget about Christchurch as a possible case study, my professor Philip McCann – who later became my supervisor – pointed to the many possibilities of doing a research project in Christchurch. Therefore, my focus shifted from urban renewal to urban rebuilding, recovery and redevelopment. I became more and more interested in disaster planning and disaster management, partly because of my small contribution in the OECD project on post-earthquake L'Aquila, Italy.

Two years later, I got the opportunity to come to a small town called Lincoln, near Christchurch, to conduct fieldwork for my master thesis. I am very happy that the AERU at Lincoln University provided me with their knowledge about the situation and expertise in the area. It was a nice working environment and Paul and Caroline, thank you very much that you were willing to host me and help me with my research.

The conducting of interviews was very interesting and provided me with the necessary information for my thesis. On the other hand, doing fieldwork in a post-disaster context was sometimes very tough. As an outsider you cannot imagine the devastations that resulted from the earthquakes, until you experience it and see it with your own eyes. By visiting several community meetings and informal dinners, I experienced the emotions of people. I understand that it could have been very hard to talk about the disastrous situation with me during the interviews and therefore, I am very grateful to all of the participants for willing to share their experiences and stories with me.

Many thanks to the staff of the Faculty of Spatial Sciences for the interesting courses and nice discussions. I learnt a lot in the past five years about planning, demography, cultural and economic geography, but also about the university and the academic world through various extracurricular functions. Most of all I am very glad that I got the opportunity to develop myself through studying and conducting research in Dublin, Geneseo (USA), Mexico and Christchurch. These activities created my interest and enthusiasm for academic research. Therefore, I am looking forward to start with my PhD after this thesis and to continue with my studies on the Faculty of Spatial Sciences. In this regard, I would like to thank Constanza in particular for all the help and support. Also, special thanks to Philip for letting me participate in the research on L'Aquila and for giving me the opportunity to conduct my fieldwork in New Zealand.

Finally, many thanks to my friends and especially my boyfriend Thomas for their on-going support, encouragement and belief in me. Last but certainly not least, I would like to thank my parents, brothers and sisters and the rest of my family for always supporting their youngest daughter, sister and auntie!

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Abstract

In 2010 and 2011, the city of Christchurch in New Zealand experienced multiple major earthquakes that destroyed large parts of the city. Disasters such as these earthquakes can be regarded as shock events that trigger a transition in a society. Planning systems in a crisis context as a result from a disaster are often characterized as top-down with little room for social engagement. However, theories on recovery state that social engagement in the aftermath of a disaster is very important. Without social engagement, it is impossible to create social capital which is needed to become resilient as a place and community. So, there is a mismatch between the need for social engagement according to the theory and the actual implementation of it in practice.

Although there are some good aspects of social engagement in the recovery process of Christchurch – such as the big 'Share an Idea' public participation exercise that informed the Christchurch Central Recovery Plan – people have the feeling that the process has a too much top-down character. They think that their commitment and willingness to engage is not as much enhanced and encouraged as they would like. Also, the unclear division of responsibilities between governments on different levels does not contribute to a development of trust among the residents in a successful recovery of their city.

As a result of this study, it appears that governments should engage with communities through connections that are developed prior to a disaster. It is important to organize the engagement activities dependent on the context, because every situation is different and requires an appropriate and suitable form of engagement. Moreover, engagement should be different in every stage of the post-disaster transition and there should be ongoing engagement during the entire recovery process.

The reason why it is important to integrate social engagement in post-disaster recovery processes, is that people need to feel ownership of the plans for recovery that are created. They have to be part of the journey towards their future city. This study proves that time pressure in recovery processes in order to rebuild a city as soon as possible should be balanced with the embracement of the transitional city, because people need to stay attached to their city in the transition from the disaster towards the future.

This study focuses on the role of social engagement in the post-earthquake transition in Christchurch. It is the result from a literature study on disaster planning and related theories, from a document analysis of the plans and policies for recovery that are created, from observations of formal and informal meetings, and from sixteen interviews that are conducted with various stakeholders in the recovery process of post-earthquake Christchurch. The importance and strengths and weaknesses of social engagement in the recovery process of Christchurch are the main subjects of this thesis. The relationship between social engagement and resilience of post-disaster places and communities is examined and lessons are presented for other pre- and post-disaster places about the integration of social engagement in a recovery process.

Keywords: disasters, planning, transition, social engagement, resilience, Christchurch.

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Abbreviations and contextual definitions

Christchurch
Christchurch is the third city of New Zealand and has approximately 348,000 inhabitants. The city is located on the South Island and recently experienced multiple major earthquakes. For the purpose of this study, the city of Christchurch as well as the surrounding districts of Waimakariri and Selwyn are studied. Although the thesis refers to 'Christchurch', the greater Christchurch area is used as subject of study.

CERA = Canterbury Earthquake Recovery Authority
CERA is a government authority that is established after the second earthquake that hit the city of Christchurch in February 2011. The authority has a leading role in the recovery process of greater Christchurch and coordinates the activities of the different affected districts.

CCDU = Christchurch Central Development Unit
The CCDU is a special unit of CERA that is set up in April 2012 to focus on the rebuilding of the Central Business District (CBD) of Christchurch. The CCDU was responsible for the creation of the blueprint plan as part of the Christchurch Central Recovery Plan.

CCC = Christchurch City Council
The CCC is the municipality of the city of Christchurch and is responsible for various projects and ongoing activities in the recovery process of Christchurch.

SCIRT = Stronger Christchurch Infrastructure Rebuild Team
SCIRT is set up after the earthquakes as an alliance between multiple parties and is responsible for the rebuilding of the horizontal infrastructure in Christchurch. SCIRT is part of the CERA, the CCC and the New Zealand Transport Agency and works together with among others the businesses City Care and Fletcher. SCIRT created its Stronger Christchurch Infrastructure Rebuild Plan for the rebuild of the horizontal infrastructure.

Recovery Strategy = Recovery Strategy for Greater Christchurch
The Recovery Strategy for Greater Christchurch is a strategic document with a statutory part that is created by CERA in May 2012. It sets the direction for the recovery of greater Christchurch on a strategic level and it proposes that various more detailed programs – such as the Christchurch Central Recovery Plan – have to be created for the recovery on a more operational level.

Central City Plan = Christchurch Central Recovery Plan
The Christchurch Central Recovery Plan describes how the central city of Christchurch is going to be rebuild. One of the social engagement practices that informed the draft of this central city plan, was the big 'Share an Idea' project. The final draft is created by the CCC and is delivered to the Minister of CERA. CERA and the CCDU created the final central city plan in July 2012, including a blueprint plan for the rebuild of the central city.

People
This thesis uses the words 'the people' to refer to the residents of greater Christchurch. Although the words are chosen to describe the residents, it is impossible to generalize 'the people of Christchurch', because they are all differently affected by the earthquakes.

1. Introduction

1.1 'Shaky Christchurch'

"There is almost certainly a magnitude 5.0 out still there, and we would guess quite a few 4s and 3s on a daily basis. […] In Canterbury there may be an ongoing sequence over a period of a few decades." (Berryman in: Bayer, 2012).

Since a few years, Christchurch and earthquakes are two inseparable stories. The city has recently been the scene for multiple devastating earthquakes. Residents of the city never expected disasters of this scale to happen in their city. In actual fact, New Zealanders were waiting for a big earthquake to happen in the capital city of Wellington. However, reality proved different. Two years after the earthquakes, Christchurch has just recently begun to rebuild its city center and many neighbourhoods are still desolated, because the devastations forced people to move to other areas in and around the city. The recovery process is still high on the agenda in Christchurch and the reality has to be faced that the city is never going to be the same again.

In 2010 and 2011, several big earthquakes hit the city of Christchurch. The first occurred on the fourth of September 2010. By that time, it was the heaviest earthquake in decades with a magnitude of 7.1 on the Richter scale. However, many more earthquakes and aftershocks would follow. The most devastating earthquake occurred on 22 February 2011. It was an earthquake with a magnitude of 6.3 and many buildings were damaged, especially in the city center. Also, where the September earthquake did not cause any loss of life, the earthquake in February caused 181 fatalities. This high number of fatalities is due to the time of the earthquake, which was on the middle of a working day, and to the fact that the epicenter was located very close to the surface. On thirteen June 2011 again a big earthquake struck the city. It was a magnitude 6.3 as well, but it did not cause any loss of life. The reason for this is among others the fact that the city center was already damaged and not occupied anymore. Also, the epicenter of this earthquake was much deeper located than of the February quake. The last big earthquake that Christchurch experienced was on six January 2012. It had a magnitude of 5.0 and there were no fatalities (Dalziel and Saunders, 2011). Figure 1.1 shows a table of the number of earthquakes in the Canterbury region since four September 2010.

Table of seismic activity in the Canterbury region

Magnitude	Number
7.0 and higher	1
6.0 – 6.9	3
5.0 – 5.9	55
4.0 – 4.9	494
3.0 – 3.9	3870

Figure 1.1 – Table of seismic activity in the Canterbury region (Source: Geonet, 2013)

Furthermore, the occurrence of a big earthquake in a particular region influences the chance on another big quake. On the other hand, with every month that passes without a major aftershock – with magnitude 5.0 or higher – the probability decreases of another big earthquake to happen. Figure 1.2 shows a graph of the significant effect that the big earthquakes in the Canterbury region had on the sequence of aftershocks that happened (Geonet, 2013).

Graph of aftershock decay sequence for Canterbury

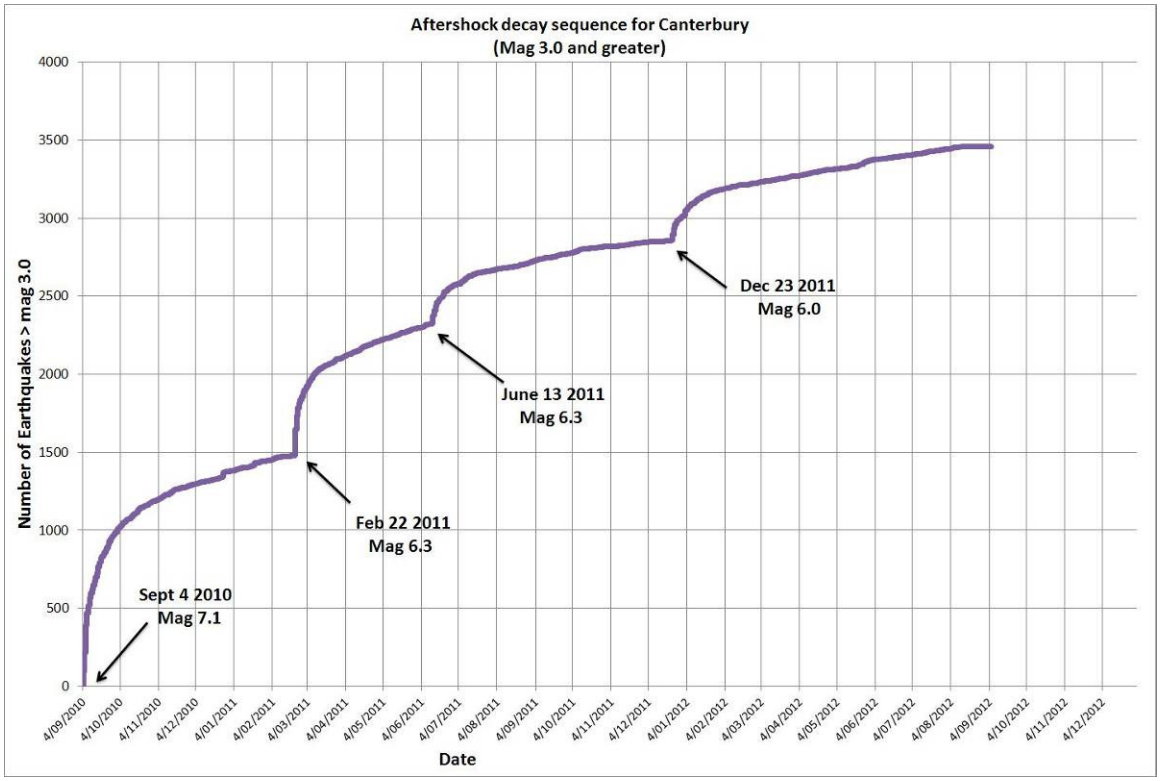

Figure 1.2 – Aftershock decay sequence for Canterbury (Source: Geonet, 2013)

1.2. New Zealand and Christchurch

New Zealand is a country on the southern hemisphere and it has approximately 4.3 million inhabitants (CIA, 2013). Christchurch is the third city of New Zealand, after Auckland and the capital city of Wellington that are located on the North Island. Christchurch is located on the South Island and it has around 348,000 inhabitants (Dalziel and Saunders, 2011). Figure 1.3 shows a map of New Zealand and in figure 1.4 a map of the greater Christchurch area is presented. Christchurch is the central city in the Canterbury region and it is surrounded by the Waimakariri and the Selwyn district (CERA, 2012b). Around ninety per cent of the Canterbury area is pastoral land and around eight per cent of the area is covered by forests. However, the key sectors of Canterbury are business services, health and community services and education, information and communications technology, specialized manufacturing, tourism and food and beverage manufacturing. These industries are for the biggest part located in Christchurch. For the Canterbury region, agriculture, forestry and fishing is another key sector (Dalziel and Saunders, 2011).

Figure 1.3 – Map of New Zealand (Source: Google Maps, 2012)

Figure 1.4 – Map of Greater Christchurch (Source: CERA, 2012b)

1.3 Theory

Social engagement in the process of redevelopment after a natural disaster is very important. Participation by the civil society and by other actors, such as the local businesses, has to be incorporated in the redevelopment process in order to create a sense of ownership of the plans and policies with regard to the rebuilding of their city. However, planning in a challenging context – after a shock event such as a natural disaster – is often characterized as top-down planning with a dominant government that has the power to make decisions. Moreover, there is often no or little room for public engagement in a post-disaster context. This leads to a discrepancy in planning processes. On the one hand, social engagement creates social capital which is important in order to develop resilient places and communities. But on the other hand, a place needs to be rebuild as soon as possible which makes time-consuming social engagement practices unpopular in the eyes of decision-makers.

After a shock event such as a natural disaster, a sudden transition takes place from a normal situation to a crisis situation. After a period of crisis, the situation has to go back to normal again. The capacity of a region or community to recover from a shock event such as an earthquake, and therefore to adapt to a changed situation, is called resilience. There is a difference between a traditional, 'bounce-back' form of resilience – which encompasses that places and communities get back to the normal pre-disaster situation – and a new, 'bounce-forward' form of the concept. Recent use of resilience refers to the potential of a shock event to open up opportunities to go to another, new, desired normal situation. Finally, the embracement of the concept of 'transitional city' is more and more regarded as important in post-disaster recovery processes.

1.4 Social engagement in the aftermath of a natural disaster

This study examines the role of social engagement in different stages of the transition process after a natural disaster. It investigates how public participation is embedded in the planning process of rebuilding the city of Christchurch. Also, it examines how the public was engaged in the creation of the plans and strategies for regional re-development after the earthquakes. Moreover, the relationship between social engagement and resilience in a post-disaster context is investigated. By conducting this research, insights are obtained in the role of social engagement in different stages of the transition process of redeveloping the city of Christchurch after the earthquakes.

Two years after the natural disasters many people are still working on the reconstruction of Christchurch, on the rebuilding of the completely destroyed city center and on the development of plans and strategies for recovery after the earthquakes. Several government bodies are responsible for the governance and organization of the recovery process. After the first earthquake in September 2010, the rebuilding was led by the Christchurch City Council (CCC) and the Ministry of Civil Defence and Emergency Management played a major role in the early response face. Whereas the local (government) institutions were responsible after the first earthquake, a national state of emergency was declared after the second big earthquake in February 2011. A central government agency called Canterbury Earthquake Recovery Authority (CERA) was set up in response to the February earthquake and became the leading authority in the recovery process of greater Christchurch.

There is a variety of feelings and experiences of people with regard to the recovery process. Although people admit that there were some good social engagement projects in the recovery process of Christchurch, they have the feeling that the process had and still has a too much top-down character and that their commitment and willingness to engage is not as much enhanced and stimulated as they would like it to be.

Research problem

Planning in a challenging context, whether that is because of a (natural) disaster, a financial crisis or a war, is different than planning in times without pressure on the planning process. Values of people that were prior to a disaster regarded as very important might be neglected in times of crisis, because bigger issues are at the forefront. A consequence of this is that there is no room for engagement with residents or with other actors in decision-making processes. The voices of these actors with regard to the actual rebuilding of the city or with regard to the establishment of plans for the future are therefore not heard. So, the problem is that the participation of these (local) people is not guaranteed in challenging times, but is needed in order to develop resilient places and communities.

Research aims

By conducting this research with a special focus on the case of post-earthquake Christchurch, knowledge will be gained about planning in post-disaster places. Also, insights will be obtained in the relationship between the identity of people and the reflection of this in recovery plans and visions. The general aim of this study is to learn about the importance of social engagement in the planning process of rebuilding areas after natural disasters, and about the strengths and weaknesses of it in the case of Christchurch. Moreover, insights will be obtained in the relationship between resilience of places and communities, and social engagement practices in the process of creating recovery plans. The knowledge that is gained through the experiences in New Zealand will at the end be translated to the other contexts. The last chapter of this study will therefore be a post-script that provides lessons for other contexts with regard to the recovery after a (natural) disaster and to create resilient places and communities.

Research questions

In order to capture the research problem and aims, the central question in this research is:

"What is the role of social engagement in the transition process of redeveloping the city of Christchurch after the earthquakes?"

This main question can be subdivided into the following sub-questions:

1. "How is social engagement embedded in the process of establishing plans and policies for regional recovery?"
2. "What is the relationship between social engagement and resilience of a region?"
3. "How were the social engagement projects in the rebuilding process of Christchurch effective for creating a resilient city?"

1.5 Outline

First, the theoretical foundations for this study will be presented in chapter 2. Different theories on transitions, planning in a crisis context, social engagement and resilience will be discussed. Then, chapter 3 describes the situation in Christchurch. It explains the planning context of New Zealand, the governmental post-disaster situation in Christchurch and the process of establishing plans and policies regarding the recovery of the region. The methodological justification will subsequently be discussed in chapter 4. The different methods of data-collection, a philosophical justification and ethical issues will be central parts in this chapter.

Chapter 5 forms an analysis of the data that is obtained for the purpose of this study. The sections in this chapter are among others devoted to an elaboration on the post-disaster transition that takes place in Christchurch, to the different social engagement practices in the recovery process that led to the recovery plans, and to the role of governments and community organizations in the recovery process. The focus of chapter 6 is on the results of this study. The strengths, weaknesses and importance of social engagement in the recovery process of Christchurch will be synthesized, it will be described how good social engagement should look like, and the relationship between the recovery process of Christchurch and resilience will be examined.

The main conclusions of this thesis will be described in chapter 7. The strengths, weaknesses, opportunities and threats of the recovery process are presented in a SWOT-analysis and at the end this chapter a discussion takes place of the findings. Finally, chapter 8 forms a post-script about how to translate lessons learnt from the Christchurch case to other post-disaster contexts or to places that are highly vulnerable to natural or man-made disasters.

Figure 1.5 – Picture of Clock Tower in Victoria Street, Christchurch. The clock stopped at the time of the February 2011 earthquake (Source: Author)

2. Theoretical Framework

This chapter provides a literature review of existing leading theories on transitions in post-disaster planning processes. In particular, the role of social engagement in post-disaster transitions will be discussed. Figure 2.1 shows a funnel of the structure of this theoretical framework. First, the concept of transition will be examined. Part of the transition in post-disaster places is the crisis stage, so planning during this phase is analyzed in the second section on planning in a challenging context. After that, the role of social engagement in the redevelopment process will be described and in particular the importance of it during the crisis stage. Subsequently, the role of social capital in developing post-disaster visions and plans will be examined. Additionally, the links of the above mentioned theories with the concept of resilience, as well as with post-disaster planning in other cases in the world are described throughout the whole chapter.

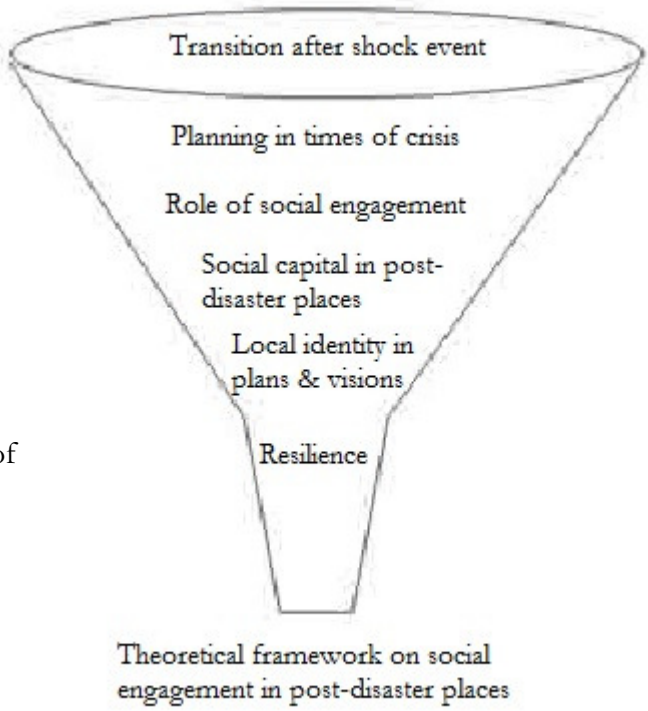

Figure 2.1 – Funnel of structure of theoretical framework (Source: Author)

2.1 Transitions

Disasters can be described as shock events that suddenly change all prevalent systems, structures, norms and values in a society. They are expected to increase in frequency, duration and magnitude (Folke et al., 2005). The Centre for Research on the Epidemiology of Disasters (CRED), describes a natural disaster as "a situation or event [which] overwhelms local capacity, necessitating a request to a national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering." (Jha et al., 2010, p. 339). A high vulnerability in combination with the occurrence of a natural hazard leads to a natural disaster.

There is a difference between natural hazards and disasters; whereas hazards happen, disasters are caused. A disaster is regarded as a serious disruption of the functioning of a community and a (natural) hazard is a potential (natural) threat (Stewart and Donovan,

2008; Cioccio and Michael, 2007). Disasters are regarded as exceptional natural events; however, hazards are not that exceptional anymore. According to Stewart and Donovan (2008), "the distinction between natural and technological hazards is becoming distinctly blurred because humans do not simply occupy the physical environment, they modify it." (p. 211). A shock event such as a natural disaster often results in a situation that can be characterized as turbulent, chaotic and full of uncertainties.

A shock event is very often the direct cause of a transition in a society. According to Rotmans et al. (2001), a transition consists of "transformation processes in which society changes in a fundamental way over a generation or more." (p. 1). Next to that, they state that it is a "gradual, continuous process of structural change within a society or culture." (p. 2). Although most literature on transitions deals with transitions in a non-disaster context, they provide interesting theories and concepts with regard to complexity and uncertainty in a disaster context. Van der Brugge et al. (2005) argue that there are three key concepts on which the underlying approach of transition theory is based. These concepts are: multi-stage, multi-level and transition management. First, the multi-stage characteristic will be examined.

There are several consecutive stages in a transition, which are shown in figure 2.2. Before the event of a disaster, a society or system does not show any significant change. The period that follows after a shock event like a natural disaster is the take-off stage. This unstable stage is characterized by the presence of many uncertainties and existing structures are most challenged here. The acceleration phase contains processes of structural visible changes that take place "through an accumulation of socio-cultural, economic, ecological and institutional changes that react to each other." (Rotmans et al., 2001, p. 3). Collective and mutual learning processes are central in this stage. The last stage is the stabilization stage in which changes in society or system slow down and in which a new, stable equilibrium is reached. In terms of a transition triggered by a disaster, four stages of social drama can be defined (Turner, 1982, in: Pezullo, 2009). The stage of breach starts when a disaster causes serious disruption of a city. After this breach, a period of crisis is opened. When affected communities start to reinvent their way around, a city is in the stage of redress. An example of this redress stage is the offering of tours by local people for tourists to watch the affected areas in New Orleans, USA, after hurricane Katrina. After the redress stage, either a period of reintegration or of recognition of schism begins (Pezullo, 2009).

Post-disaster planning processes for recovery are often "construed as a race towards 'normal' or 'better.'" (Vallance, 2012, p. 401). However, a distinction can be made between two forms of new equilibriums as the final stage of a transition after a disaster. The first kind of new equilibrium involves that societies go back to the normal situation as it was before the event of the disaster. Another kind of new equilibrium however, can be characterized by a whole new situation as a result of the transition. The take-off stage determines whether the transition in society leads to the returning to the old, pre-disaster situation or whether it leads to a new equilibrium (Pendall et al., 2010). Therefore, the risk for a shift into undesired regimes is the highest in this stage (Folke et al., 2005).

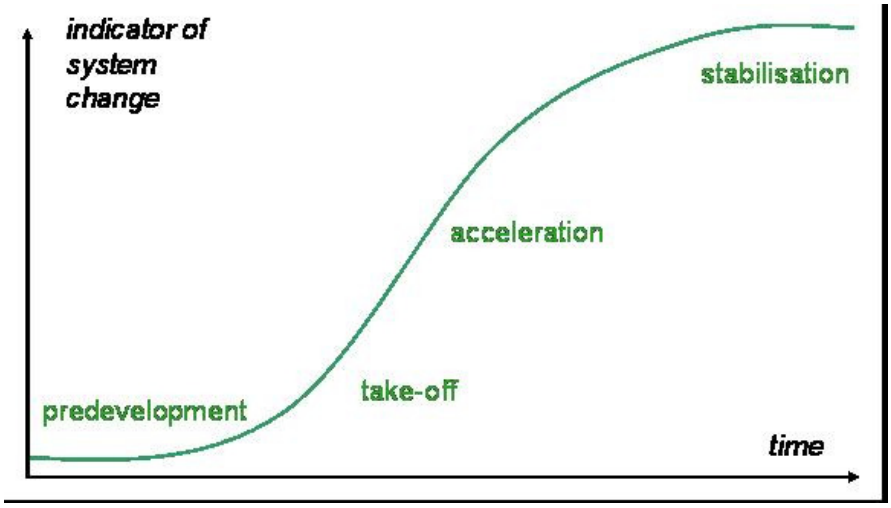

Figure 2.2 – The four stages of a transition (Source: Rotmans et al., 2001)

The two possible equilibriums as a result of a post-disaster transition relate to the concept of resilience. The notion of resilience refers to the ability of communities to deal with change (Howitt, 2011). Generally, it is defined as the capacity of a community or region to return to the normal situation after disturbance; to the situation before the shock event. A reduction of vulnerability of places and communities is important for creation of resilience. According to Lansford et al. (2010), "resilience means the capability of a community to make necessary adaptations and advance themselves through the opportunities that are presented after the disaster unfolds." (p. 11). So, resilience is the ability to withstand, to adapt to and to recover from external adverse shocks (OECD-Groningen Research Team, 2012). Pendall et al. (2010) regard cities as resilient when they are able to bounce-back to their pre-disaster state. Nevertheless, they also state that the assumption of resilience as the capacity to 'bounce-back' to the normal state is only one version of resilience; an 'engineering', single-equilibrium version of resilience. In this traditional view, resilience means a return to normalcy (Dos Santos and Partidario, 2009). New studies on the other hand, recognize resilience as the ability of a community to bounce-forward to a new desired equilibrium (Manyena et al., 2011). In this context, resilience is viewed from a systems framework and it "refers to the ability to change or adapt in response to stresses and strains." (Pendall et al., 2010, p. 76). Pendall et al. (2010) argue that this second definition of resilience is based on the assumption that there are multiple equilibriums. A shock event in this case might cause a shift in a system from one equilibrium to another. "Resilience in this context is a measure of robustness and buffering capacity of the system to changing conditions." (Berkes and Folke, 1998, p.12, in: Pendall et al., 2010, p. 74).

A model for resilience from a complex adaptive systems perspective is the adaptive cycle, as is shown in figure 2.3. This model is based on the assumption that systems and therefore cities are vulnerable for internal and external surprises, stresses and shocks, which can be translated to four different phases of adaptation. In the exploitation stage, all systems and structures in a community function well and the level of resilience is high. The lack of dynamics in this stage however, makes the society vulnerable for disasters which lead to the shift of the system to the conservation phase with the characteristic of having a low resilience level. A society will transfer to the release phase as a consequence of a shock event, such as a natural disaster. Resilience starts to increase again when innovation and restructuring after a disaster begin (Pendall et al., 2010).

Consequently, resilience can be regarded as a bounce-back or as a bounce-forward option. However, according to Manyena et al. (2011), the bounce-back option is less applicable to cities. Physical or physiological reasons might make it impossible for humans to go back to the situation before the event of the disaster, so humans have to adapt to a changed reality. Moreover, "the notion of bounce-forward is to see disaster as an opportunity for local livelihood enhancement rather than as simply a return to status quo ante." (Manyena et al., 2011, p. 423). Additionally, after conducting a study on post-tsunami Aceh, Indonesia, Mills et al. (2011) question the increase of resilience by simply reconstructing places to the post-disaster situation – as is assumed with resilience as a bounce-back option. They state though that diversity in communities – socio-economical, institutional, ecological et cetera – increases the ability of a place to adapt to changing circumstances and thus contribute to resilience (Mills et al., 2011).

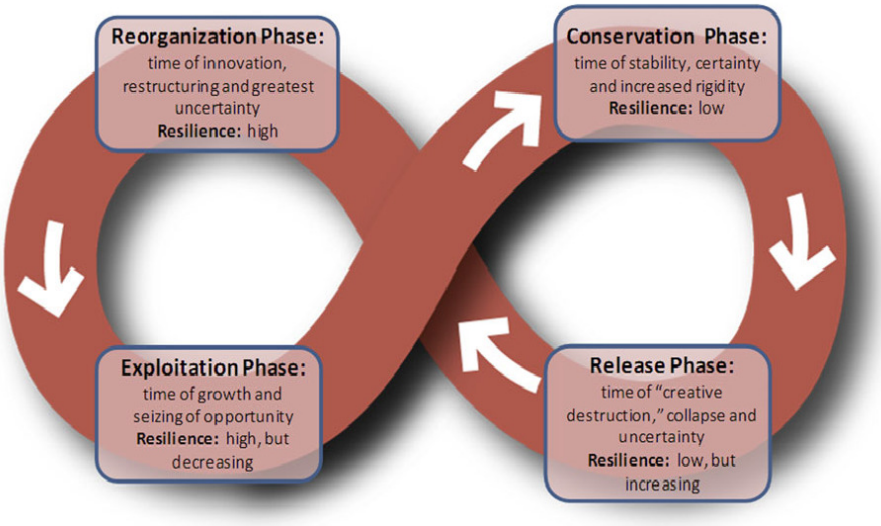

Figure 2.3 – A four-phase adaptive cycle (Source: Holling and Gunderson, 2002, in: Pendall et al., 2010)

The second concept that forms the basis of the transition theory is the multi-level characteristic of transitions. Transitions take place on three levels: on a macro-, on a meso- and on a micro-level (Van der Brugge et al., 2005). Figure 2.4 shows these different levels. The macro level – also regarded as the landscape level – consists of changes that take place in the macro economy, in the natural environment and in broader cultures and views on the world. Transitions at this level deal with slow trends and large scale development. Transitions at the meso level – also known as the regimes level – are changes in patterns, institutions, and rules and norms. Lastly, the micro level – also regarded as the niche level – consists of changes with regard to individual actors, alternative technologies and local practices (Van der Brugge et al., 2005; Rotmans, 2001).

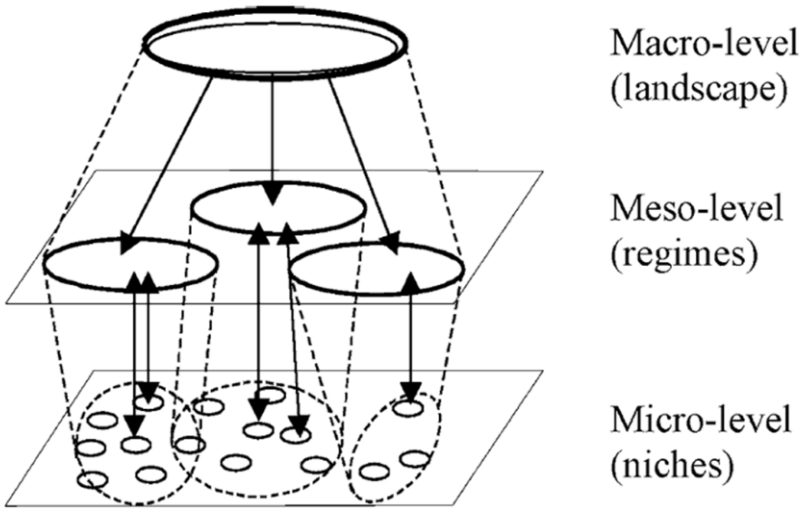

Figure 2.4 – Multi-level concept of transitions (Source: Rotmans, 2001)

In addition, Loorbach (2010) distinguishes four levels on which transitions take place. The first three levels – strategic, tactical and operational – correspond respectively with the three levels that are described in the previous paragraph. However, Loorbach (2010) adds the governance activities to this that are conducted on each level. On the strategic level, he argues, "we identify processes of vision development, strategic discussions, long-term goal formulation, collective goal and norm setting, and long-term anticipation." (p. 168-169). Next, on a tactical level, activities are steered with regard to societal structures or (sub-)systems. The activities take place to achieve certain goals within a specific context, but they are not related to the overall goals on the strategic level. Activities that take place on the operational level are related to experiments and actions "that have a short-term horizon and are often carried out in the context of innovation projects and programs." (p. 170). So, whereas the authors above distinguish levels in terms of scale, Loorbach (2010) adds the temporal characteristic to the multi-level concept. Moreover, the fourth level with regard to transitions according to him, is the reflexive level. Reflexivity relates to monitoring, assessing and evaluating ongoing policies and societal changes, and it has to be an integral part of planning processes that deal with transitions (Loorbach, 2010).

The three main levels on which transitions take place influence each other; initiatives at the micro level can be stimulated by developments at the macro and meso levels – top-down influencing –, or micro level activities can be a trigger for developments on the higher meso and macro levels – a bottom-up influence (Rotmans, 2001). A combination of the multi-stage and the multi-level characteristics of transitions results in the statement that regimes on the meso level often act as impeding factors in the pre-development phase, because the regimes often have a conservative character. The take-off stage of a transition starts when innovations at the niche or micro level and developments at the landscape or macro level mutually enhance and stimulate each other. The regime level plays again the biggest role in the acceleration phase, because of the practical application of the activities. New regimes that have been built up at the meso level slow down new developments and lead to the stabilization of the transition (Van der Brugge et al., 2005).

After this elaboration on the multi-stage and multi-level character of transitions, the rest of this chapter will be devoted to social engagement in the management of post-disaster transitions. What is important in this regard to mention here, is the role of the government. All actors on the different levels can stimulate, slow down or even block a transition. Because of the interactions between the government and these actors, governments should take a leading role in transition management. This does not mean that the government should impose and force other actors to conduct activities; it should stimulate change by "inspiring a collective learning process and encouraging other actors to think along and participate." (Rotmans, 2001, p. 0011). Additionally, governments on various levels have to play a different role in transition management. Local and regional governments are closer to the citizens than the national government. Therefore, these lower governments should focus on social transformations in their regions. Subsequently, governments on all levels should allow the private sector to conduct its own activities and they have to give companies enough room to be innovative.

On the other hand, the government should provide some direction in transition management. This guiding role should be different in each stage of the transition. According to Rotmans (2001), the government should act as the catalyst and director in the pre-development stage. Discussions in this stage must take place with other actors in a wide playing field, in order to encourage many initiatives and activities. In the take-off and in the acceleration stage, governments must play a more leading role in order to stimulate mutual learning processes and to create consensus about possible solutions. In the last stabilization stage, the government must act as a controller and consolidator; it should devote its role towards embedding the transition in a society and it should prevent that negative aspects of the transition cause that societies shift into undesired regimes. So, Rotmans (2001) argues that the role of the government is two-fold: on the one hand it should reach certain goals with regard to the content of the transitions, and on the other hand it should ensure that the process of the transition is going in the right direction. However, as mentioned above, governments should allow room in transition management for the private sector and for societies themselves in terms of landscape factors – such as price setting – and socio-cultural factors (Rotmans, 2001).

The last issue that will be described here, is that post-disaster places in the world start to embrace the concept of 'transitional city'. Although places experienced a disaster which caused a lot of physical damage and potentially fatalities, people regard the post-disaster transition as an opportunity to employ temporary activities. In Christchurch for instance, several grassroots initiatives arose that have the ambition to conduct temporary activities in empty spaces in the city (Vallance, 2012). According to Vallance (2012), these "temporary solutions are immensely valuable because they promote experimentation and innovation; provide opportunities for trial runs; give residents and recovery authorities the opportunity to do something useful; and, importantly, temporary activities help balance the hasty demand for progress with the time needed for careful planning." (p. 402). Subsequently, temporary activities will enhance the recovery of cities by:

- "Fostering, and supporting, retention of, creative talent;
- Fostering entrepreneurship, incubation and testing of new business ideas and products;
- Creating an ever-changing palette of entertainment and activity;
- Replacing lost amenity with interesting and attractive places;
- Increasing foot traffic and patronage for neighboring businesses;
- Enhancing community engagement and confidence in the city;
- Promoting regeneration in adjacent buildings." (CCC, 2012, p. 4).

So, a transition in society triggered by a disaster has different stages and can lead to a variety of new situations. The embeddedness of social engagement in planning processes is dependent on the different stages of a transition. A place needs to become livable again as soon as possible and therefore, there is not much social engagement in the crisis stage of immediate response to the disaster. Although short-term rebuilding is necessary, long-term goals should be inherited in the initial steps of redeveloping post-disaster places (Ingram et al., 2006). The following section will take a closer look at the crisis stage after the event of a disaster and it will examine how planning systems in this stage of crisis can be characterized.

2.2 Planning in a challenging context

As mentioned in the previous section, a post-disaster society can be characterized as turbulent, chaotic and full of uncertainties. Moreover, the wishes of people in a society with regard to the future state of their living environment can be very different which can result in conflicts between different groups of people in society (Lindell and Prater, 2003). This section will dig into the crisis stage of the post-disaster transition by examining planning systems in challenging contexts. First it will describe planning processes and decision-making after shock events and after that, suggestions from the literature will be made about how to design resilient planning systems.

2.2.1 Planning and decision-making after shock events

Following Christensen (2007), although planners tend to reduce uncertainties, an important task for them is to recognize and address uncertainties rather than to ignore them. "If uncertainty is the source of planner's problems, it can also be the path to those problems' solutions," she states (Christensen, 2007, p. 71). Beck (2006) goes even a step further by saying that humans believe they can calculate, control and predict everything and therefore reduce uncertainties and minimize risks. However, disasters arise because not everything can be predicted and calculated (Beck, 2006). Christensen (2007) argues that there are four types of situations that planners can face which differ in the level of uncertainties:

1. Known technology, agreed goal;
2. Unknown technology, agreed goal;
3. Known technology, no agreed goal;
4. Unknown technology, no agreed goal.

Planners have to work differently in each of these circumstances. In the first situation, decision-making processes can follow standard, routine procedures, whereas planners have to search for order in chaos in the fourth situation. Bonn and Rundle-Thiele (2007) regard governance and planning systems in periods of abrupt change – like in the circumstances characterized by Christensen (2007) – as intuitive, less analytical and less consultative, whereas planning in a stable situation is more cooperative, formal and analytical. Because of the fact that many things are certain and predictable in a normal situation, decision-making in these stable environments is comprehensive and slow. Decision-making following a shock event however, is often simplified and fast, because there is no time for a comprehensive and consultative way of planning (Bonn and Rundle-Thiele, 2007). Additionally, Friend and Hickling (2005) regard planning under pressure as a continuous process of choosing strategically through time. They view

planning in times of crisis as a cloud with blurred lines, depth, edges and with a shape that constantly changes. Because of the dynamic context in which planning systems are located, they have to be designed in a way that increases its resilience.

2.2.2 Designing resilient planning systems

The many shock events that societies experience today lead to a world full of turbulence, complexities and uncertainties. Moreover, crises and disasters are changing. They last longer and often cause more damage (Boin, 2009; Stewart and Donovan, 2008). Morover, Boin (2009) states that "societies are becoming more vulnerable to relatively small disturbances" (p. 369) and that current networks of people and the connections between them are so complex that it is hard to find the location of the disturbance. In order to be able to adapt to these sudden changes, "resilience is increasingly seen as a critical feature that reflects the capacity of a system to absorb disturbance and reorganize without collapsing." (Dos Santos and Partidario, 2009, p. 1517). As a consequence of these many uncertainties, planning systems in periods after shock events are most robust when they contain a high level of flexibility. This flexibility will allow for the successful adaptation to possible future changes (Friend and Hickling, 2005).

Dos Santos and Partidario (2009) describe that a shift is needed in policy making and planning in order to create resilient planning systems. Approaches and processes have to change "from being essentially rationalist, reactionary or bureaucratic, to becoming more adaptable, anticipative, flexible, collaborative and co-accountable." (p. 1525). They distinguish five characteristics on which planning systems have to be based in order to be able to manage resilience and to build adaptive capacity. The first is that planning systems have to be anticipative. It is important to signal disturbances in an early stage and to invent possible solutions. This anticipative capacity avoids that societies develop into undesired regimes. The second characteristic is innovativeness. Because of the many uncertainties and complexities of the future, innovation and creativity are the main ingredients to generate better solutions than repeating old interventions; "'business as usual' actions […] may not resolve deep problems" (p. 1526). Next, planning systems have to be used as continuous learning processes. Since the fast changing character, societies must learn to adapt faster to situations than they were used to. Finally, planning systems have to be communicative. This characteristic is important, among others because relationships have to be built, consciousness has to be raised and action has to be mobilized to make planning systems resilient (Dos Santos and Partidario, 2009).

A consultative planning approach is needed in order to rebuild places as soon and good as possible during the crisis stage, and at the same time to take the longer term needs for a place into consideration. Therefore, already in the crisis stage after a disaster participation is important (Ingram et al., 2006). Christensen (2007) argues additionally, that as soon as all participants in a planning process agree on a certain solution, planners should treat this agreed solution as a working hypothesis rather than as a certain technology. So, an agreed approach to solve problems in a post-disaster context should always contain a certain level of flexibility. In this way, a planning system is more able to adapt to changing circumstances and is therefore more resilient. The next section will focus on this aspect of social engagement in times of rebuilding after disasters.

2.3 Social engagement

Many theories emphasize the importance of social engagement and participation in planning processes. In order to integrate the wishes, needs and knowledge in processes with regard to the rebuilding of places after disasters, it is necessary to engage with local people (Yamamura, 2010). However, practice often proves different; in times of crisis and with the existence of an urgent need of rebuilding places, governments tend to plan in a top-down, rational, less-collaborative manner (Ingram et al., 2006; Innes and Booher, 2010). The International Association for Public Participation (IAP2) distinguishes several forms of public participation, as shown in figure 2.6. The most limited form of public participation according to this spectrum is to inform people in a one-direction information flow from the government and decision-makers to the public. The other side of the spectrum is to empower people. This means that the people are the owners of the decision-making processes. The IAP2 argues that the empowerment of people is not necessarily the best form of public participation. It depends on the context and of the project which form of public participation is most suitable to reach a particular goal (IAP2, 2013).

Additionally, a well-known categorization of different forms of public participation is the ladder of participation of Arnstein as is shown in figure 2.5. He argues that there are different degrees to which people can participate in decision-making processes. The lowest forms of public participation are manipulation and therapy, which are actually non-participation. Token participation includes informing, consultation and placation. Arnstein (1969) qualifies these levels as meaningful participation. The highest form of public participation – citizen power – includes partnership, delegated power and citizen control (Arnstein, 1969). According to Woltjer (2004), on these highest levels "citizens have the opportunity to discuss and debate a plan, or even have collaborative decision-making power." (p. 41). This section will examine the discrepancy between the importance of social engagement in post-disaster contexts from theory and the practice of really implementing it, through an analysis of literature on social engagement in post-disaster planning processes.

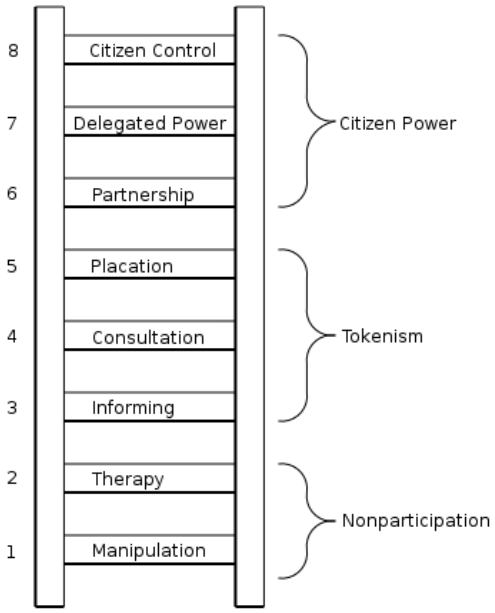

Figure 2.5 – Ladder of Citizen Participation (Source: Arnstein, 1969)

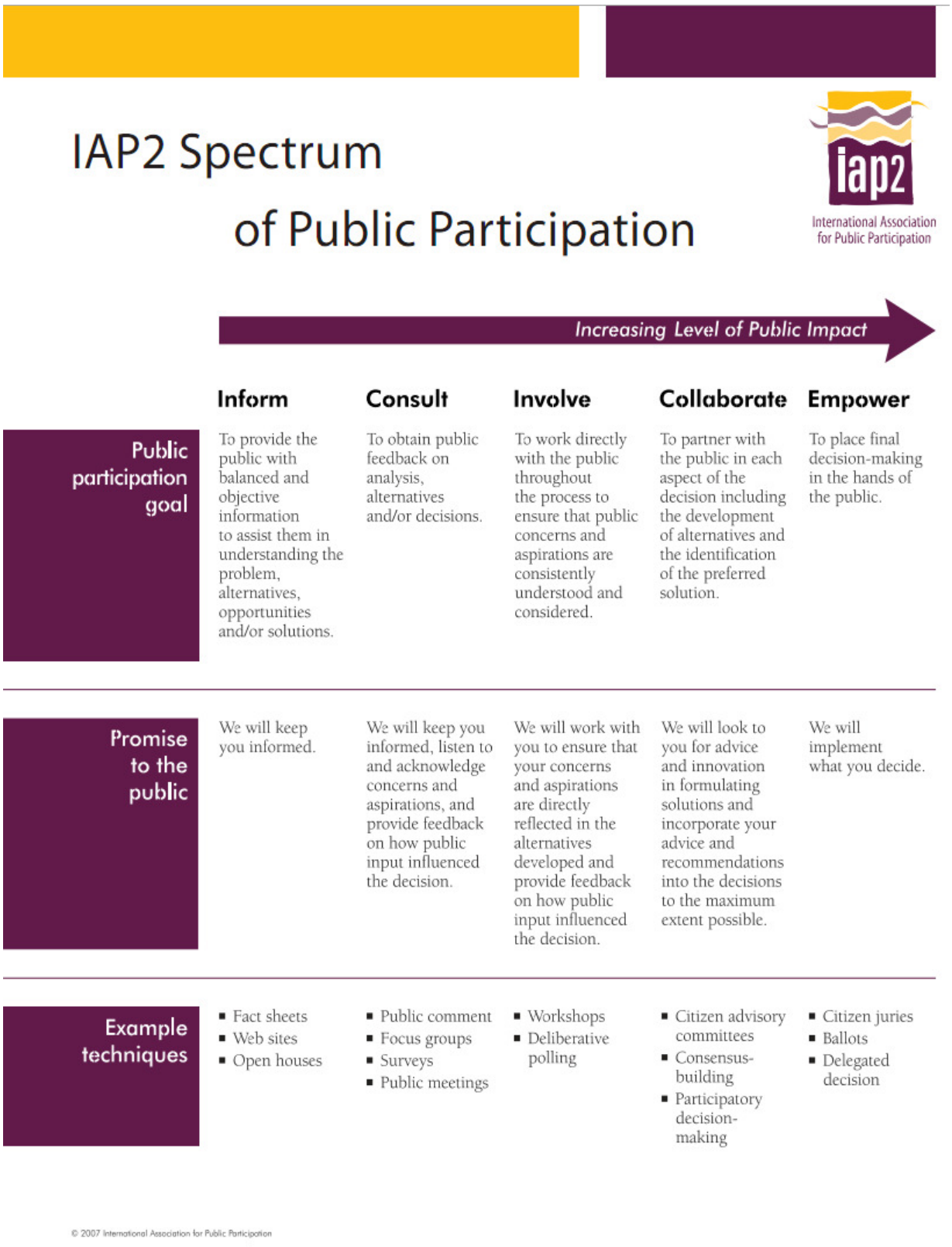

Figure 2.6 – IAP2 Spectrum of Public Participation (Source: IAP2, 2013)

2.3.1 Role of social engagement

As discussed in the previous sections, decision-making processes follow structured and standardized procedures in normal, stable times. Although there is room for public engagement in decision-making processes in these normal times, local people here often have no direct incentive to engage in planning processes (Bonn and Rundle-Thiele, 2007). In the aftermath of shock events however, communities in general do want to participate in rebuilding processes. But, because of the complexities that characterize post-disaster societies, social engagement is often only limited embedded in post-disaster planning systems (Jacobs and Williams, 2011).

Because of the social impacts that natural disasters have on communities, social engagement in recovery processes is regarded as important. Social impacts are all impacts that are actually perceived by humans, such as impacts on their way of life, on their communities and on their environment. There are many elements that influence the social impacts of natural disasters on communities, as shown in the model in figure 2.7 developed by Lindell and Prater (2003). The characteristics of the hazard agent – an earthquake or hurricane – determine the physical impacts of a natural disaster, because these characteristics are dependent on the mitigation practices for hazards of the communities and their emergency preparedness practices. The physical impacts of the disaster can be reduced when a community has developed and sufficient hazard mitigation practices and also is prepared to the disaster in case of emergency. Subsequently, the social impacts of a natural disaster are based on the physical impacts. However, when a community has good recovery resources and there is extra assistance possible, the social impacts on the community can be reduced (Lindell and Prater, 2003).

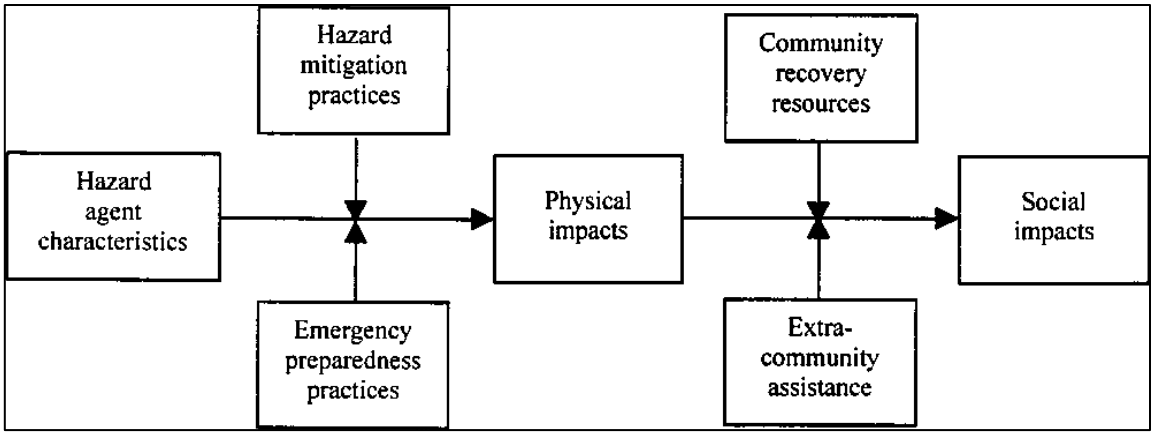

Figure 2.7 – Impacts of disasters on communities (Source: Lindell and Prater, 2003)

Recently, there are many social impact studies conducted on the influence of natural disasters on communities, in order to improve planning and preparedness after natural disasters in the future (Cottrell and King, 2011). According to Lindell and Prater (2003), there are three reasons why it is important to assess the impacts of natural disasters on local communities. The first reason is that information about the impacts on the communities is helpful for local community leaders, so that they can determine whether external help is needed after the event of the natural disaster. Second, it is possible that specific parts of the population have been affected disproportionally and need more help, for instance ethnic minorities or people from a lower socio-economic background. The third reason is that planners can develop impact projections to examine potential impacts of alternative hazard adjustments (Lindell and Prater, 2003).

According to Jacobs and Williams (2011), local knowledge is regarded as very important in post-disaster planning processes, because it saves times in the long run and it reduces the risks of governments to respond ineffectively to changing circumstances as a result of and after the shock event. Next to that, they argue that policies are most effective in their implementation when they are based on local resources as is the case when they are sensitive to local circumstances and tacit knowledge (Jacobs and Williams, 2011). Diefendorf (2009) argues moreover, that community engagement and voluntary work were the reasons for the open and rapid planning processes in New Orleans after hurricane Katrina in 2005 which made that the catastrophe turned into an opportunity to rebuild a better city. Another reason that stresses the importance of social engagement in the aftermath of a natural disaster, is that planners should be aware of the strengths and weaknesses of the different communities. They can obtain that knowledge through engaging with communities. This knowledge is important, because vulnerabilities have to be identified in order to increase resilience with regard to future disasters (Lindell and Prater, 2003). Vallance (2011), following Eyre (2004), argues that "getting involved after a disaster can be cathartic" and that "taking positive action can make victims feel empowered; this helps recovery." (Vallance, 2011, p. 20). Through a study on post-earthquake Christchurch, Vallance (2011) claims that communities also benefit from being engaged in the recovery processes and so, the importance of social engagement is endorsed for both planning processes and decision-makers, and for local communities.

Despite the wide agreed importance of public engagement in the literature, reality proves that governments often claim that they want to reduce risks and rebuild communities as soon as possible after disasters (Ingram et al., 2006), but "the pressure to urgently address complex, difficult decisions can result in reactive policies that may increase long-term vulnerability of affected populations." (p. 1). By stating this, Ingram et al. (2006) draw the link between disaster response and vulnerability. In the long term, they argue, vulnerabilities of communities and places may even increase because of the creation of reactive policies under huge pressures. These policies often fail to address the social, economic and environmental weaknesses of places which can lead to the risk of future natural hazards being turned into disasters again. In the case of post-tsunami Sri Lanka for instance, socio-economic inequalities increased and environmental quality decreased because of the reckless implementation of ineffective post-disaster policies that had irreversible consequences for the long term (Ingram et al. 2006).

Despite the awareness of the need for vulnerability reduction, policy makers commonly create reactive policies. This is understandable given the challenging context after disasters. Whereas short-term recovery efforts should indeed be urgent and rapid, "redevelopment policies should be cautiously developed upon comprehensive, site-based assessment of risk and vulnerability alongside continual consultation with all stakeholders." (Ingram et al., 2006, p. 6). Ingram et al. (2006) state subsequently that social engagement in the form of consistent and continuous support, consultation and information is needed in order to create longer-term plans that reduce anxiety, frustration and consequently uncertainty. So, a combination of short-term recovery efforts and long-term planning is needed that inherits social engagement practices.

2.3.2 Technocratic versus collaborative planning

Consequently, planning processes in post-disaster societies can often be characterized as technical rationalistic rather than as collaborative rationalistic (De Roo, 2001). Some scientists argue that technical rationale is the best way to plan in a challenging context. This means that the planning process is top-down; a dominant (central) higher government decides what lower governments have to do and there is no or very little participation of the public (Allmendinger, 2002). However, as discussed above, much local information is ignored when the public is not involved in the rebuilding process, since there is a lot of local knowledge that will not be taken into consideration. Although governments should take a leadership role in post-disaster transition management, there must be clear boundaries and limits to what it must and should do (Rotmans et al., 2001). Healey is the biggest advocate of the collaborative planning approach and she emphasizes the importance of developing collaboration among stakeholders in policy development, as well as widening stakeholder involvement and the building of rich social networks (Healey, 1997). According to Healey (1997), the traditional approach in planning – the technical rationale approach – is not suitable for many planning projects anymore. The reason for this is the increased dynamic and therefore complex context in which planning projects are located. In this complex society, collaborative consensus building is needed to come to mutually agreed solutions instead of competitive interest bargaining (Healey, 1997). Habermas (in: Allmendinger, 2002) agrees with Healey and argues that objective knowledge is not the only existing rationality, but there are many forms of rationality. The basis of the collaborative planning approach is that communication based on agreed standards of behavior is a form of rationality as well (Allmendinger, 2002).

Also, Tsubohara (2010) stresses the importance of public participation: "citizens in democracy should participate in every important public or private decision that influences their lives." (Tsubohara, 2010, pp. 16). Through participation the gap can be bridged between the government and the governed and moreover, participation can be regarded not as an end product but as a means to self-development. So, both societies and individuals benefit from public participation (Tsubohara, 2010).

Innes and Booher (2010) connect the collaborative approach in planning to the creation of resilient places and communities. Resilience can be developed in a post-disaster context by creating a planning system that is built on the principles of collaborative rationality of Healey. Decision-makers often avoid public participation processes, because they are afraid to lose control. However, following the concept of multi-level governance, a planning system based on the collaborative approach would consist of a distribution of control and power over several government agencies, open boundaries and several different networks of participants (Innes and Booher, 2010). Spence (2004) states as well that "coercion by government is only part of the answer. The success of any government action depends equally on the development in society of a 'safety culture' in which citizens both understand the risks they face and are prepared to participate in the management of them." (p. 391). Subsequently, Jacobs and Williams (2011) argue that planning systems should not become tokenistic, but a real engaged approach that involves local engagement is needed instead.

2.3.3 Social capital in a post-disaster context

In order to describe the importance and role of social networks, Putnam (2000) invented the concept of 'social capital'. He stresses that social networks have a value and that reciprocity and trustworthiness in a society come from the social connections between citizens. According to him, "a society characterized by generalized reciprocity is more efficient than a distrustful society." (Putnam, 2000, p. 21). Another reason why social capital in cities is important, is that social capital helps individuals to solve collective problems more easily. Furthermore, people who have connections with others develop a character that is also to the benefit of the rest of society and people with these connections become more tolerant to each other (Putnam, 2000). However, critics of social capital stress that networks and reciprocity are good for people inside the network, but not always that positive for people outside the network. So, it is important to always seek for a balance between the maximization of the positive consequences of social capital and the minimization of the negative. That is why there are two forms of social capital; bridging and bonding. "Bonding social capital is good for undergirding specific reciprocity and mobilizing solidarity" whereas "bridging networks are better for linkage to external assets and for information diffusion." (Putnam, 2000, p. 22).

Although social capital is seen as very important for societies and especially for post-disaster societies, social connections are becoming weaker and weaker because of factors such as a lack of time, increased mobility of people, an increase in the number of men and women that work and so on (Putnam, 2000). But at the same time, extended technology of telecommunication allows people to get and stay connected to each other. An example of this is the key role of social media such as Facebook and Twitter in the aftermath of recent natural disasters, such as the earthquakes in Christchurch and Fukushima, Japan (Anderson, 2012). Despite the decrease in 'conventional' social connections, planners that develop projects in neighbourhoods have to pay attention to the existing social structures that are already there. Public participation is a way for planners to get to know these social structures. Moreover, key figures in neighbourhoods can be helpful for planners in mobilizing citizens to become engaged in processes of public participation.

Yamamura (2010) draws an explicit relationship between social capital and natural disasters. He states that there will always be uncertainties, because disasters cannot be completely forecast. In this regard, "social capital is expected to mitigate the damage caused by disasters via the enhancement of collective action" (p. 1020) and therefore, "social capital reduces the damage caused by natural disasters." (p. 1019). Furthermore, by looking at the case of natural disasters in Japan, Yamamura (2010) proves that places with a high level of social capital tend to have fewer victims of natural disasters and that experiencing a disaster becomes a joint learning process for communities resulting in better disaster preparedness and therefore higher resilience (Yamamura, 2010). Cioccio and Michael (2007) endorse the path dependency of the ability of societies to cope with and recover from natural disasters. They state that the history of a place with regard to experiencing previous natural disasters has a positive influence on the risk perceptions of the community and consequently on the resilience of places and communities. Based on a study on the bushfires in Australia in 2003 however, they draw the limitation that the continued co-existence of communities with hazards can also lead to a disaster culture in which the residents regard the impacts of hazards as inevitable (Cioccio and Michael, 2007). The next final section continues with the concept of social engagement by focusing on its importance in developing plans and visions.

2.3.4 Social engagement and plans & visions

As mentioned before, disasters close and open up opportunities. A shock event such as a disaster can create a window of opportunity which enables new developments. Existing plans and visions, such as regional development plans and local visions, often have to be revised after the event of a disaster. In this way, governments and planners have the opportunity to develop new plans and visions for a post-disaster place or region. They can develop these plans and visions from an ivory tower, but according to Rotmans et al. (2001), participatory decision-making helps to create support for plans and visions. So, a bottom-up approach is regarded as the most suitable approach for establishing post-disaster plans and visions.

Plans and visions reflect the identity of a place and/or region. It is important that communities recognize their values in plans for their city (Pezullo, 2009). In order to include and reflect this identity in plans and visions, public participation is needed in the process of creating new plans. Moreover, Folke et al. (2005) stress the importance that places retain the same function, structure and identity for the creation of resilience in communities. Therefore, communities should still be able to identify themselves with post-disaster plans and visions. An example of the role of identity is the case of post-disaster tourism in New Orleans after hurricane Katrina. Neighbourhoods of New Orleans that previously were not touristic places became tourist attractions for post-disaster tourists. On the one hand, this kind of tourism is good for education and remembrance, but on the other hand, as soon as plans envision the attraction of tourists to parts of the city that were previously outside of tourist attention, residents of these neighbourhoods can lose their feeling of belonging to these places. So, the process of establishing a new plan or vision should include social engagement projects in order to reflect local identities of an area (Pezullo, 2009).

With this elaboration on the importance of the reflection of the identity of people and places in plans and visions for future, the bottom of the funnel for this theoretical framework is reached. The major message of this chapter is that according to existing theories, social engagement is important (1) in a post-disaster, challenging, crisis context, (2) for the creation of resilient places and (3) for the reflection of the identity of people and places in plans and visions. The next chapter will elaborate on the case of Christchurch. How is the institutional system in New Zealand organized and how does the planning process look like in the aftermath of the devastating earthquakes?

3. Post-earthquake Christchurch

This chapter gives insights in the case of post-earthquake Christchurch. In order to understand the context of this study, first the general institutional and planning context of New Zealand will be described. After that, the institutional history with regard to the case of Christchurch will be analyzed from the event of the first earthquake in September 2010 till today. The focus in this history will be on the establishment of government institutions and on public engagement projects that were incorporated in the process of the creation of plans and visions for recovery.

3.1 Institutional context of New Zealand

As described in the first chapter, Wellington is the capital city of New Zealand and it is the place where the central government is located. Power in the New Zealand Government is distributed across parliament – the makers of the law, – the executive – the Ministers who administer the law – and the judiciary – the interpreters of the law through court. The country is a constitutional monarchy which means that its parliament consists of the sovereign and the House of Representatives. The Queen of the United Kingdom is the sovereign and at the same time the head of state. However, the Governor-General is the representative of the Queen in New Zealand. The House of Representatives is democratically elected, using a mixed member proportional representation. This means that each elector can vote for both a local member of parliament as well as for a preferred political party. In addition, New Zealand has three layers of government; the central government on national level, the regional councils on a regional level, and city or district councils on a local level (New Zealand Parliament, 2012; Dalziel and Saunders, 2003).

The relationship with the United Kingdom has a central role in the institutional history of New Zealand. The history of the two countries became entwined with the signing of the Treaty of Waitangi between the British Queen and Maori tribal leaders on six February 1840. After two centuries of British rule, New Zealand became an independent part of the Commonwealth in 1907. The Commonwealth is an alliance between countries which were once part of the British realm, and it is founded by the United Kingdom. The British domination had a huge influence on the formation of New Zealand as a state and although the country has been self-governing for more than a century now, the British influence in New Zealand is still profound. For instance, New Zealand is a parliamentary democracy, based on the British system and the British Queen is still the official chief of state in New Zealand. Also, the legal system in New Zealand – which defines the ways in which contemporary planning policies are developed and used – is based on English law (CIA, 2013).

In 1977, the Town and Country Planning Act of New Zealand was established. This act does not only carry the same name as the British Act, the content was also derived directly from British planning practice. However, while land use plans in the United Kingdom are used in an indicative way, in New Zealand they became more prescriptive (Memon, 1993). This caused a lot of dissatisfaction in the private sector in New Zealand in the 1980s. People complained about the inflexibility of planning schemes and planning

was seen as an unnecessary intervention in the free market and private property rights. These neoliberal sentiments led to a reform process, which was accompanied by a lot of political tensions. In the meantime, environmental movements in New Zealand became more influential. The new legislation in the form of the Resource Management Act (RMA) of 1991 swept away parts of the traditional British planning system. In the RMA, the focus is shifted from the planning of rural and urban land uses to sustainable management, by regulating the environmental effects of development. Natural resources which are protected are land, air and water. The prescriptive way of regulation is left behind and the system became more flexible and based on market allocation. Moreover, the three-tier planning structure involving central, regional and local governments was established (Memon, 1993). The neo-liberal turn of the New Zealand government in the 1980s was supported by three Acts: the earlier mentioned RMA (1991), the Local Government Act (1989) and the Building Act (1991). These acts facilitate private property development and the free flow of labour and capital. Planning conditions became advantageous for private developers and supported inflows of real estate capital. Next to that, since the RMA was established in 1991, the central government has been almost uninvolved in planning. Rolling back state control had a significant effect on local governance structures and on the built environment of the cities in New Zealand. The private sector started to invest, but the state also started to develop entrepreneurial activities (Gleeson and Grundy, 1997).

The RMA of 1991 caused a revolution to urban planning in New Zealand. New Zealand left the entire tradition of town and country planning behind which the country inherited from the United Kingdom. The new Act was supposed to reduce time and price frictions within the planning process whilst at the same time still focusing on community participation in planning processes. Moreover, the two ideals of the RMA are an increased emphasis on and more possibilities for public participation, and a focus on the environment (Gleeson and Grundy, 1997). An example of a planning program with a focus on public participation is the urban renewal program of Christchurch. Since 1987, Neighborhood Investment Plans (NIPs) have been developed in different 'asset poor' areas around the city of Christchurch and more specifically in older suburban areas surrounding the central city. Many actors of both the government and of the communities have been involved in the process of the development of the NIPs (Christchurch City Council, 2002). The next section will dig deeper into the institutional context of Christchurch since the earthquakes of 2010 and 2011.

3.2 Institutional context of Christchurch

The earthquakes of 2010 and 2011 devastated the central business district of Christchurch and the town of Kaiapoi, which is located twenty kilometres north of Christchurch. Also, it caused serious damage to other business areas and residential suburbs in the east and on the hills of Christchurch, and in the Selwyn district. Therefore, the earthquakes had a huge influence on every aspect of life in and around the city. A completely different approach and institutional system were set up in response to the earthquakes in order to provide leadership in the process of rebuilding the city.

As in the pre-earthquake situation, the city of Christchurch falls under jurisdiction of the Christchurch City Council (CCC). This local government makes decisions about local issues and services and has to respond to local needs and priorities. This made the CCC the first major government body that had to deal with the aftermath of the earthquakes.

Next to that, two other local governments that had to deal with recovery processes after the earthquakes, were the Waimakariri District Council and the Selwyn District Council (Waimakariri District Council, 2013; Selwyn District Council, 2013). Furthermore, the regional council in the area is called 'Environment Canterbury' and it is responsible for environmental issues, such as the collection and provision of information on natural hazards (Environment Canterbury, 2013).

The table in figure 3.1 at the end of this chapter shows a timeline of the events that took place in Christchurch since the first earthquake. Several government institutions were set up and various plans and strategies were created. After the first earthquake in September 2010, The Ministry of Civil Defence and Emergency Management (or: Civil Defence) was the responsible body in the early response phase and the CCC was leading the initial steps towards recovery. Next to that, only two weeks after the earthquake, the central government passed the Canterbury Earthquake Response and Recovery Act 2010. This led to a possibility for easier and faster planning procedures and gave way to the local and central government to claim among others property rights in certain situations. One commission of the central government was appointed to lead the recovery (CCC, 2013; New Zealand Government, 2012).

However, on February 2011, another big earthquake happened. Although it was smaller in magnitude, it caused much more societal disruption than the September earthquake, including many casualties. In response to this disaster, a national state of emergency was declared and the Canterbury Earthquake Recovery Authority (CERA) was established as a central government ministry that had to take a leading role in the redevelopment of the area (CCC, 2013; CERA, 2012a). Two months after this second big earthquake, the former act was replaced by the Canterbury Earthquake Recovery Act 2011. This act states among others that a recovery strategy had to be created, as well as different recovery plans. In addition, the act states that one of its major purposes is to enable community participation in the planning process of the recovery of the city (New Zealand Government, 2012).

Moreover, immediately after the February earthquake, the mayor announced in a public speech that the public would be involved in the recovery process. So, public engagement projects were integrated in the process of developing recovering plans for Christchurch. The biggest overall project was 'Share an Idea' and the CCC was responsible for the organization of it. People could share their ideas for the future city through a wide variety of submitting options, such as the Share an Idea expo and a 48 hours design challenge. Another public engagement project was 'Magnetic South', an initiative of the Crown Research Institute 'Landcare Research'. It was an online idea-generating game designed to help people explore the future together (Magnetic South, 2013). The CCC received over a hundred thousand ideas from the Share an Idea campaign and they were used as input for the draft of the Christchurch Central Recovery Plan (CERA, 2012a).

After the creation of the first draft of the Christchurch Central Recovery Plan in August 2011 by the CCC, there was a public engagement project called 'Tell us What you Think'. Nearly three thousand people gave their comments on the draft of the plan. Consequently, this led to the creation of the final draft of the Christchurch Central Recovery Plan which was sent to the responsible Minister of CERA in December 2011. Until three February 2012, people could make written comments to the Minister (CCC, 2013).

Because the CERA was devoted to the rebuilding of greater Christchurch – Christchurch and the surrounding areas that were also affected by the earthquakes – a special unit within CERA was established to focus on the rebuilding of the central city. This new unit, called the Christchurch Central Development Unit (CCDU), was commissioned to provide clear leadership in the recovery process and its first task was to prepare the final Christchurch Central Recovery Plan, including a blueprint plan. After the Minister considered this finalised plan, the Christchurch Central Recovery Plan came into force on 31 July 2012 (CERA, 2012a). Meanwhile, CERA launched its Recovery Strategy for Greater Christchurch on 31 May 2012. This strategy was meant to be "an overarching, long-term strategy for the reconstruction, rebuilding, and recovery of greater Christchurch." (New Zealand Government, 2012, p. 12). Additionally, all other plans and visions regarding the recovery must be in accordance with the recovery strategy (CERA, 2012b).

By the end of October 2012, all residential land zoning was completed for the greater Christchurch area. Earlier, geotechnical data was released related to the zoning decisions for the flat land area. According to the Minister of CERA, the end of the land zoning process means that residents have certainty and can move on with their lives. Finally, in order to obtain knowledge about the experiences of residents in the post-earthquake recovery process and to get feedback from the residents, CERA launched an online wellbeing survey in October 2012. On February the twentieth 2013 the results of this wellbeing survey were presented by CERA with an overall positive outlook to the future, although many residents experienced many challenges and stress. This wellbeing survey will continue to be held twice a year until 2015 (CERA, 2013a).

To conclude, the CCC received many ideas and comments during the several public engagement projects. Moreover, documents with regard to the recovery of Christchurch reflect the approach that public engagement is very important and that it should be incorporated in the recovery process. As discussed in the previous chapter, theories claim that social engagement is extremely important in post-disaster recovery processes in order to develop resilient places and communities. So, according to the institutional history – the establishment of government institutions, the process of the creation of recovery plans, and the incorporation of public participation in these processes – the recovery process of Christchurch forms a perfect recipe for the creation of a resilient city. Nevertheless, there have been questions raised in the city about whether the government has engaged with the public as much as and in ways that it should have done. Next to that, existing international theories claim that a social protocol regarding reconstructing places after disasters is inferior to a technocratic protocol. So, what are good ways to integrate social engagement in a post-disaster redevelopment process and why is it important? Experiences of the case of Christchurch will provide the basis for an answer to this question in chapter 5. The next chapter first explains and discusses the methodological foundations for this research.

Timeline of the Canterbury Recovery Process

Date	Event
4 September 2010	Large 7.1 earthquake on the outskirts of Christchurch caused some damage to the central business district (CBD) of Christchurch.
14 September 2010	Central Government passed the Canterbury Earthquake Response and Recovery Act 2010.
14 September 2010	Appointment of the Canterbury Earthquake Recovery Commission chaired by Murray Sherwin.
22 February 2011	Large 6.3 earthquake devastated the CBD of Christchurch.
29 March 2011	Prime Minister John Key announced the creation of the Canterbury Earthquake Recovery Authority (CERA) to provide leadership and coordination of the ongoing recovery effort in Canterbury.
19 April 2011	The Canterbury Earthquake Recovery Act 2011 came into force.
29 April 2011	The Civil Defence Emergency period came to an end and earthquake response and recovery functions and the key roles and responsibilities were shared between the CERA, the Christchurch City Council (CCC) and other local authorities and agencies.
14-15 May 2011	The CCC organised and held a 'Share an Idea Expo' in a community centre (Pioneer Stadium) over a weekend. The explicit aim was to involve the community sharing its ideas for the redevelopment of the Central City following the earthquakes.
24-25 June 2011	Magnetic South was an online idea-generating game designed to help people explore the future together and what this might mean for the decisions made for the city. It was one of the 'Share an Idea' suite of initiatives run on the 'Foresight Engine' sponsored by a Crown Research Institute (Landcare), Foresight Engine and the CCC.
30 June 2011	The public were able to continue sharing their ideas through website submissions and public consultation evenings, which closed at the end of June in time to inform the draft Central City Plan being prepared by the CCC. The process had generated 106,000 ideas.

1-3 July 2011	The Central City Plan team ran a 48 Hour Design Challenge at the School of Landscape Architecture, Lincoln University. The goal was to provide the design and architecture industry with an opportunity to put their best plans forward for specific parts of the Central City. 15 teams took part.
August 2011	The initial draft Central City Plan was released by the CCC for feedback from the public. The feedback process was called 'Tell Us What You Think' and generated nearly 3,000 responses.
December 2011	The revised draft Central City Plan was presented to the Minister for his approval in December 2011 and was publicly notified. The public were invited to make written comments to the Minister by 3 February 2012.
11 January 2012	CERA launched a survey led by Ernst & Young asking property and business owners, as well as their customers, how they want to rebuild the city centre, with the results to be delivered to CERA in February 2012.
18 April 2012	Canterbury Earthquake Recovery Minister Gerry Brownlee announced the establishment of a new business unit (the CCDU) inside the CERA to focus on rebuilding Christchurch's CBD. The CCDU's first task was preparation of a blueprint for the implementation of the Central City Plan inside 100 days.
May 2012	The Minister of Education released a draft Education Renewal Recovery Programme under the name 'Shaping Education – Future Directions'. It was now open for public consultation. The provision of education in greater Christchurch had to be changed due to damage to land and education facilities, population changes and financial constraints.
31 May 2012	Canterbury Earthquake Recovery Minister Gerry Brownlee released the Recovery Strategy which sets out the directions and priorities for the wider region's recovery.
30 July 2012	The CCDU released its Christchurch Central Recovery Plan, incorporating its spatial Blueprint Plan showing the location of anchor projects and describing the form in which the central city could be rebuilt.

August 2012	The Ministry of Education and the Tertiary Education Commission released the Directions for Education Renewal in Greater Christchurch with the aim to combine the opportunity with innovation to enhance education across wider Christchurch.
6-10 August 2012	CERA is holding community meetings about the Christchurch Central Recovery Plan and the CCDU is presenting the design and plan for the new central city.
27 September 2012	CERA is releasing the geotechnical data relating to the land zoning, since the zoning process for flat land is now completed and the outcome of the review is known.
15 October 2012	CERA launches an online wellbeing survey that will investigate how people have been affected by the earthquakes and it will provide feedback for CERA. From now on this wellbeing survey will be run twice a year for the next three years, in order to see trends that are emerging in different places.
31 October 2012	Residential land zoning is completed. All 190.000 residential properties in greater Christchurch are now zoned.
15 November 2012	CERA, CCDU and the CCC present the draft of the Transport Plan which is now open for public consultation.
20 November 2012	Environment Canterbury starts to prepare a Land Use Recovery Plan, together with the CCC, Selwyn District Council, Waimakariri District Council, Te Rūnanga o Ngāi Tahu, NZ Transport Agency and CERA.
6 December 2012	CERA presents its Economic Recovery Programme for Greater Christchurch, including twenty key projects.
20 February 2013	The results of CERA's wellbeing survey are available online. The major outcomes were that people had to experience enormous challenges in the recovery process, but overall it reveals a positive outlook with increased levels of resilience.

Figure 3.1 – Timeline of the recovery process of Canterbury (Source: CERA, 2013b)

4. Research Design

This chapter describes the methodology that is used for answering the central question of this study on the role and importance of social engagement in rebuilding processes of post-disaster places, as described in chapter 1. First, the case study approach that is used in this research on examining post-earthquake Christchurch will be described. Subsequently, the different methods of data collection will be discussed, respectively literature study, document analysis, in-depth interviews and observation. The third section of this chapter is devoted to the ways of data analysis. Then, section 4 examines the philosophical basis of this research and finally, section 5 describes the ethical issues that had an influence in this study.

4.1 The case study approach

Many international studies are devoted to different aspects of disaster management and disaster planning. This research focuses on the role and importance of social engagement in recovery processes after natural disasters. In order to get a comprehensive insight in this subject, a case study approach is used. The case of post-earthquake Christchurch is studied as an "in-depth examination of a single instance of some social phenomenon." (Babbie, 2010, p. 309). There are some advantages and disadvantages of the case study approach that will be discussed in this section.

To begin with, the case study approach is often used to study one or multiple small case(s) of a social phenomenon very intensively (Swanborn, 2008). According to Swanborn (2008), it is suitable in particular for conducting research about the interactions between people and their environment. Moreover, Flyvbjerg (2006) argues that in-depth case study research is necessary to understand complex societal issues. Additionally, Yin (1993) states that case study research is useful, particularly "when researchers […] desire to cover contextual conditions and not just the phenomenon of study, and rely on multiple and not singular sources of evidence." (p. XI).

Verschuren (2001) adds to this that case study research has predominantly a holistic rather than a reductionistic character. According to a reductionistic approach, a research unit has to be broken down into observation units, and subsequently into variables, in order to be able to examine individual units. Based on these individual values, general claims can be made about the whole group or research unit. However, important aspects of the research unit might be not integrated in the study by applying a reductionistic approach to a complex societal phenomenon, such as post-disaster recovery. Therefore, the holistic approach refers to this reductionary approach as a 'tunnel vision', because the research unit is only studied "(1) at one point in time, (2) detached from its physical, social and political context, (3) without taking into account its relations with other objects in the case, and (4) without looking at the functions that it fulfills for the larger whole (i.e. the case) of which it is a part." (Verschuren, 2001, p. 128). Since these arguments in favor of a holistic approach apply to the case of post-earthquake Christchurch, the case study approach is an appropriate method for this research.

There are nevertheless some disadvantages of and ambiguities around case study research. Verschuren (2001) argues that "there is little consensus as to the methodological status of a case study as a type of empirical research." (p. 122). He distinguishes three ambiguities around case studies. First, it is unclear what the empirical object is and in which way we have to look at it. Although case study research is by many regarded as a holistic approach because it studies one or a small number of cases, others regard it as holistic because the whole object is studied instead of the object as a whole. Second, there is disagreement about the research methods that have to be used. Some scientists promote the use of qualitative research methods, whilst others are advocates of the use of a mixed-method – both qualitative and quantitative – approach (Verschuren, 2001). Whereas Verschuren (2001) claims that a choice has to be made in case study research between a reductionistic and a holistic – respectively a quantitative or a qualitative – approach, Babbie (2010) states that these two poles are not necessarily limited to a quantitative or a qualitative approach. He argues that quantitative methods might add value to the overall qualitative case study (Babbie, 2010). Third, there are doubts about the adequacy of the results that are obtained. Many quantitative researchers regard the case study approach as subjective and they perceive problems with intersubjective agreement as its most important quality criterion (Verschuren, 2001).

According to Swanborn (2008), there are four criteria that have to be met in order to assure intersubjective agreement: controllability, researcher-independence, internal validity and external validity. More attention needs to be paid to these criteria in qualitative case study research than in quantitative research. The reason for this is that qualitative research methods are often formulated verbally whereas quantitative are formulated numerical with a higher level of formalization. Also, qualitative research methods are more linked to the personality of the researcher than quantitative research methods. So, qualitative research gives in general more freedom to the researcher than quantitative research methods do (Verschuren, 2001). Moreover, many scientists object the limited external validity of case studies. They claim that it is "impossible to generalize case study results to broader contexts, to other points in time or to similar populations." (Verschuren, 2001, p. 127).

However, Flyvbjerg (2006) indicates five misunderstandings about case studies:

- "Misunderstanding 1: General, theoretical (context-independent) knowledge is more valuable than concrete, practical (context-dependent) knowledge.
- Misunderstanding 2: One cannot generalize on the basis of an individual case; therefore, the case study cannot contribute to scientific development.
- Misunderstanding 3: The case study is most useful for generating hypotheses; that is, in the first stage of a total research process, whereas other methods are more suitable for hypothesis testing and theory building.
- Misunderstanding 4: The case study contains a bias toward verification, that is, a tendency to confirm the researcher's perceived notions.
- Misunderstanding 5: It is often difficult to summarize and develop general propositions and theories on the basis of specific case studies." (Flyvbjerg, 2006, p. 221).

He corrects the first misunderstanding by saying that there are only specific cases and there is only context-dependent knowledge. Therefore, concrete and context-dependent knowledge is more valuable than the ongoing search for predictive theories and universals. Next, the author argues that generalization based on a single case is possible, but that generalization is "overrated as the main source of scientific progress" (p. 226)

and that the "force of the example is underestimated" (p. 228). With regard to the third misunderstanding, Flyvbjerg (2006) states that because generalizations can be made based on case studies, case studies are useful for all activities in a research process and are not limited to the generation or testing of hypotheses. Furthermore, in terms of the fourth misunderstanding, the author agrees with the claim that qualitative methods allow more room for the subjectivity and judgments of the researcher. However, Flyvbjerg (2006) says, based on experience "the case study contains a greater bias toward falsification of preconceived notions than toward verification." (p. 237). Finally, Flyvbjerg (2006) stresses that it is indeed difficult to summarize case studies. On the other hand though, he argues that the reason for this is the complex reality that is studied rather than the case study methodology. Therefore, it is not desirable to summarize and generalize case study results; they "should be read as narratives in their entirely." (p. 241).

Verschuren (2001) argues that this inability for generalization is based on a reductionistic approach. By examining the case of post-earthquake Christchurch from a holistic perspective however, the case will be investigated as a whole including different aspects and unforeseen variables. Therefore, insights in the importance of social engagement and in the strengths and weaknesses of it in the case of the post-earthquake recovery of Christchurch can be provided. Although these insights and strengths and weaknesses might be dependent on the context of Christchurch, an analysis of this case will provide insights that will be relevant for other contexts. With incorporation of this context-dependency, general lessons can be drawn for other vulnerable pre- and/or post-disaster places.

4.2 Data collection

In order to answer the main research question of this study, several methods of data collection are used: literature study, document analysis, participant observation and in-depth interviews. These methods will be described in this section.

4.2.1 Literature study

First, a literature study is conducted of existing theories with regard to transitions after shock events, such as natural disasters. The aim of this activity was to learn about post-disaster planning in order to construct the theoretical framework for this study. International theories are examined about transitions, about planning in a challenging context, about the role of social engagement and about the importance of social capital in a post-disaster context. Furthermore, existing theories are analyzed regarding the relationship between regional plans visions and the identity of people. Moreover, the literature study focused specifically on the links between all of these themes with resilience. Subsequently, literature about other cases of recovery after a natural disaster is examined in order to learn about post-disaster planning in other contexts.

The literature study forms an analysis of the most important existing secondary data. Through the literature study an understanding is gained about the bigger picture of social engagement in post-disaster planning. This research can contribute to the theory of social engagement in post-disaster planning through linking the outcomes based on the literature about the bigger picture study with the findings in the case of Christchurch.

4.2.2 Document analysis

In the recovery process of post-earthquake Christchurch, multiple plans and policies for the future are designed. In order to examine the importance of social engagement in the recovery process, social engagement activities are studied that were included in the process of the creation of plans and policies for recovery. Moreover, to be able to get insights in the relationship between the ideas and identity of people and the reflection of these ideas into the plans for recovery, the several plans themselves are analyzed.

The following plans for the recovery of Christchurch are analysed as secondary data:

- Final Draft Central City Recovery Plan;
- Christchurch Central Recovery Plan;
- Draft Recovery Strategy for Greater Christchurch;
- Recovery Strategy for Greater Christchurch;
- Stronger Christchurch Infrastructure Rebuild Plan;
- Community Engagement Strategy of CERA;
- Community Engagement Framework of CERA.

A discourse analysis is conducted of several policy documents in order to gain insights in the processes that shape the way in which a group of people understand their world and how they act in that world. Moreover, dominant power relations that structure the underlying assumptions in policy documents could be examined through the discourse analysis (Rose, 2007).

Furthermore, international protocols with regard to post-disaster recovery are examined. The aim of this was to learn about social response to a disaster according to scientists and policy makers in an international context. The following protocols are analyzed, since they include the issue of social engagement in post-disaster recovery processes:

- *Safer Homes, Stronger Communities. A Handbook for Reconstructing after Natural Disasters*. By: The World Bank & Global Facility for Disaster Reduction and Recovery (2010);
- *Disaster Preparedness for Effective Response. Guidance and Indicator Package for Implementing Priority Five of the Hyogo Framework. Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters*. By: United Nations (2008);
- *Mission 2014: Feeding the World: Emergency Disaster Response*. By: Massachusetts Institute of Technology (2012);
- *The New Orleans Index at Six. Measuring greater New Orleans' progress towards prosperity*. By: Greater New Orleans Community Data Center (2011).

Additionally, newspaper articles about the aftermath of the earthquakes in Christchurch are analyzed. The result of this was an insight in the recovery process based on media releases. The following newspaper and opinion articles are used, because they focus on opinions about the recovery process from different perspectives:

- The Press Christchurch:
  - "If in doubt, get a second opinion. Assessors 'under-qualified and under-trained" (23 February 2012);
  - "Red zoners stressed to breaking point" (28 February 2012);
  - "Expert says demolition is 'a horrendous mistake"' (15 April 2012);
  - "Initial quake response sound – report" (5 October 2012);
  - "Christchurch quake response faulted" (6 October 2012);
  - "Rebuild needs community involvement" (27 November 2012);
  - "EQC proud of achievements in Canterbury" (28 November 2012).
- New Zealand Herald:
  - "How (and where) will Christchurch be rebuilt? CERA boss answers readers' questions" (22 February 2012).
- The National Business Review:
  - "Christchurch outlook dims as politicians dither" (24 July 2012).
- New Zealand Listener:
  - "Christchurch homeowners face long wait for rebuild" (8 September 2012).
- Scoop; independent news:
  - "Kevin McCloud urges Christchurch to creates sustainable city" (18 October 2012).
- TV NZ; One news:
  - "New Christchurch plans show 'livable' city – Key" (30 July 2012).
- Blogspots:
  - "The bill to "rebuild" Christchurch is starting to emerge – and it's huge" (8 August 2012).

4.2.3 Participant observation

Participant observation is used in this study as a form of primary data collection. Several formal and informal meetings are visited and observations have been conducted. The table in figure 4.1 shows the meetings and gatherings that have been observed.

Observations

What	Where	When	Details
Informal dinner with group of residents of greater Christchurch	Lincoln	8 September 2012, evening	Listed to people who were remembering the September 2010 earthquake and had informal dinner.
Christchurch Earthquake Assistance Centre	Breezes Road, Avondale, Christchurch	1 October 2012, afternoon	Talked with some people, many residents are still coming for assistance. Different organizations are represented at the centre at different times.
Community meeting Canterbury Earthquake Recovery Centre	Grace Vineyard Church, Beach Campus, Seaview Road, New Brighton, Christchurch	3 October 2012, 6-8.30pm	Observed the meeting, around 150 attendants. Represented organizations: CERA, CCC, Earthquake Commission (EQC), Insurers, Building & Housing. Talked to some people and made an interview appointment with someone of CERA.
Community consultation meeting Christchurch Coastal Pathway	Mount Pleasant Yacht Club, Mount Pleasant/Sumner, Christchurch	9 October 2012, 4-6pm	Observed the meeting, around 20 residents of Mt Pleasant, Redcliffs and Sumner were present. Wraight & Associates (landscape architects) facilitated the meeting.
Informal dinner with interview respondent and his family	Swannanoa, Canterbury	16 November 2012, evening	Talked with the family about the early days after the earthquakes, listened to stories and had informal dinner.
Gap Filler project	Christchurch	1 December 2012, afternoon	Observed the activities on the site, talked with some volunteers and with some members of Gap Filler.

Figure 4.1 – Table of participatory observations (Source: Author)

Next to these observations, online movies have been observed of information evenings of CERA about among others land zoning regulations and property assessments. The reason to observe these meetings online, is that the researcher was not in the Christchurch area at the time these evenings were held. Therefore, the availability of these movies online proved to be very useful. Furthermore, an online seminar is observed about the use of the computer software program NVivo for the analysis of the ideas that were generated through the Share an Idea public participation project.

Participant observation can be characterized as an active process of participating in the world. It is not just observing meetings or other kinds of gatherings as an outsider, but playing an active part in the world (Cook, 2005). According to Kearns (2010), participant observation may have three different purposes. The first is to count persons, objects or phenomena. The second is to provide complementary descriptive evidence to other methods and the third purpose is to gain a contextual understanding by constructing an in-depth interpretation through direct experience.

The observations that are conducted in Christchurch are used to get insights in the broader context of the case of Christchurch and more particularly in the feelings of residents of post-earthquake Christchurch. The reason to conduct participant observation for the purpose of this research, is that the researcher is an outsider in the case of Christchurch and therefore it is hard to get a full understanding of what the residents of the city have gone through. The participation and observation of informal and formal meetings helped in the construction of an image of life in a post-disaster situation. Therefore, participant observation proved to be useful to understand the feelings and everyday lives of people (Kearns, 2010).

However, a drawback of participant observation is that there is much room for freedom of the researcher, since the data is collected by the researcher him- or herself which leads to high levels of subjectivity. However, the data collected through the observations is not directly translated into conclusions. In this research, the combination of participant observation and in-depth interviews as primary data collection was the basis for an understanding of the importance of social engagement in the case of post-earthquake Christchurch. According to Becker and Geer (1970) in: Atkinson and Coffey (2003), two sociologists who were the frontrunners of qualitative research methods as participant observation in the 1960s, a combination of in-depth interviews and participant observation is very valuable. They argue that "observation of events in contexts yields a more complete record and understanding of events, rather than reliance on interviewing about those events alone." (Atkinson and Coffey, 2003, p. 112). This relates to the concept of triangulation. Triangulation means that the use of a mixed data collection method maximizes the validity of the data. In this way, the strengths of the methods can be enhanced and the limitations can be counteracted (Atkinson and Coffey, 2003).

Participant observation, next to in-depth interviews, allows the researcher to check descriptions made by the respondents and to note discrepancies when necessary. Moreover, the researcher is often not naturally familiar with the contextual conditions in the situation under study. Then, as is the case in this study, participant observation next to in-depth interviews provides a source of information to get an understanding of the situation (Atkinson and Coffey, 2003). The meetings and the gatherings that are observed in this case study helped the researcher (1) to get insights in the feelings and frustrations of people about the recovery process of Christchurch, (2) to get an understanding of the relationship between the recovery plans that are written by decision-makers and the

wishes and feelings of people in real life, and (3) to check and compare the data obtained from the interviews with the wishes and feelings of residents of Christchurch. With regard to the last point, it could have been possible to obtain a too one-sided image of the case of Christchurch when the respondents all adhered the same opinions. Although this proved differently, the observations were a valuable activity to check the insights obtained from the documents and interviews.

4.2.4 In-depth interviews

In-depth interviews that are conducted in and around Christchurch are the biggest source of primary data for this research. Insights are obtained in the different values of different people with regard to the recovery process of Christchurch. The reason to choose for this way of data collection, is that respondents are able to express their emotions and opinions in their own ways rather than being forced to follow a structured way as is the case in for instance questionnaires. Respondents are enabled to emphasize what they regard as important and moreover, in-depth interviewing allows the researcher to immediately react on issues the respondent is describing. This characteristic is particularly valuable when the researcher wants to ask for clarification or to elaborate further on a specific topic (Babbie, 2010).

Researchers might have several reasons to use interviewing as a method of data collection. According to Dunn (2010), interviews are conducted when (1) other methods are unsuccessful in addressing the issues properly, (2) complex personal issues have to be examined, (3) a range of different opinions, meanings and experiences have to be addressed, and (4) the aim is to empower respondents and to treat them with respect. In terms of these four reasons, using interviews in order to examine the importance of social engagement in post-earthquake Christchurch was a suitable method. It provided a way to address the complex situation of the different opinions of different stakeholders with regard to the strengths and weaknesses of the recovery process of Christchurch. Additionally, different views about the relationship between social engagement and resilience could be obtained.

In-depth interviewing is a qualitative research method and it allows the researcher to find out about different realities of people. For this study, this qualitative research approach is used to obtain a deep understanding of the feelings about the rebuilding process. The qualitative approach "strongly argues the value of depth over quantity and works at delving into social complexities in order to truly explore and understand the interactions, processes, lived experiences, and belief systems that are part of individuals, institutions, cultural groups and even the everyday." (O'Leary, 2010, p. 113-114). Moreover, a social phenomenon like the case of social engagement in a recovery process is hard to quantify. A quantitative research approach is not suitable in this case, since numbers about facts have little meaning. More important in this case are the context, opinions and feelings of residents of Christchurch and of others actors.

A disadvantage of this qualitative method, as discussed in the first section of this chapter, is that it is complicated to generalize the results of the research to other cases. Also, the picture of post-earthquake Christchurch that at the end of this study will be generated might not be a representative outcome for the whole population. However, the purpose is not to draw general conclusions, but to get a complete as possible understanding of the post-earthquake recovery process. Based on this understanding, lessons can be provided

for other contexts and with incorporation of the context-dependent factor, general lessons can be drawn for other vulnerable places. In order to achieve this, it is more interesting to look at the outliers – a heterodox approach – then on the majority – an orthodox approach.

For the purpose of this research sixteen interviews are conducted. Prior to contacting potential interview respondents, a stakeholder analysis of social engagement in the recovery process of post-earthquake Christchurch was made. The result of this stakeholder analysis is shown in figure 4.2. The stakeholders are categorized in three groups: community, government and other. Based on this stakeholder analysis, respondents are recruited for the interviews. Almost every group of stakeholders is included in the research. Nevertheless, the planning consultancy company that was involved with the development of the blueprint plan for the recovery of the central city – Boffa Miskell – was not able to participate and a limited number of other stakeholders were not recruited, because of achieved data satisfaction and/or due to the practical reason of limited time.

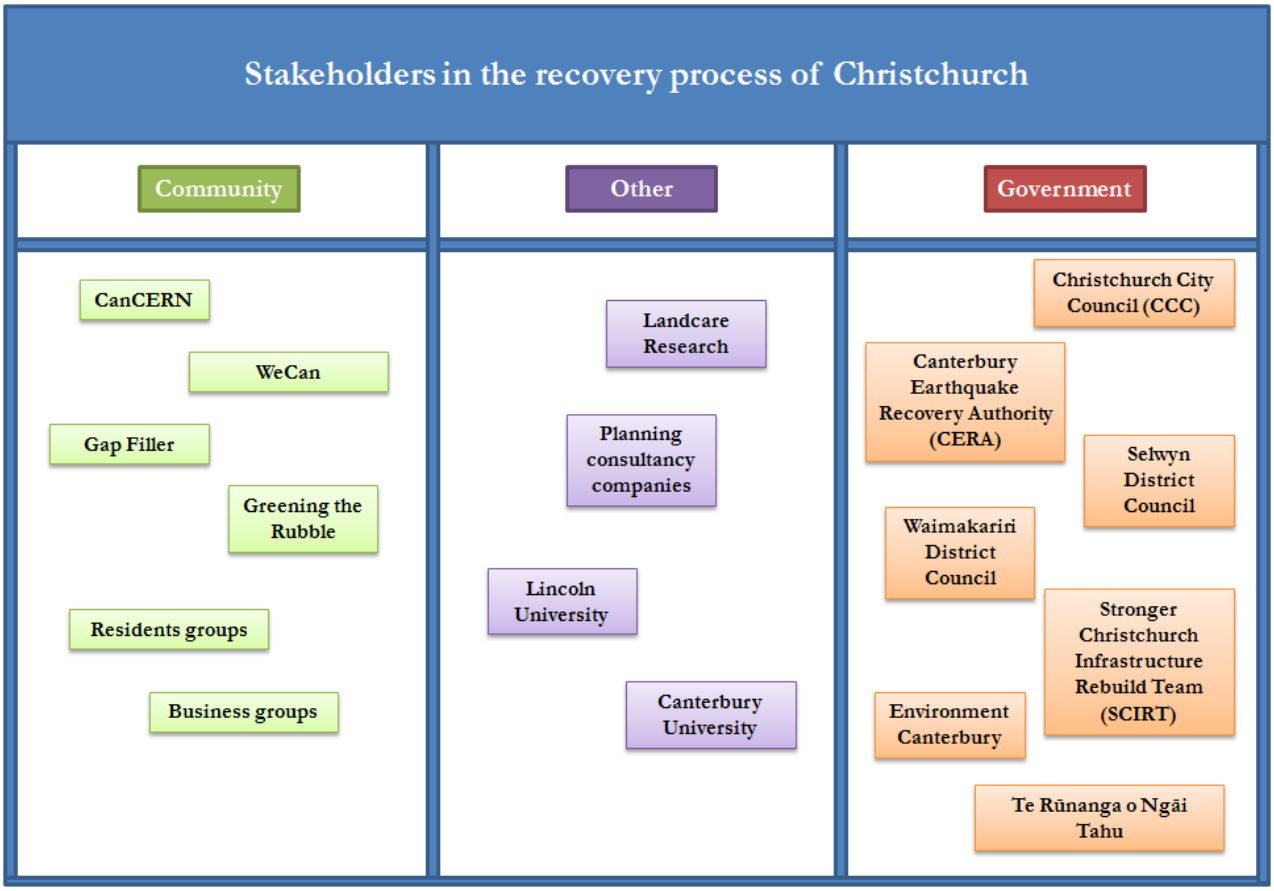

Figure 4.2 – Stakeholder analysis of social engagement in the recovery process of post-earthquake greater Christchurch (Source: Author)

The respondents can subsequently be divided in three groups of stakeholders: decision-makers, community organizations and other stakeholders. Sometimes a respondent could be assigned to two of these groups, for instance an independent researcher at a research institution who was at the same time involved with a community organization. Roughly five decision-makers, seven representatives of community organizations and four other stakeholders are interviewed. Representatives of among others the CERA and of the CCC belong to the first group of actors. Many community organizations arose or expanded after the earthquakes. Interviews with different kinds of such community organizations are conducted, among others with overarching, purpose-built organizations and with residents associations. The third group of respondents mainly consists of researchers at research institutions. The table in figure 4.3 shows the characteristics of the interviews and of respondents.

Interviews

Respondent	Organization	Date & time
X1	Member of Parliament	01 October 2012, 1:30pm
X2	CERA	04 October 2012, 3:30pm
X3	Sumner community organization	04 October 2012, 5:00pm
Brian Parker and Leanne Curtis	CanCERN	05 October 2012, 9:00am
X4	Christchurch City Council	08 October 2012, 3:00pm
X5	Canterbury Business Leaders Group	09 October 2012, 12:30pm
X6	SCIRT	09 October 2012, 2:00pm
X7	Lincoln University and Greening the Rubble	16 October 2012, 11:15am
X8	Landcare Research (Magnetic South)	16 October 2012, 2:00pm
X9	WeCan	16 October 2012, 4:00pm
X10	Greening the Rubble	17 October 2012, 10:00am
X11	Lincoln University	17 October 2012, 1:00pm
X12	CERA	18 October 2012, 10:00am
X13 and X14	Mount Pleasant community organization	18 October, 1:00pm
X15	Waimakariri District Council	31 October 2012, 10:00am
X16	Gap Filler	14 November 2012, 8:30am

Figure 4.3 – Table of characteristics of interviews (Source: Author)

There were different ways in which the participants were recruited. First, the work environment of the researcher at the Agribusiness and Economics Research Unit in Lincoln, New Zealand, was of great value. Through conversations with researchers at the unit, a list of possible respondents was created based on the network of these researchers. Second, a stakeholder scan through the internet led to possible participants. Furthermore, the technique of 'snowballing' was used: one interview led to an appointment for another interview.

The interviews were conducted in a semi-structured way. An interview guide was made for each interview and the researcher could follow the structure of the interview guide. However, the flexible character of the interviews allowed the researcher to elaborate more on a specific issue or to ask for more clarity when desired (Dunn, 2010). Therefore, the average duration of the interviews was about an hour, although some took forty-five minutes and others lasted for an hour and a half. The themes that were addressed in the interviews were: (1) introductory questions, (2) public participation, and (3) resilience. A summary of the more detailed interview guide that is used for each interview is shown in Appendix A.

4.3 Data analysis

All interviews were tape-recorded and are transcribed completely in order to be able to analyze them in a structured way. One respondent preferred not to be tape-recorded, so a summary was made of this interview. In the transcripts the exact use of language is written down, so the transcripts consist of a mix of both abbreviations and full grammar. When an activity happened during the interview, for instance when the telephone rang, it is written down in Italics in the transcript.

The reason why all interviews are transcribed completely is to obtain a presentable, readable form of the tapes and to ensure an accurate source of information. According to Flowerdew and Martin (2005), transcribing makes that the researcher gets familiar again with the information obtained during the interviews, which is valuable for later steps in the research. As well, it allows less room for the personal interpretation by the researcher of what is being said during the interviews (Flowerdew and Martin, 2005).

After the interviews were fully transcribed, the transcripts were coded manually. The data is transformed into a standardized form in the process of coding (Babbie, 2010). Codes are descriptive labels or categories that are attached to a part of the transcript or to a phrase, regardless of the length (Flowerdew and Martin, 2005). Although codes can be subject to the descriptive interpretation of the researcher, they have to be exhaustive, exclusive and enlightening. This means respectively that every piece of the transcript has to be covered by a code, that the codes must not overlap and that the codes must be interesting and coherent (Rose, 2007). Nevertheless, multiple codes can be subscribed to one part of the transcript (Flowerdew and Martin, 2005). The codes that were made for the analysis of the transcripts for this study were the result of the method of 'open coding'. This means that the researcher reads through the transcripts and writes a few words by every part of the transcript that emerge as ideas based on what is said during the interview (Flowerdew and Martin, 2005). During the process of coding, real codes were made based on these ideas. The codes that were used in this study form the basis of the structure for the analysis and results in chapters 5 and 6.

The validity of the information obtained through the interviews is ensured by three activities. The first is that the transcript or summary of an interview was sent to the particular respondent in order to check if the information was correct and if he or she still agreed with what has been said during the interview. In this way, it could be ensured that the right information was used for the analysis of the interviews. Second, with regard to the analysis of the interviews, every paragraph of the transcript was coded. Third, all these codes were consequently included in the final thesis of the research.

In terms of the analysis of the observations, notes were made during or after the observations of the meetings and gatherings. These notes provided a detailed description of the meetings. The researcher referred to those notes during the process of analyzing the documents and the transcripts, to check for possible inconsistencies between what the interview respondents said and what could be observed from the meetings.

Finally, the document analysis took place through coding as well. The parts of the plans and strategies for recovery that were valuable for the examination of social engagement in the recovery process of post-earthquake Christchurch, were categorized based on the same codes as those that were used for the analysis of the interview transcripts.

4.4 Philosophical basis

Researchers are often unaware that they adopt a particular theoretical perspective. Because there are many competing intellectual philosophical approaches, it is good to consider the underlying ways of thinking of this research. In this section, different epistemological and ontological approaches will be described that influenced this study.

The first fundamental difference in social science is the difference between naturalism and anti-naturalism. Naturalism claims that research in the social sciences is the same as research in the natural sciences and that it is committed to methods adapted from natural sciences. Anti-naturalism opposes such a view and claims that social sciences are not like physics (Flowerdew and Martin, 2005). The scientist Auguste Comte is the founder of positivism, a philosophical approach that is developed in the early nineteenth century. According to Juma'h (2006), positivism is a form of strict empiricism, which means that only knowledge claims that are founded directly on experience are valid. This approach advocates that statements are only real when they are based on empirical data and when they are collected through experience (Juma'h, 2006). Modern logical positivism, which is based on the principles of positivism, states that "claims to know something can only be justified – are only meaningful – if they are open to empirical testing and verification." (Flowerdew and Martin, 2005, p. 16). Therefore, positivists often criticize in-depth interviews. They claim that interviews bias the answers of respondents and say that interviewers are not or cannot be objective or detached (Flowerdew and Martin, 2005).

Positivism is established in a period when modernism was the prevailing paradigm or pattern of thinking. Modernism is closely linked to the Enlightenment that emerged at the beginning of the eighteenth century and it is a rational form of looking to the world (Allmendinger, 2002). Modernism is based on the idea that the development of society results from the Reason and it is based on certainties and control (De Roo and Voogd, 2007). Modernism allows for different systemic approaches that are internally consistent within themselves. So, there are multiple ways of looking to things. A modernist way of thinking claims that realities are external; it is about objective facts and not about values. This study however is based on the viewpoint that nothing is objective; the reality that we see is our own reality. Getting to know people's perceptions and therefore their realities through in-depth interviews is the aim of this research. In contrast to a modernist way of thinking, there will not be clear answer on how to engage with the people in rebuilding a city after a natural disaster, since there are many different values that have to be taken into account. So, modernism and positivism are not approaches that form the philosophical justification and basis for this research.

After some centuries when modernism was the prevailing paradigm, a paradigm shift occurred. This resulted in the development of a new paradigm in the mid-twentieth century, called postmodernism. The most influential contributors to postmodern thinking are Foucault, Derrida and Sartre – members of the so-called 'French School' (Allmendinger, 2002). Whereas modernism claims that there is such a thing as the absolute truth, postmodernism says that we have to accept that there is no absolute truth. Also, in contrast to modernism, postmodernism questions any reality as being objective. It says that there is no external reality; all realities are internal and are built on perceptions. According to Allmendinger (2002), we now live in a post-positivist world; there are no clear answers, only opinions and values.

Post-structuralism goes even further than postmodernism by destabilizing understanding of knowledge itself. Post-structuralists say that objectivity in social science research does not exist. Instead, "all research is explicitly or implicitly informed by the experiences, aims and interpretations of the researcher." (Flowerdew and Martin, 2005, p. 112). According to Flowerdew and Martin (2005), "postmodernism allows for multiple voices. No theory, particular aspect of society or 'voice' is privileged over others." (p. 28). A characteristic of postmodernism is that it is celebrating difference and it embraces a complexity of ideas. The underlying philosophical nature of this research is based on this statement. Moreover, with regard to planning, postmodernism claims that looking for certainties is meaningful, but full certainties are unable to achieve (De Roo and Voogd, 2007). With regard to the planning process of rebuilding a city after a disaster, planners have to reduce uncertainties and the city has to be rebuilt as resilient as possible. But on the other hand, planners should not have the illusion that all certainties can be abolished.

The philosophical and methodological basis for this research is for the biggest part organized in and through the discussion between realism, anti-realism and critical realism. Realism says that there is a 'real' world that is independent of our perceptions about it. However, anti-realists say that "there is no possible justification for believing in a reality other than that constituted by the human mind." (Flowerdew and Martin, 2005, p. 20). Lastly, critical realism says that things are real in so far as they have an effect (Babbie, 2010). So, the discussion is about what it means to say that something exists.

This study embraces the postmodern view that reality is how everyone sees his or her own reality. However, this research distinguishes from the postmodern claim that there are only internal realities, because how do we know that there is no external reality if we only have internal realities and all realities are not available to everyone? Moreover, an event such as a natural disaster is a very real event; it is an external fact that there were different earthquakes that devastated large parts of the city of Christchurch. Although this viewpoint is supporting of a modern approach, there are no external realities about the strengths and weaknesses of social engagement in the post-disaster situation. Therefore, in order to take the many different experiences and feelings of people into consideration and to be able to incorporate these different realities in this research, the case of social engagement in the reconstruction of post-earthquake Christchurch is on the other hand grounded in a postmodern approach.

Consequently, this research is based on the notion that "reality is layered and some layers are not available to sense perception." (Juma'h, 2006, p. 98). Therefore, this research accepts the notion that different people have different values and realities and that it is impossible for the researcher to understand all these different realities completely. In the process of the rebuilding of Christchurch, all stakeholders have other experiences in terms of their engagement in the recovery process. Nevertheless, through a combination of data collection methods, a comprehensive insight is obtained in the importance and strengths and weaknesses of social engagement in the recovery process of post-earthquake Christchurch.

4.5 Ethics

Research ethics are important in every research. According to Babbie (2010), there are some main points with regard to ethics in social science. He states among others that "what is ethical and unethical in research is ultimately a matter of what a community of people agree is right and wrong." (p. 84). Although the background of a researcher convinces him or her that something is right, the other cultural context may not regard it as right. In this regard, again the work environment of the researcher proved valuable. Prior to conducting the interviews, the researcher had many conversations with researchers at the research unit about the situation in Christchurch. Next to that, some observations prior to the interviews led to an understanding of the emotions of people with regard to the post-disaster situation.

Other important ethical issues to take into consideration are that participation in the research should be voluntary, the research should not harm the participants and anonymity and confidentiality should be guaranteed if the participant wishes that. Also, (vulnerable) people should be treated respectfully (Babbie, 2010). Moreover, interviews – and in particular the interviews for this study – had to be based on what is called 'informed consent'. In order to ensure that participants knew what to expect of the interviews and what could be expected of them, a consent form is used in this research. This consent form, attached in Appendix B, stated the rights of the respondent and the rights and obligations of the researcher and is sent to each respondent prior to the interview. It can be assumed that the use of this consent form was of great value to the research, especially because this study deals with a complex, emotional and sensitive case. Although it seemed a bit formal and strict, the signing of this form prior to each interview made that the participants could share their experiences fully, without being afraid of what would be done with their information.

Furthermore, it is important to bear in mind that the positionality of the researcher always influences the outcomes of the research. With regard to the observations conducted by the researcher, it is not possible to observe everything because of the selective nature of observations. Every person connects his or her observations to a broader framework of what his or her reality is. With regard to the interviews, the positionality of the researcher – a female master student from the Netherlands – created a certain power balance. Furthermore, what the researcher communicates – both verbally and nonverbally – depends on the position of his or her in a system. The analysis of the data is as well subject to the interpretation and therefore positionality of the researcher.

As an outsider in the Christchurch case, extra effort had to be put in gaining an understanding about the local feelings and knowledge about the events that happened. In order to obtain this understanding about the local and national context, the researcher has attended and observed meetings of local residents, as is shown in table 4.1. Moreover, the first interview was conducted with the Member of Parliament for Christchurch East. Although the same interview guide was used as in the following interviews, more attention was paid to the local, institutional and political context in this interview. This gave the researcher some initial, important insights in the context. Also, the researcher paid attention to the local newspapers and websites of local organizations in order to get and stay updated about the recovery process. Moreover, as said before, various newspaper articles were analyzed as part of the data collection and analysis.

Finally, it is important to be reflexive about these ethical issues. Interviewing people about the aftermath of a natural disaster was not an easy topic. It was essential to pay attention to the fact that this topic in itself could be very emotional for people. Also, it is possible that some information that respondents provided is too much influenced by their emotions and frustrations. Therefore, it is important to bear in mind that this research is conducted only two years after the devastating earthquakes. However, the outcomes of this research are relevant and form an understanding of social engagement in the aftermath of natural disasters.

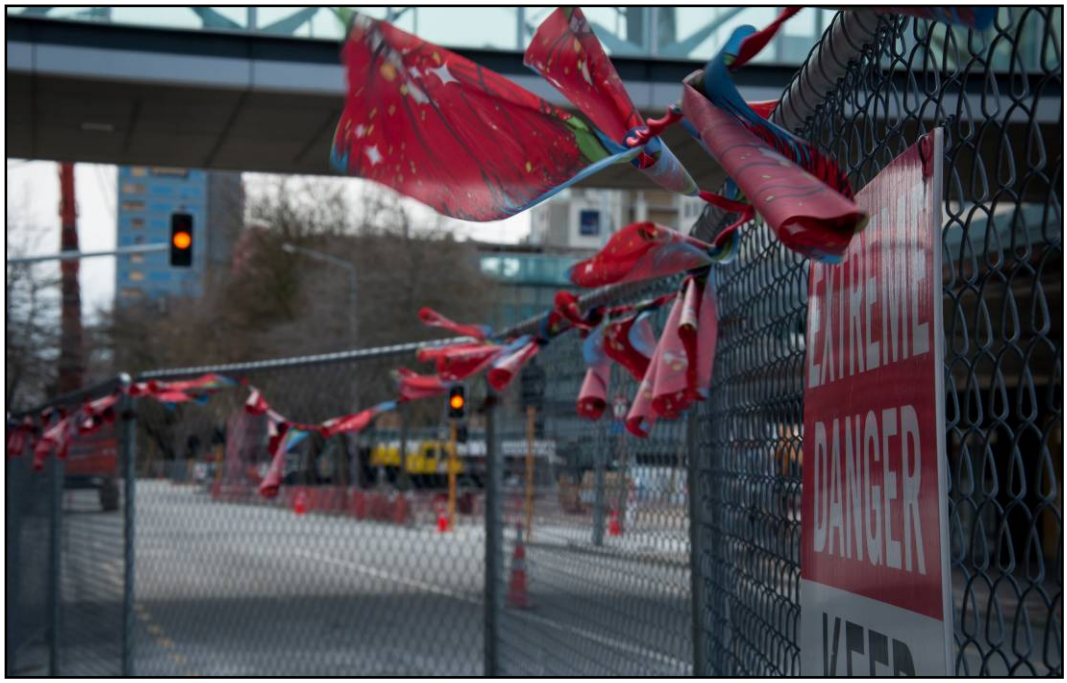

Figure 4.4 – Picture of remembering the earthquakes (Source: Author)

5. Analysis

This chapter presents an analysis of social engagement in the recovery process of post-disaster Christchurch. First, the conceptual model of a transition that is described in chapter 2 will be adapted to the Christchurch context. Second, an elaboration takes place of the contents and creation of the several plans for recovery in Christchurch. After that, the experiences of people with regard to social engagement for the development of the recovery plans will be examined. Subsequently, section 5.4 describes the way in which the recovery plans reflect the ideas of people that were generated through the social engagement projects. Finally, section 5.5 focuses on the experiences of people with the role of the government and of community organizations.

The results are based on an analysis of the transcripts of the interviews that are conducted for the purpose of this study. Also, the participant observations, document analysis and the earlier conducted literature study are part of the sources on which the analysis is based.

5.1 Post-disaster transition(s) in Christchurch

The post-earthquake recovery process in Christchurch is different than the standard post-disaster recovery process. An important message that is obtained through the interviews and that all respondents emphasize, is that the case of Christchurch is characterized by many disasters and not 'just' by one. The occurrence of a second major disaster after the first earthquake, and additionally the threat of the ongoing seismic activity in the form of many aftershocks, make the recovery of Christchurch a complex and complicated process.

The theoretical framework of this study presented a conceptual model of a transition. Shock events like natural disaster often trigger such a transition. However, whereas in a normal context a transition develops gradually and can be blocked or slowed down mostly by forces on meso-level, a transition that results from a disaster develops very abrupt and fast. Figure 5.1 shows the conceptual model of a transition applied to the context of Christchurch. When integrating the conceptual transition curve with a post-disaster transition, the pre-development stage can be characterized as the pre-disaster stage. Next, the take-off stage can be regarded as the emergency stage in which emergency response activities are conducted. Subsequently, the acceleration stage can be applied to the restore stage. In this stage, buildings are made safe when possible and buildings that are too badly damaged are demolished. Finally, the stabilization stage can be regarded as the improvement stage, in which a better place is created (CERA, 2012a).

However, because there is not one but two major shock events, the transition in the Christchurch case does not follow a standard post-disaster transition curve. The systems in Christchurch changed into an emergency stage when the first earthquake hit the city on four September 2010. The city was shifting into the restore stage with a glimpse towards reconstruction until 22 February 2011 (X15, 2012). However, when the second big earthquake struck in February, the society returned into a disaster emergency response situation. Moreover, the recovery process towards improvement is complicated by ongoing seismic activity in the area (X1, 2012). Nevertheless, by the end of 2012 most

respondents agree that the situation in Christchurch is slowly moving towards a state of reconstruction and improvement, as the seismic activity has decreased and people are beginning to look and wish for a better future (X9, 2012). This study focused mainly on the crisis stage of emergency response and the stage of restoration towards reconstruction.

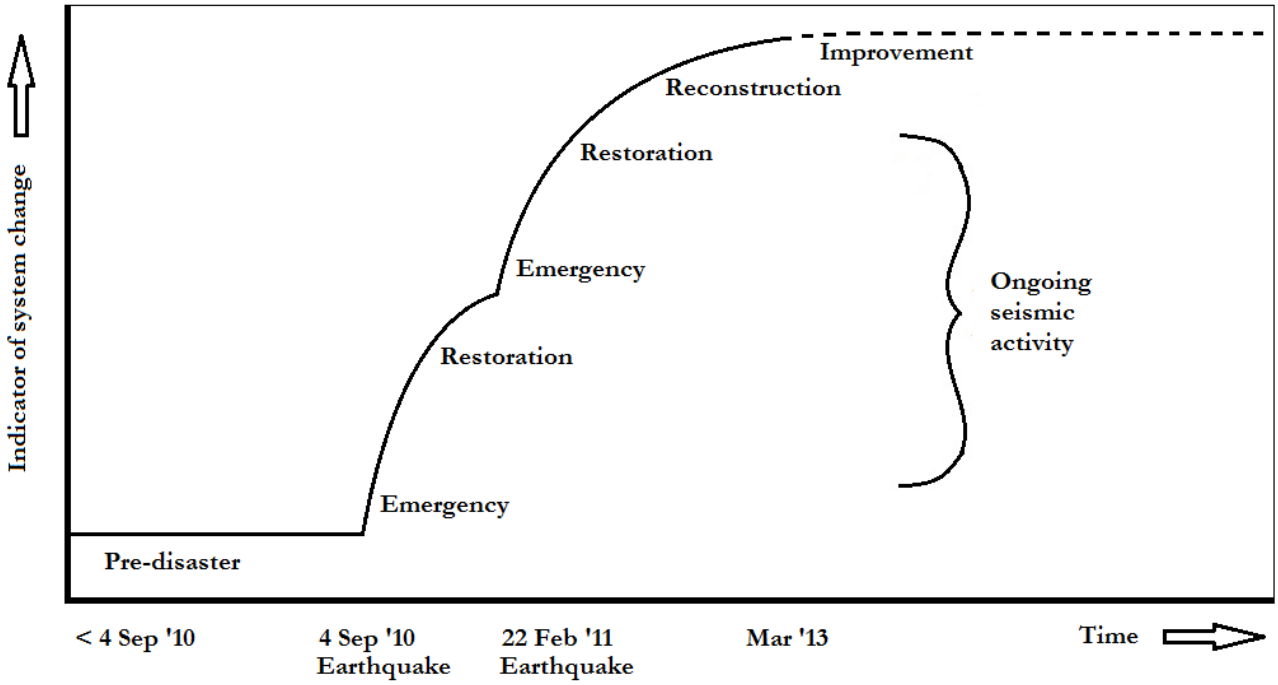

Figure 5.1 – Post-disaster transition process of Christchurch (Source: Author)

5.2 Plans, visions and strategies

In the recovery process of Christchurch, various plans, visions and strategies are created for the greater Christchurch area. Because these plans form the basis for the future of the city, it is important that the public could participate in the process of the creation of the plans. The plans that are examined, as mentioned earlier in chapter 4, are the:

- Final Draft Central City Recovery Plan of the CCC;
- Christchurch Central Recovery Plan of CERA and the CCDU;
- Draft Recovery Strategy for Greater Christchurch of the CERA;
- Recovery Strategy for Greater Christchurch of the CERA;
- Stronger Christchurch Infrastructure Rebuild Plan of the SCIRT;
- Community Engagement Strategy of the CERA;
- Community Engagement Framework of the CERA.

The CCC developed the final draft of the Central City Recovery Plan in December 2011. According to the CCC (2011a), the draft was inspired by 106,000 ideas that were generated from the Share an Idea public engagement project, by key stakeholder feedback and it was refined by 4,704 comments that were generated through the Tell us What you Think public engagement project. The final draft entails a vision that is based on five themes: green city, distinctive city, city life, transport choice and market city. The CCC emphasizes the importance of community engagement in their approach to recovery. Also, the final draft distinguishes five key changes: green city, stronger built

identity, compact CBD, live, work, play, learn and visit, and accessible city. Several key projects are described that have to direct the city towards these five key changes. The first part of the draft of the Central City Recovery Plan is organized around Christchurch before the earthquakes, the effects of the earthquakes, the way to recovery, the importance of remembering and the embracement of the transitional city. After this, the plan elaborates on the five themes of the vision for the recovery (CCC, 2011a).

The Final Draft of the Central City Recovery Plan was presented to the Minister of CERA. In July 2012, the CCDU of CERA launched the Christchurch Central Recovery Plan. The five key changes as distinguished in the draft of the plan were adopted in the final plan. Also, the final plan emphasized the importance to listen to the people in the recovery process. Both plans elaborate furthermore on the multifaceted character of recovery and that a good balance between the competing elements is essential for quick recovery. These elements and phases of recovery are: emergency, restoration, reconstruction and improvement and can be compared with the four stages of a transition as described in chapter 2 and in the previous section 5.1 (CERA, 2012a).

A major difference between the final draft and the plan however, is that the latter includes a blueprint plan for the recovery of the central city. Moreover, the final plan mentions six key challenges. These challenges are: too much space, extent of damage, attracting investment, time to fix, multiple owners, and east is worst hit. In order to address these challenges, the CCDU proposed ten design principles: compress, contain, catalyse, support, repair, embrace the river, open space, complete, existing value, and attract. Furthermore, the final draft differs from the plan in that the plan proposes 'anchor projects' that will contribute to recovery and the plan assigns various precincts for the realization of the five key changes (CERA, 2012a).

In September 2011 the CERA presented the Draft Recovery Strategy for Greater Christchurch. The purpose of this document was to generate discussion and to receive feedback from the strategic partners of CERA – Te Rūnanga o Ngāi Tahu, the CCC, the Selwyn and Waimakariri District Councils and Environment Canterbury – and from government agencies as well as the wider community. This consulting process led to the development of the final Recovery Strategy for Greater Christchurch in May 2012. The vision of the strategy is to "recover as a place to be proud of – an attractive and vibrant place to live, work, visit and invest [...] – for us and our children after us." (CERA, 2012b, p. 8). The final recovery strategy has six goals which relate to the six components of recovery, as distinguished by CERA (2012b). These six components are: leadership and integration, economic recovery, social recovery, cultural recovery, built environment recovery, and natural environment recovery.

The final recovery strategy emphasizes more on the different recovery programs than the draft, and there are separate sections for these above mentioned major components of recovery. Moreover, whereas the draft of the strategy elaborates on what is learnt from the experiences in Christchurch, the final strategy moves directly towards describing the guiding principles in the recovery and it emphasizes on the vision and goal for recovery (CERA, 2011; CERA, 2012b).

The next plan that is analyzed, is the Stronger Christchurch Infrastructure Rebuild Plan of the SCIRT and the CCC. According to CCC (2011b), the plan "has been prepared to help the community understand how the Council and the Stronger Christchurch Infrastructure Rebuild Team (SCIRT) will fix our earthquake damaged horizontal

infrastructure." (p. 6). A major message in this document is that public participation with regard to the rebuild of infrastructure will mainly be on the informing and consulting levels of the IAP2 spectrum. Furthermore, the vision of SCIRT is to create resilient and sustainable infrastructure so that people feel secure and confident about the future of Christchurch (CCC, 2011b).

The last two documents that are analyzed are the Community Engagement Strategy and the Community Framework of CERA. In the engagement strategy, CERA argues that it is their goal to enable communities to participate in decision-making processes, and to communicate and work with people in a variety of ways. Furthermore, CERA states that this is important, since international research proves that engagement with communities in recovery processes is essential. The more detailed engagement framework is based on the IAP2 spectrum for public participation. CERA states that their aim is to engage with the community on the various levels of public participation and that they will do this as often as possible on the highest level of empowerment (CERA, 2012c; CERA, 2012d).

In the next sections, the contents of these plans and strategies will form a point of reference for the analysis of the interviews that are conducted with the different stakeholders. In the next section, the planning process of the creation of recovery plans and strategies for greater Christchurch will be examined and specifically, attention will be paid to the role of social engagement in this.

5.3. Planning process and social engagement

How was social engagement incorporated in the process of establishing the plans and visions for recovery? And what kind of public engagement projects took place in post-disaster Christchurch? Experiences of people with regard to these issues based on the interviews will be addressed in this section.

Christchurch Central Recovery Plan

Several plans and strategies are created by different governments in the recovery process of Christchurch. The main documents are described in the previous section. In the process of developing the Christchurch Central Recovery Plan – or: central city plan – there were various engagement practices of governments and other institutions. When asking the respondents about the planning process for the development of the plans, all sixteen participants referred to the Share an Idea campaign. According to a planner at the CCC, the Share an Idea project was a really new engagement exercise, because it was totally at front in the process (X4, 2012). The ideas that were generated through the Share an Idea project were input for the first draft of the central city plan by the CCC. So, whereas normally planning processes start with planners themselves developing a first draft or initial document, there was no document at all prior to the Share an Idea campaign (X4, 2012). After the first draft of the central city plan, there was the more traditional social engagement exercise Tell us What you Think, where people could submit written comments. Furthermore, there were public hearings and targeted stakeholder workshops, so that everyone could have their say on the draft.

Next to these public engagement projects of the government, the Crown Research Institute Landcare Research conducted an engagement exercise. Because a team at Landcare Research was interested in sustainability and resilience in the city, they came up with the idea to use social media in an event to generate ideas from the people about the future of Christchurch. The project that they undertook was called 'Magnetic South' and it was a 24-hour event that allowed a real dialogue in the form of an online game about how the future should be. Magnetic South was supported by the CCC and it ran at the same time as Share an Idea of the CCC (X8, 2012). But, according to respondent X8 (2012), whereas the Share an Idea was a passive engagement event in the form of submitting ideas, Magnetic South was an interactive game and it provided a platform for people to discuss ideas with each other. The participants in Magnetic South stayed anonymous, but the researchers could see the location and age of a player and there was quite a good representation of the population. The results from Magnetic South were presented in a report that was offered to the CCC (X8, 2012). Together with the input from Share an Idea this ultimately resulted in the final draft of the central city plan by the CCC (X4, 2012; X8, 2012).

As shown in the timeline of the recovery process of Christchurch in chapter 3, the final draft of the central city plan was presented to CERA. After that, the CCDU of CERA wrote the final central city plan. Many respondents argue that engagement in the recovery process was good until the CCDU received the plan. Respondent X5 (2012) argues that the sharing and engaging process stopped since the plan is delivered to CERA. Also, respondent X4 (2012) states that the Share an Idea and the Tell us What you Think projects got good feedback and were appreciated by the people, but there was tension about the final central city plan, because it was developed in-house. Respondent X7 (2012) argues as well that although the Share an Idea campaign of the CCC was good, the social engagement of the CERA and CCDU for the final central city plan was much more limited. Furthermore, the Share an Idea project is regarded as a good social engagement exercise, because people had the room to submit ideas they wanted (X10, 2012), it was a robust project (X11, 2012) and since it was a very inclusive project, people felt connected to the city (X16, 2012). However, respondent X11 (2012) states that it should not have been the only means of engagement. Respondent X16 (2012) adds to this that the consultation that CERA undertook for the final central city plan was very token and therefore, respondent X10 (2012) argues that the original spirit of Share an Idea is lost.

The major reason for the fact that people feel disengaged after an exciting period of initial engagement (X10, 2012), is the difference between the contents of and process for the final draft of the central city plan by the CCC and the final plan by the CCDU and CERA. With regard to the contents of the plans, respondent X9 (2012) argues that the biggest change is the decision of the central government "to impose certain big assets on the city. And the costs associated with them are going to be enormous. [...] That was not part of Share an Idea." (X9, 2012). Respondent X10 (2012) argues as well that most aspects of the final draft of the central city plan were good, but he has a concern for the "extravagant, unnecessary things, like the convention centre." (X10, 2012). The next section will dig deeper into the contents of the final plans and into how people feel their ideas are reflected in these plans.

With regard to the process, although CERA states in the final central city plan that they used the inputs from Share an Idea in their process of consultation, respondent X9 (2012) argues that CERA has not consulted at all for the final central city plan. In

response to this, respondent X2 (2012) of CERA argues that the CCDU did use the input from the Share an Idea campaign to create the final central city plan, but CERA had to make certain decisions about what could and could not be included in the final central city plan (X2, 2012). Respondent X1 (2012) thinks that it was a mistake to link the input from the Share an Idea campaign to the central city, because it should have been input for the whole of greater Christchurch. Furthermore, respondent X16 (2012) states that CERA struggles with community engagement, because it seems very token according to her. This is caused by the experience that respondent X16 (2012) and respondent X3 (2012) have had with regard to social engagement of CERA. They were both invited for a stakeholder engagement exercise of CERA, but the decision to engage with the stakeholder groups and the composition of the groups seemed very random to them (X16, 2012; X3, 2012).

Recovery Strategy for Greater Christchurch

Many respondents indicate that it is not clear whether the Share an Idea campaign was also meant to inform the Recovery Strategy for Greater Christchurch (or: recovery strategy) of CERA. Respondent X12 of CERA has worked on the recovery strategy and states that the recovery strategy is a document with statutory effect that will set the direction for the rebuilding of greater Christchurch. There are many more detailed programs under the recovery strategy and the central city plan is one of them. The central city plan was retested against the recovery strategy, since the more detailed programs have to be "not inconsistent with" the recovery strategy (X12, 2012; X4, 2012; CERA, 2012b). Respondent X12 (2012) argues that that the Share an Idea project was much more detailed and mainly for the final central city plan, whereas the recovery strategy was at a much higher, strategic level for all of greater Christchurch. Respondent X4 (2012) of the CCC says as well that the Share an Idea project was to inform the central city plan and that CERA undertook their own engagement for the creation of the recovery strategy. Respondent X4 (2012) states indeed that the consultation of CERA was at a much higher level and is therefore less easy to understand for people.

There were eight focus groups held with different people in the process of creating the draft of the recovery strategy. These focus groups were conducted with the community, but also with different governments. Whereas most government agencies operate across the country about a specific topic, CERA operates in a specific area about a lot of different topics (X12, 2012). Therefore, respondent X12 (2021) states, CERA engages in every step of the process "with (a) the local government, because we are in their space, (b) Iwi, because we are in their space, and (c) the central government, because they have policies and directions that we need to nest within." (X12, 2012). In the draft of the recovery strategy CERA presented questions to think about and people could make written submissions on these questions. At the end, CERA received 463 written submissions which resulted in the final recovery strategy (X12, 2012).

Social engagement of CERA

Respondent X12 (2012) argues that CERA engages a lot with its strategic partners, among others with the CCC and Environment Canterbury. There are meetings on a monthly basis and next to that, there are meetings with advisory committees. Every program has a technical advisory group, there is a community forum and there is a cross-party forum. So, respondent X12 (2012) states that CERA had an inclusive process. However, respondents X13 and X14 (2012) argue that there is indeed much engagement,

but CERA does not engage with the people in the communities. It stays on a too high level according to them. Respondent X12 (2012) says in response to this that because the recovery strategy is very much on a high level, it is not suitable for ongoing engagement. Furthermore, many people think that CERA only engages with the business community because they are important stakeholders in the CBD (X10, 2012). However, respondent X5 (2012) points out that although the big businesses do feel they participated, smaller businesses do not. Moreover, whereas many people think that the focus on the CBD is to the benefit of the businesses, respondent X5 (2012) argues that many businesses do not necessarily have to be located in the CBD because "a nice working environment is also an important quality."

According to respondent X9 (2012), although there is a community forum, "there seems to be no correlation between decisions that are made and the put-back community forum. It's pseudo consultation". Two respondents from the Mount Pleasant Community Organization agree with this and state that the members of the forum can participate "but whether Gerry Brownlee takes any notice, who knows." (X13 and X14, 2012). Subsequently, Parker and Curtis (2012) of the community organization CanCERN – Canterbury Communities' Earthquake Recovery Network – argue that there has not been clear leadership and communication in the recovery process. Also, they state that the timing of engagement is wrong; there is a lack of engagement at the time when plans and decisions are created whereas there was engagement after the decisions were made (Parker and Curtis, 2012). Respondent X2 of CERA (2012) believes that community engagement is very important in recovery, but until now the decisions that had been made were all technical decisions on which the government decided to not have consultation with communities. According to this respondent, it did not reach further than the level of informing on the IAP2 spectrum of public participation (X2, 2012). Furthermore, respondent X2 (2012) states that social engagement in the creation of the recovery plans can be characterized by that there was an attempt to engage, but there has not been any clear understanding about what that engagement might look like. Parker and Curtis (2012) furthermore critique that on paper the engagement in the recovery of Christchurch is well-written, but in reality many people do not feel engaged, because they cannot make themselves heard in the process. They think that Share an Idea was good for a group of people, but many people could not engage, because it was too high level. They claim that the government imposes engagement and that is not engagement (Parker and Curtis, 2012).

Finally, respondent X9 (2012) states that "the general feeling is that there is an ideology that the national government is promoting in Christchurch, and that is a top-down, corporate, dictatorial approach without consultation. [...] People are not part of the recovery process in Christchurch, so we feel quite disempowered." (X9, 2012). There is a belief that "mother knows best, therefore will do and tell you." (X5, 2012). Finally, respondent X16 (2012) calls the recovery process of Christchurch "very top-down, government-led, results-focused and private investment-driven."

Tensions: 'CBD versus suburbs' and 'emergency versus future'

Another point of critique that some respondents emphasize, is the focus of the governments on the future of the central business district of Christchurch – the CBD – while the people in the badly affected suburbs were still living in tough conditions. Many people participated at the time in the Share an Idea campaign, but there were also people that could not participate and felt therefore disempowered. These people were still living

in a traumatized, disaster situation and respondent X9 (2012) as well as Parker and Curtis (2012) question how these people could think about the future of the CBD. Respondent X9 (2012) argues that people were frustrated, because there was no plan for the rebuild of the suburbs at all, while that is where the people are living. If there was parallel suburban planning, it would have been easier to engage for the people in the affected suburbs (Parker and Curtis, 2012). The respondents from the coastal suburbs of Sumner and Mount Pleasant also refer to the lack of planning for their areas. After the earthquakes, the immediate services and responses did not come to the coastal neighbourhoods, so the communities had to improvise themselves (X7, 2012; X3, 2012; X13 and X14, 2012).

This relates to the various stages of a transition after a disaster. Parker and Curtis (2012) argue that social engagement should be different in each phase, because the context and content change during the transition and because you have to stay connected with your community. First, there was the emergency response and then there was the long-term planning and programming (X12, 2012). In the early response phase, people needed a lot of information (X2, 2012). Respondent X15 (2012) of the Waimakariri District Council points to the huge thirst for information among people in this response phase.

Waimakariri

The Waimakariri district was also badly affected by the earthquakes and in particular by the first earthquake in September 2010. The Waimakariri District Council looks at the recovery process after the earthquakes as a transition with different components and different stages. Respondent X15 (2012) characterizes the response phase in the Waimakariri district as having very early and very significant communications with the affected community, because there was a big need for information. After the September 2010 earthquake there was a first round of community meetings where the council asked the people what they wanted to know. However, in February the second major earthquake happened and everything turned absolutely to chaos, among others because homeless people from Christchurch came to Kaiapoi and Rangiora in the Waimakariri district (X15, 2012).

In this emergency response phase there was a lot of face-to-face engagement, media attention and newsletter distribution. The Waimakariri District Council was consulting about a cluster-based rebuild program. After the February 2011 earthquake, CERA was established and it began their zoning process. There was no consultation for the zoning decisions and these were very declaratively decisions. During this process there was a lot of mass community engagement and the council said what it knew and what it did not know. After this period of mass community engagement, Waimakariri retained their information hub where people could make individual appointments, and a supporting team was kept that supports households one-to-one through the process (X15, 2012). So, "we move from mass to much more customized, individual sort of stuff." (X15, 2012). Two years after the disaster, when the area is moving from restoration into reconstruction, the Waimakariri district is looking at how they have to deal with the post-disaster stress in the wider community (X15, 2012). Respondent X15 (2012) states finally that the disasters have accelerated decision-making.

SCIRT

The separate agency that is set up in Christchurch that is responsible for the rebuild of the horizontal infrastructure of greater Christchurch, is the SCIRT. SCIRT conducts its own community engagement with regard to the infrastructure rebuild (X6, 2012). Their engagement is based on the IAP2 spectrum of public participation. Because SCIRT deals with a lot of technical issues, its community engagement often takes place on the inform level in terms of the IAP2 spectrum. Respondent X6 (2012) states that "the community engagement part of the rebuild plan of SCIRT is all about being really clear to the community about what is going to happen, it is expectation management." It is not necessarily best to aim for participation on the highest level of the IAP2 spectrum, respondent X6 (2012) argues. She is a great advocate of the inform level, because by informing properly, "you give people security and confidence." (X6, 2012). People do not need to participate more in the process with regard to the rebuild of horizontal infrastructure, because underground infrastructure does not affect people directly. However, when there are intrusive components that have an influence on the ground, in neighbourhoods and on people, public meetings will be held (X6, 2012).

As well as the central city plan, the rebuild plan of SCIRT is in accordance with the recovery strategy of CERA (X6, 2012). Nevertheless, things had to be quite flexible to allow for changes particularly in the early days after the disaster. Moreover, many people just had to make up what they had to do, because they had never faced something like this post-earthquake situation before (X6, 2012). The next section examines how people feel their ideas are translated in the plans for recovery and how these plans reflect the identity of the people in greater Christchurch.

5.4 Reflection of ideas of people in the plans and strategies

As mentioned in section 5.3, this section describes how the contents of the plans with regard to the recovery of Christchurch reflect the ideas of people for the future of their city. Some of the findings relate to the process of social engagement in the creation of the plans, as examined in the previous section.

The final draft and the final plan

Most respondents indicate that the ideas of people are well reflected in final draft of the central city plan of the CCC. The five key changes that the CCC presents in the final draft – green city, stronger built identity, compact CBD, live, work, play, learn and visit, and accessible city – are the major ideas that the people came up with during the Share an Idea campaign (X3, 2012; X7, 2012). However, respondent X1 (2012) states that although the ideas of people are well reflected in the five key changes of the final draft of the central city plan of the CCC, they are not in the final plan that CERA has created. Respondent X9 (2012) argues as well that people do not see their ideas reflected in the final five key changes, because the CCDU of CERA has not consulted with the people for the creation of the final blueprint plan that is part of the final central city plan. Parker and Curtis (2012) refer to the difference between the concept of the plan and the actual outcome of it. Only pieces of the ideas are used for the final plan, according to them. Respondent X2 (2012) of CERA comments that it is hard to speak for all people about whether their ideas are reflected in the plans, but that the community probably feels locked-out of some of the decisions.

The reason why many respondents argue that the final central city plan changed negatively with regard to the reflection of ideas of people, is that CERA and the CCDU presented big catalyst facilities in the final plan, such as a convention center (X7, 2012; X16, 2012). People did not ask for those things (X9, 2012). Respondent X13 and X14 (2012) argue that there were great and green ideas after Share an Idea, but only some of these ideas are remained since CERA received and worked on the plan. Next to that, respondent X7 (2012) and respondent X4 (2012) think that the design principles that CERA proposes in the final plan are based on the views of architects, planners and consultants who wrote the final plan rather than on the views of the people.

Respondent X4 (2012) states that the final plan of CERA is certainly based on the final draft of the CCC, but agrees that CERA and the CCDU made some changes. According to respondent X4 (2012), whereas the final draft of the central city plan was really what the community and the council asked for – for instance the issue of affordable housing – CERA paid more attention to the catalyst facilities. In this regard, respondents X13 and X14 (2012) as well as respondent X4 (2012) refer to the financial considerations that CERA had to make and the CCC did not have to pay attention to. Also, CERA needed a recovery plan to attract foreign investors for the rebuilding of the city and to compete in this sense with for instance post-disaster cases in Japan and Australia (X13 and X14, 2012).

The plan and the outcome in reality

Next to the difference between the final draft and the final central city plan, some respondents argue that the final plan reflects the ideas of the communities well, but they are skeptical about the actual implementation of it (X16, 2012). CERA and the CCDU say that the blueprint is based on the ideas of Share an Idea. However, respondent X9 (2012) thinks that although the names are chosen well, the actual meaning of them in terms of the assets, the costs, the shapes and just the way they are going to be, seem to be very different than the initial ideas of Share an Idea. Respondent X1 (2012) agrees with this by saying that "they have probably taken those words, but they have made it something else." Respondent X10 (2012) emphasizes that people do see their ideas reflected in the central city plan, but "only at the most trivial level of green wash". He states that these are 'public relations' names and that the five key changes and the ten design principles are the result from the 'public relations factory'. Respondent X10 (2012) understands that design principles help to better articulate a direction, but he is not sure whether these reflect the ideas of the people. Furthermore, respondents X13 and X14 (2012) argue that the five key changes captured the ideas from Share an Idea and what is required for a twenty first century city, but people do not trust that it is actually going to happen. Also they state that the ten design principles are good principles, but there is no political leader who advocates for these principles (X13 and X14, 2012).

Respondent X4 (2012) agrees that some ideas are not directly represented in the final central city plan, but he states that it is hard to see the transition from the post-it note to the final product of CERA and the CCDU. With regard to the critique that people had that the plans did not reflect the ideas of Share an Idea and Magnetic South, respondent X8 (2012) argues that you cannot reduce such a process to one individual with an idea and recognize that idea directly in a plan. He refers to the metaphor of the baking of a cake. "The ingredients go in and then at the end the cake does not look like the ingredients, but everyone has agreed that if you have this, this and this, then you get

something nice to eat." (X8, 2012). So, at the end you cannot see the separate ingredients back (X8, 2012).

Two major bottom-up grassroots community groups – Gap Filler and Greening the Rubble – are initiated in Christchurch. The next section will dig deeper into their role and activities in the recovery process. What is important to mention in this space however, is that they both embrace the concept of 'transitional city'. Respondent X16 (2012) of Gap Filler states that she feels that although the ideas around the transitional city are well reflected in the plans, they are not taken seriously: "the plans reflect what the people want, but also what fits with what the government wants." Respondent X16 (2012) agrees that big facilities are needed, but they have to be balanced against community wishes. As Gap Filler they think that it is important to "reconnect people with their city rather than just passively waiting for it to be rebuild." (X16, 2012). Through participating in this kind of projects, communities feel that they are part of the city again and because of their contribution, they can identify themselves with the city.

Identity

According to respondent X7 (2012), it is hard to answer whether people can identify themselves with the city that the plans propose, because the city centre did not mean very much to a lot of residents of Christchurch before the earthquakes. Respondents X13 and X14 (2012) agree with this by saying that the central city was dying before the earthquakes. However, the alienation from the city centre is strengthened by the non-incorporation of the ideas of the people in the final plans. "It feels like the city does not belong to us." (X13 and X14, 2012). Respondent X7 (2012) argues that it is more like a chance to build a new city and about a recovery of a memory, so he states: "what are we in danger of losing if we do not participate in this recovery?" (X7, 2012).

Respondent X9 (2012) thinks that people in the eastern suburbs in particular do not know or do not care about what is going on in the city centre. They cannot identify themselves with the plans for the recovery of Christchurch (X9, 2012). Respondent X4 (2012) argues as well that some people find it hard to identify themselves with the new city, they do not recognize it anymore. Although the plans do reflect what people want, it is hard for them to visualize from the plans what their city is going to look like (X4, 2012). Another big issue that respondent X9 (2012) and respondent X16 (2012) emphasize is the destruction of the heritage buildings. They are both afraid that people cannot identify themselves anymore with the new central city, because the old beautiful buildings are taken down without any consultation.

5.5 Role of governments, community organizations and other stakeholders

This section examines the role of different actors in the recovery process of Christchurch. Many respondents indicate that there was a lack of understanding of the institutional structure after the earthquakes. Therefore, the role of the different governments will be analyzed first. After that, a specific issue around the unclear structure – the communication between the government and the people – will be described. At the end, the role of community organizations, and in particular of Gap Filler and Greening the Rubble, will be examined.

Unclear structure and responsibilities

The interviews with various actors turn out that the responsibilities were unclear between the different governments in greater Christchurch. After the first earthquake in September 2010, the CCC was responsible for the rebuild of the city of Christchurch, and the Selwyn District Council as well as the Waimakariri District Council were responsible for their affected areas. However, after the earthquake in February 2011, a national state of emergency was declared which ultimately led to the establishment of CERA. According to respondent X5 (2012) and respondent X6 (2012), CERA arose out of Civil Defence when it became obvious that the fragmented approach of the councils and the initial emergency response activities of Civil Defence were not appropriate and sufficient for leading the recovery process of Christchurch.

The tensions between the responsibilities of the different governments started in this period when CERA arose out of Civil Defence. The affected districts in Canterbury – Christchurch, Selwyn and Waimakariri – had their own Civil Defence emergency and when this period was over, every district made their own recovery plans based on what was needed in their area. However, respondent X1 (2012) states, Christchurch did not make a plan, because the central government had set up CERA. And so, the CCC thought that CERA was going to make the recovery plan for Christchurch, but the CCC was supposed to create the plan by itself (X1, 2012).

The overall feeling among the respondents is that the relationship between the CCC and CERA is good (X4, 2012; X7, 2012). However, respondent X4 (2012) argues that he can understand it when some councillors feel a bit marginalized, because the central government "stepped-in and took over" and they did not have much access to what was going on at CERA. According to respondent X7 (2012), many people regard CERA as a mysterious entity that is hard to talk to. Moreover, the relationship between and the responsibilities of CERA and the CCC are very unclear (X3, 2012). Respondent X3 (2012) argues that many people are confused about the responsibilities of the CCC and of CERA, because after the February 2011 earthquake, suddenly the central government announced that it was going to lead the Canterbury recovery process. Therefore, many people regard CERA as coming from Wellington taking over the rule (X3, 2012).

In actual fact, the CCC was responsible for rebuilding the city of Christchurch whereas CERA was responsible for rebuilding greater Christchurch. Also, CERA acts on a high and strategic level and the CCC on a more detailed, operational level (X12, 2012). However, CERA was focusing on the recovery of the central city as well. Respondent X7 (2012) argues in this respect that the CCC needed the authority of the central government to realize things. Because CERA was set up, it became the instrument for the central city although it was initially established for greater Christchurch and not necessarily for the CBD.

Communication

In the early response phase of the transition after a disaster, the government has to provide the people with clear information (X2, 2012). As mentioned in the section 5.3, there was a huge need for information in the initial stage after the earthquakes. However, Parker and Curtis (2012) argue that there is no good communication in the recovery process of greater Christchurch. Their community organization CanCERN is set up with the aim to improve the communication between the government and the people, because

in the recovery process they get unclear answers, "inconsistent information or definitely different pieces of information from different stakeholders which actually confuses everybody more than anything else." (Parker and Curtis, 2012). Respondent X5 (2012) adds to this that negotiation, good will and listening helps more than yelling and screaming and that is why CanCERN is set up.

Also, as is described in the theoretical framework in chapter 2 of this thesis, the government is supposed to provide leadership and direction in the recovery process. Nevertheless, respondents X13 and X14 (2012) argue that the political leaders in Christchurch did not have a clear vision. Moreover, they state that because of political influences in the recovery process, leaders could not act freely and they should have had the ability to do so to do their job successfully. Respondent X1 (2012) argues in this respect that the initial earthquake commission "was independent but had no power and CERA is powerful, but has no independence." Moreover, responders X13 and X14 (2012) think that the energy in the rebuilding does not come from the political leaders, but from the creative people of Gap Filler and Greening the Rubble.

Gap Filler and Greening the Rubble

Gap Filler and Greening the Rubble are two organizations that are set up after the earthquakes and that are trying to fill up empty spaces in the city with temporary creative and green initiatives. As mentioned before, they both embrace the concept of transitional city in order to make the best of the recovery process. Respondent X16 (2012) explains that Gap Filler was set up after the September 2010 earthquake, but it expanded after the February 2011 earthquake. First, she and a few others were afraid that the city was going to be rebuild too fast, without paying attention to good new urban quality and possibilities in the intermediate time. However, she states, "this seems a bit naive now." (X16, 2012). After the February earthquake, Gap Filler became more known and more important for people, because people "needed to feel positive." (X16, 2012). People come with ideas to Gap Filler and the organization then looks for a site and asks for permission from the land owner. Usually the land owners are happy to participate if the proposed initiative does not conflict with their schedule for rebuilding. Sometimes land owners even come to Gap Filler to ask if they want to develop something temporary on their land. Gap Filler is organizing and enhancing a lot of temporary creative activities, that fit with its principles "to be innovative, to lead by example, to be experimental and to involve the community." (X16, 2012).

Before the earthquakes, a group of people already had the idea to create more green space in the city. And so, after the September 2010 earthquake Greening the Rubble became a real organization (X7, 2012). Respondent X10 (2012) defines the activities of Greening the Rubble as "community-run, temporary re-use of vacant sites in the city." It is set up after the September 2010 earthquake, but the scale and magnitude changed after the February 2011 earthquake (X7, 2012; X10, 2012). The process of finding sites for temporary use of Greening the Rubble goes the same as with Gap Filler. Because the search for sites takes a lot of time and can be very complex, Gap Filler and Greening the Rubble led the initiative to establish another organization – Life in Vacant Spaces – that is going to focus on the process of searching for and getting available sites to conduct their temporary activities on (X16, 2012).

Community organizations

Apart from Gap Filler and Greening the Rubble, there are a lot of residents groups and other earthquake recovery related community organizations that are set up or expanded after the earthquakes. The already mentioned organization CanCERN is set up with the specific goal to get more and better communication between the governments and the people and to get full community engagement (Parker and Curtis, 2012). Another community organization that is called WeCan – Wider Earthquake Communities Action Network – aims to challenge decisions of among others CERA and the CCC and to get a fair and equal recovery process (X9, 2012). Furthermore, there are many residents associations that are committed to create good relationships and networks of people in their neighbourhoods. Through the organization of activities such as farmers markets and cinema evenings, residents get to know each other better and create energy to rebuild their neighbourhoods (X13 and X14, 2012). In this way, social capital is built in the areas. The next section will elaborate more on the strengths and weaknesses of the recovery process in general, and on the importance of social engagement in this in particular.

Figure 5.2 – Picture of future site of Gap Filler (Source: Author)

6. Synthesis and results

This chapter is devoted to give answers to the sub-questions of this study about the role of social engagement in the process of creating recovery plans, about the relationship between social engagement and resilience, and about the contribution of the social engagement projects in the recovery of Christchurch to a resilient city. First, the strengths and weaknesses of social engagement in the recovery process of Christchurch will be described. Second, the importance of social engagement in general, and in particular in a post-disaster context will be examined. Subsequently, the question will be answered how good social engagement should look like. The relationship between the recovery process and the creation of resilience in greater Christchurch will be examined at the end of this chapter. The results are a synthesis of the theory, the recovery plans, and the analysis of the interviews.

6.1 Strengths and weaknesses of social engagement

In this section the experiences of people based on the interviews with regard to the recovery process will be described. First, it examines the weaknesses of social engagement in the rebuild process. The experiences of the respondents will be described in relation to the issues social engagement activities, CBD versus suburbs and emergency versus future, general planning process and time pressure. After that, attention will be paid to some strong points of recovery process of Christchurch. The Share an Idea public engagement project will be examined here, as well as the two cases of the Waimakariri District and SCIRT. Subsequently, answers will be given to the question why social engagement is important, particularly in a post-disaster context. A description of how good social engagement should look like will be given at the end of this section.

Weaknesses

Weakness 1: Too limited social engagement practices

Although almost all respondents emphasize that the Share an Idea campaign to inform the central city plan was a very good social engagement activity, a related weakness is that there was no follow up process after the Share an Idea campaign (X1, 2012; X4, 2012). Also, the Tell us What You Think activity was "a traditional form of consultation which was fine, but there was not follow-up." (X1, 2012). Respondent X1 (2012) argues that social engagement in the recovery process started very well with engaging with the community and people thought they had a say in the recovery process. However, when it turned out that this was the only social engagement practice, people felt disempowered, because they had nowhere where they felt they could participate in the recovery process (X1, 2012). Respondent X5 (2012), respondent X7 (2012) and respondent X11 (2012) think as well that the Share an Idea campaign was a very good exercise. People participated in thinking about their future city and the numbers of participants show how many people were concerned. Respondent X7 (2012) questions on the other hand where the input has gone since CERA and the CCDU are working on the central city plan and whether it was worth all the effort. Respondent X11 (2012) states that the Share an Idea project was good, but it should have been a contribution instead of the only engagement activity. Respondent X8 (2012) thinks as well that the recovery process could be

improved when more participatory techniques were used with more groups actively involved. According to him, two years after the earthquakes there is a gap between the government – CERA – and the people. He states that sometimes there is a point where community involvement is not possible or appropriate, but there is nevertheless as well a point where you have to engage with them again and that is not happening in Christchurch (X8, 2012). Respondent X11 (2012) thinks that there was a lot of energy before the Share an Idea campaign, but unfortunately that has not been harnessed. Therefore, respondent X5 (2012) argues that a lot can be learnt about civic representation. Councilors are community leaders who have to represent communities and they have to know how to do that (X5, 2012).

Social engagement projects in the case of Christchurch did not reach further than the level of consultation. In terms of the ladder of participation of Arnstein – as mentioned in chapter 2 – respondent X11 (2012) states that engagement in Christchurch was often token participation. It was a 'tick-the-box' engagement type of exercise and there was no room for an interdisciplinary discussion (X11, 2012; Parker and Curtis, 2012). Parker and Curtis (2012) argue as well that the way and timing of engagement in the recovery process of Christchurch is not engagement, because "true engagement would actually continue with engagement the whole way through." Moreover, they state: "there are all the engagement principles, the guiding principles, but actually if you read it from their perspective, they can go through and tick off that they have done that exactly." (Parker and Curtis, 2012).

Respondent X2 (2012) agrees with this by saying that CERA has indeed a community engagement strategy and a framework, but there are no clear guidelines about how engagement should be done and what it means. However, two years after the earthquakes, CERA is working on a document with clear engagement guidelines. Nevertheless, respondent X3 (2012) states that the consultation that CERA undertook with some stakeholders was very top-down; "you had to get an invitation to participate and actors were chosen very random." (X3, 2012). Furthermore, a lot of the community engagement of CERA goes through the community forum which was democratically elected (X2, 2012). Next to that, CERA meets with different actors which they themselves identify as 'strategic partners' (CERA, 2012b). However, because this identification goes as well without consultation with the community, many respondents argue that recovery process is not transparent (X1, 2012). Respondents X13 and X14 (2012) argue that they do not understand why CERA did not come the communities to discuss, negotiate and consult with them (X13 and X14, 2012). Respondent X12 (2012) agrees that a lot of decision-making of CERA happens behind closed doors, but she states as well that some people want more and others want less community engagement.

Furthermore, with regard to the critique that there was no engagement on the zoning decisions, respondent X12 (2012) argues that these were very geotechnical and scientific decisions that had to be made by technical and scientific persons. However, according to Parker and Curtis (2012), engagement is when everybody agrees on something, and when engagement takes place before decisions are made. Moreover, respondent X7 (2012) thinks that some top-down planning can be important, but there has to be a balance. The recovery of Christchurch is too much top-down oriented, according to respondent X9 (2012). So, he states: "bottom-up is needed in recovery, otherwise they are going to, they are already isolating heaps of the city." (X9, 2012). According to respondent X4 (2012), Christchurch loses an opportunity if it does not try to involve the people back in the process.

Weakness 2: Tensions CBD versus suburbs and future versus emergency

A major factor that makes the recovery process of Christchurch complex, is that people in different areas are differently affected by the different earthquakes. While the CCC and CERA were engaging with the people and focusing on recovery plans for the CBD, many people in the eastern suburbs were still living in an emergency situation (X9, 2012). According to respondent X7 (2012), there has to be a split between business recovery and home recovery. Respondent X1 (2012) claims that people would have been a lot more satisfied with the recovery process if there was a plan for the suburbs next to the one for the CBD. Parker and Curtis (2012) state in response to this that "we have to be able to find a balance between those business-oriented concepts and social concepts and I think it is too out of balance at the moment." With regard to the business recovery, the local government has to look further than the Chamber of Commerce as the representative of the business community, because in particular the smaller business want to be more engaged (X5, 2012). Parker and Curtis (2012) argue that because people were so differently affected by the earthquakes, for some less affected people the type and way of social engagement was probably enough, while some other people needed a lot more and different engagement exercises. So, the stages of the transition are not going parallel for all residents and areas of Christchurch.

In the early days after a disaster, people needed a lot of information (X3, 2012). As is discussed in section 5.3, there was an enormous thirst for information in the emergency response phase (X15, 2012). When the transition evolves into the restore phase however, engagement should be more 'tailor-made' and based on the needs of the community (X15, 2012). Respondent X2 (2012) and respondent X12 (2012) argue as well that social engagement has to be different in every post-disaster stage and it has to depend upon the contextual circumstances. It should always be targeted to the decision-making context and the needs of the stakeholders.

So, following the theory of chapter 2, different forms of participation were needed in the different stages after the disaster and a better balance was needed between the short term response needs and the long terms recovery wishes. However, the governments have not organized the engagement in the recovery process based on the different contexts of each stage in the post-disaster transition.

Weakness 3: Time pressure

The third weakness about the recovery process of post-earthquake Christchurch is the high time pressure under which the government wants to rebuild the city. Many respondents regard the high time pressure as having a negative impact on social engagement, because it makes that social engagement is put aside very easy (X8, 2012). The planning process is too rushed and an ordinary citizen cannot see the reason for rushing the development of big new facilities. There is a tension between this and the individual issues of people (X5, 2012). Respondent X2 (2012) argues that there is indeed a tension between the time pressure and social engagement in the recovery process and respondent X11 (2012) stresses the tension between the time pressure and the depth of the process. Following the theory as described in chapter 2, respondent X12 (2012) thinks that there has to be a balance between the need to rebuild fast and to rebuild in the right way. Moreover, Parker and Curtis (2012) argue that the time pressure made good social engagement impossible and that the decision to work with tight time frames was not made by the people, but by the government (X3, 2012; X9, 2012). Respondent

X9 (2012) states in response to this that when a government puts things in a time frame, they do not pay attention to whether that frame is going to affect people negatively or positively. According to respondent X10 (2012), the time frames that were imposed were a political gesture and form a threat for the successful recovery of Christchurch.

Although respondent X4 (2012) thinks that the time pressure just made everything much more intense, respondent X10 (2012) argues that the result would have been better when there was more time to keep the public involved during the decision-making process. Respondent X1 (2012) argues that the high time pressure resulted in the problem that none of the normal work that would normally be done, would be done.

Respondent X5 (2012) regards the time pressure in the recovery process as that "there seems to be a belief by the government that we have got to do it now and we have to do it faster. The comments made by local government and central government officials often are: 'we have to take the shortest possible route.' The trouble with the shortest possible route is you can end up reinventing it again and redoing it again. Because you are not engaged to the point where when it finally hits the ground, it may have taken a year longer, but the combination of ownership is really community based." (X5, 2012). Respondents X13 and X14 (2012) state that the time pressure resulted from the need to have a plan and show that to overseas funders to invest in Christchurch. Nevertheless, they agree that the time pressure had a bad influence on the community engagement. Respondent X16 (2012) states finally that the time pressure makes that it is not important what you are doing in the interim.

Weakness 4: No clear leadership

The last weakness of the recovery process to mention in this section, is the confusion around the responsibilities of the different government institutions which leads to the threat of unclear leadership, as described earlier in the theory in chapter 2. Respondent X4 (2012) of the CCC states that the criticism is about the issue that CERA is too much focused on the central city, while it is been set up for the whole of Canterbury. It is confusing for the community that the CCC is creating suburban master plans to focus on the suburbs two years after the earthquakes; "they want to have some consistency." (X4, 2012). Furthermore, some respondents in the category 'decision-makers' acknowledge that they had and still have to make up things as they go and they had to make ad hoc decisions just by themselves (X4, 2012; X12, 2012; X6, 2012). Respondent X7 (2012) sees this as a disadvantage of the recovery process. He states that CERA is made up out of nothing, but it is important to be better prepared. This preparedness in Christchurch can be improved by having the planning of Civil Defence delivered through a geographical instead of through a political structure (X7, 2012).

According to respondent X5 (2012), the decision-makers in Christchurch know in what direction they want to rebuild, but they are not engaging in it correctly. Respondent X10 (2012) argues that Greening the Rubble's "transitional city effort is currently delayed by the government, but at the same time their policy says they are going to promote transitional activities in the central city, so they are handicapping themselves by not collaborating as they should be." Respondent X16 (2012) reacts on this by saying that the government is too much focused on the end result instead of on the process, because they are nervous and have to give confidence to the investors. Respondent X5 (2012) argues that people have to be enabled to think, create and develop, and therefore people have to work more together in Christchurch instead of operating from silos.

Various respondents indicate that the recovery process is too much influenced by party politics. Respondent X9 (2012), respondent X1 (2012) and respondent X5 (2012) state that there should be no politics involved in the recovery process. Respondent X3 (2012) argues that CERA does a lot of things behind closed doors and is working a political agenda at the same time. Furthermore, people feel that the government is not listening to them in the entire recovery process until now and that "there is not enough transparency." (X13 and X14, 2012). Respondent X6 (2012) argues as well that the process has to be changed towards more openness, honesty and integrity. If something is not going to happen, you have to be open about this and not make infeasible promises as a government, she states (X6, 2012). Finally, respondents X13 and X14 (2012) argue that the government needs to step up, because the market force is not going to solve this problem and the market itself calls for a clear direction from the government as well.

Strengths

Strength 1: 'Share an Idea'

A strong point of the recovery process of Christchurch on which all respondents agree, is the Share an Idea participation project. This engagement exercise is highly valued by people, because every citizen could submit their ideas in various ways and in particular because it was totally at front in the recovery process. As mentioned in the previous chapter, respondent X4 (2012) emphasizes that normally there is already a kind of plan developed and then there is consultation on that plan. However, the input from Share an Idea – the 106,000 ideas that were generated – really formed the draft of the plan (Respondent X4, 2012). So, the recovery process started very well with a big social engagement exercise in the beginning of the process.

Strength 2: Waimakariri District

When asking respondents how good social engagement should look like, a variety of them point to the recovery process in the Waimakariri District (Parker and Curtis, 2012; X13 and X14, 2012). Parker and Curtis (2012) agree with the statement of the mayor of the Waimakariri district that the success of recovery should not be measured by how many kilometers of pipes or infrastructure are restored, since that is progress but no success, but by how people come through the recovery process. Respondent X15 (2012) of the Waimakariri District Council argues indeed that the recovery process in the Waimakariri district is led by scholars that state that "recovery is a marathon and not a sprint, it is a journey and the process of recovery is as determining of the success of recovery as the physical rebuild, in terms of people's heads." (X15, 2012).

Furthermore, respondent X15 (2012) states that the Waimakariri District Council thinks it is important to "recognize the strengths and the resources in the community and the willingness of people to give in this situation, in a post-disaster situation." Therefore, the Waimakariri district has a couple of teams that go to the communities through for instance door-knocking and ask people if they need help. So, the community engagement in Waimakariri is organized around community leaders and volunteers (X15, 2012).

Respondent X15 (2012) regards the post-earthquake recovery process as a transition with different subsequent stages. Because things are constantly changing, especially in this post-disaster context, "you just cannot do engagement once. […] We need to continue to have the dialogue." (X15, 2012). Moreover, he states that it is important to repeat information, to be clear about the fact that as a government you cannot always satisfy every citizen and that you do not always know the answers. What is important is that a government invests in and follows people in where they want to have information about (X15, 2012; Parker and Curtis, 2012).

"Because the Waimakariri district is an isolated group, they have to work in certain ways with certain communities and they think more deeply about those types of things and the effects of those decisions." (Parker and Curtis, 2012). For this reason, Parker and Curtis (2012) think the rebuild in the Waimakariri district is successful. However, respondent X15 (2012) states that the Waimakariri recovery is also not a truly community-based recovery; "it is strong relationship building". Also, he emphasizes the scale difference between the Christchurch and the Waimakariri case, because the amount and level of devastations in the city of Christchurch including the suburbs are much higher than in the Waimakariri district (X15, 2012).

Strength 3: SCIRT

Another strong aspect of the recovery process of greater Christchurch is the establishment of SCIRT and the way in which SCIRT organizes social engagement for its rebuilding activities. Residents appreciate that SCIRT is very open and clear in its communication. SCIRT uses the IAP2 spectrum of public participation to determine how their engagement practices should be organized (X6, 2012). Respondent X6 (2012) argues that SCIRT is only engaging with people on the inform, and sometimes on the consult level of the spectrum. Since SCIRT deals with a lot of highly technical data and activities, respondent X6 (2012) states that "when it comes down to determining what level of the spectrum we are going to work at, it comes back to the question: 'what value will it add?'"

Moreover, in engagement it is important to know who the community is and what their needs and wishes are (X6, 2012). In public meetings of SCIRT, they ask the attendants what they want to know and in this way they are able to give answers to the questions of the public instead of deciding themselves what the community wants to know. This kind of engagement is still positioned on the inform level, but it does create some dialogue. Furthermore, SCIRT has a lot of brochures to inform people about their activities and these are even translated into different languages (X6, 2012).

6.2 Importance of social engagement

Why is social engagement important? What does it create in a society? This section gives answers to these questions and focuses in particular on the importance of social engagement in a post-disaster context. The reasons for the importance can be grouped in the categories ownership, part of the journey and strong communities and society, which will subsequently be described in this section.

Ownership

The first major reason for the importance of social engagement in a post-disaster recovery process, is that people need to own the outcomes of the process (X1, 2012). Respondent X4 (2012) emphasises that especially in a post-disaster context it is necessary to engage with the people, because they have to feel they have ownership of their destiny. The best city is a city that is inhabited by people and owned by people, according to respondent X4 (2012). Respondent X2 (2012) states in addition that the key to recovery is community-led recovery, which has to be achieved through community engagement. People have to play an active part in the recovery, otherwise they may not recover (X2, 2012). Moreover, "you can have a flash central city and you can have new roads, but if the community does not see it, does not take ownership, or if the population has left because they feel so disillusioned about it, or if the community does not feel like it has any part in that recovery, that is what cohesion is about." (X2, 2012). Respondent X16 (2012) argues that social engagement connects people to their city. It makes them "active rather than passive and it makes them feel empowered rather than disempowered." (X16, 2012). With regard to social engagement in the recovery process, she states that "if we do not do that citywide, then the central city becomes irrelevant, but if we do not do that in communities, then we lose that community spirit that was so important after the earthquakes." (X16, 2012).

Respondent X8 (2012) relates social engagement to complexity, because complexity is inherent to values of people, which are central in a post-disaster recovery process. According to him, a way to face this complexity which will lead to better outcomes, is to deal with greater forms of engagement (X8, 2012). Respondent X15 (2012) refers as well to values-based character of a recovery process. He states that "communities are more than just collections of physical building stock and infrastructure." (X15, 2012). In order to restore all aspects of wellbeing and to get a complete recovery, engaging with people is essential (X15, 2012). Respondents X13 and X14 (2012) also state that social engagement is about social wellbeing and community wellbeing. It is important, because it creates a less divided community and an energy of self-belief and pride (X13 and X14, 2012; X5, 2012). "If social engagement is done correctly, you get a society that lives, loves and cares for each other." (X5, 2012). Finally, social engagement creates very tangible outcomes, a group of people who feel psychologically happier and healthier because they are taking part and actually engage (X10, 2012).

Part of the journey

The second reason for the importance of social engagement that is proved from the interviews, is that people want to be part of the journey towards a recovered city. Parker and Curtis (2012) think that social engagement is important, because after a disaster such as an earthquake, people have to get on with a new life. "It is like having an accident and losing your arm. So you have lost your arm, what are you going to do about it? [...] I am not saying it is an easy world, but I am suggesting that it can be a better world. And I think that that journey, in terms of the way that that person has lost its arms participates, makes a huge difference in terms of how they live their life. Our city has lost an arm. Probably a leg as well." (Parker and Curtis, 2012). So, people have to be engaged in order to be part of the journey towards the future.

People have to be part of the recovery process, because there has to be some excitement about the future. This can be achieved through projects in which people can participate, such as the projects of Gap Filler and Greening the Rubble (X16, 2012). The focus should not be on the final product, but on the journey towards the end results. Therefore, the transitional city should be embraced. Moreover, the transitional city is particularly important for older people, because there is a chance that they are not going to experience the future city. So, there is an opportunity to create excitement, trust and hope among the people and especially among the older people, to feel that the journey towards the future was and is purposeful (X16, 2012; Parker and Curtis, 2012).

Strong process, communities and society

Finally, social engagement is important to create stronger outcomes and therefore to get strong communities (X5, 2012). It leads to civic pride, a sense of place and it creates extra skills in the community (X10, 2012). Respondent X3 (2012) argues that decision-makers are better informed to develop policy solutions and at the same time, people feel they have been involved in the process. According to respondent X12 (2012), social engagement is absolutely crucial, because it strengthens the process and the outcomes. Respondent X10 (2012) argues as well that "if you trust a representative selection of people and discuss carefully, you will get quite good outcomes. If you manipulate or suppress a group of people, you will get distrustful responses, you will get campaigners, for and against, you have defined people and you will end up with a camps debate." (X10, 2012). Moreover, respondent X12 (2012) states that social engagement "makes policies and plans more robust, much more enduring and it enables people to be involved in the implementation as well as in the planning." Furthermore, the chance on good solutions that people understand is bigger, because everyone had a chance to participate in the process (X12, 2012). In response to that, respondent X6 (2012) thinks that social engagement is important, because it creates equity and a space for everyone to have a chance to be heard.

Subsequently, respondent X12 (2012) describes that social engagement is a way of mitigating risks, because it makes that you get an understanding of the different impacts on people and so, it is possible to navigate around them (X12, 2012). Engagement in a post-disaster context is not different according to respondent X12 (2012), except for the fact – as mentioned earlier in chapter 2 – that the human factor is magnified which makes that there is a lot more stress, people are less rational and are thinking less clear compared to a normal context. Finally, respondent X11 (2012) believes that social engagement contributes to sustainability and to political stability. The question how this good social engagement should look like, will be answered in the next part.

6.3 Good social engagement

This section describes the way in which good social engagement should be organized. First, the respondents of the interviews indicated that good social engagement should be dependent on the context. Second, social engagement should be organized based on the IAP2 spectrum for public participation and third, good engagement should take place through community leaders. These ingredients for good social engagement will subsequently be described.

Dependent on context

Good social engagement is context-dependent and it should be the right form of engagement for the problem or opportunity (X11, 2012; X6, 2012). Therefore, many respondents emphasize that there is no general form for good social engagement. Respondent X8 (2012) argues that there is no general theory, because practices of good social engagement need to keep evolving, since technology evolves as well. He states that engagement practices should be fresh, spontaneous and interesting (X8, 2012). Respondent X12 (2012) can neither answer the question what good social engagement is. According to her, "every engagement process is different and the context behind it is also different." (X12, 2012). Among others, there are always financial and time factors and it is important to understand the decision-making context and stakeholder groups that play a role or have an interest in the process (X12, 2012). Moreover, respondent X16 (2012) states that good social engagement should be different in the different stages of a transition after a disaster, because the need is different. First there is the adrenaline, the trauma, and then there is the long whole endurance slow process (X16, 2012). So, an engagement process should be designed based on the context and it should be targeted, because "what is right for one target audience can be completely wrong for another." (X12, 2012).

Subsequently, respondent X6 (2012) argues that integrity, honesty and clear communication are important for good social engagement projects and also listening and reflecting are important aspects (X12, 2012). Nevertheless, Parker and Curtis (2012) think that good social engagement is not about projects, but it is the culture behind it. This starts with the feeling, understanding and commitment to look after people (Parker and Curtis, 2012). Moreover, in good social engagement the government should allow people to do their own thing, but the freedom that people can get should be dependent on the context and the related level of participation on the IAP2 spectrum (X4, 2012).

Use of IAP2

Good social engagement that is context-based should be organized according to the IAP2 spectrum for public participation. According to respondent X12 (2012), Christchurch needs to move more from the inform end to the empower level on the spectrum. However, respondent X8 (2012) argues that good social engagement should not always take place at the empowerment level, because informing along the way is also necessary. Moreover, as mentioned as well in chapter 2, respondent X6 (2012) states that it is not always preferable to work on the highest level of the spectrum as possible, but that it is important to use the IAP2 spectrum as "what is the best fit for the decision?". According to respondent X12 (2012), although there is collaborating between CERA and the councils, there is not yet enough engagement with the community groups (X12, 2012).

Engagement through community leaders

Finally, various respondents argue that good social engagement should take place through community leaders, since they are "the people people go to when they want answers." (X1, 2012). Governments should first come to community organizations, find out what they are already doing, listen to them and support them in what they need (X13 and X14, 2012). Then, respondent X9 (2012) explains, each community could negotiate about what they believe could and should happen within their areas; "then you are

enabling Share an Idea within a suburb and from there look at their ideas and then it moves into a larger, bigger plan for the city and within that you could have looked at the CBD as well." (X9, 2012).

Furthermore, respondent X5 (2012) argues that proper engagement would be that representatives of many sectors sit around the table to discuss and to look what everyone wants for the future. It is important to keep the two-way communication going in an honest and open dialogue and to believe that the community has strength (X5, 2012; X13 and X14, 2012). So, respondent X8 (2012) states that the "changes of success are better the greater the amount of consultation you have with as wide a group as possible".

6.4 Relationship between the recovery process and resilience

In this section, the central focus is on the question what the relationship is between the recovery process of Christchurch and the resilience of the city. In the interviews that are conducted for this study, resilience is used as the ability of communities and places to recover from shock events, and to adapt to a changed situation. Different aspects of the recovery process will be related to the concept of resilience. First, the influence of the way and level of government involvement on resilience will be examined. Second, a paradox will be highlighted about the role of the government and resilience. After that, the relationship between social engagement and resilience will be described and subsequently, the importance of social capital and preparedness for resilience will be analyzed. Finally, an examination will take place of the question whether resilience in Christchurch is regarded as a bounce-back or as a bounce-forward concept.

What is important to mention in this place, is that various respondents emphasized that it is too early to tell two years after the earthquakes, how and whether the role of the government and the social engagement activities influenced the creation of a resilient Christchurch (X2, 2012; X3, 2012; X12, 2012; X7, 2012; X8, 2012).

Way and level of government involvement

How did the way and level of government involvement in the recovery process strengthened or weakened the resilience of Christchurch? Some respondents answered in response to this question that it weakened the resilience of the area. The reason for this according to Parker and Curtis (2012), is that the government is focusing on the 'strong people' instead of on the 'broken people'. Respondent X1 (2012) states that the top-down decision-making approach of the government is an anathema to recovery and resilience. The government has to take a partnering, facilitating and enabling role instead of a directing, deciding, giving and doing role, she states (X1, 2012). Additionally, respondent X2 (2012) argues that the communities themselves have to participate and to contribute to a resilient society, but the government should indeed enable them to do so.

In response to this, Parker and Curtis (2012) argue that many communities were resilient immediately after the earthquakes. The fact that seventeen community groups were set up after the earthquakes proves this. However, the energy in the recovery decreased, because it is not been encouraged or harnessed by the government. Instead of encouraging people, governance stayed as business as usual. "So, over half of them disappeared […], because of a lack of clear communication, lack of support and a lack of encouragement to be actually useful to help out." (Parker and Curtis, 2012).

Subsequently, respondent X8 (2012) argues that Christchurch has put enough energy in addressing the short term needs, but in not the longer term needs. The immediate response went good, he states, because there was strong leadership from the mayor. This was necessary because otherwise people would move, but on the other hand the attention for the long term is lost. So, according to respondent X8 (2012), a balance is needed between the short term and long term needs. Respondent X5 (2012) recognizes as well two sides of the role of the government. On the one hand he argues that the way in which the government acted had a huge value for the ability of Christchurch to become resilient in the recovery process. But on the other hand, the government is making decisions from an ivory tower and "if you are seven floors in the air, you cannot hear what we breathe downstairs." (X5, 2012).
Finally, respondent X16 (2012) argues with regard to the role of the government, that the people in Christchurch feel disconnected and disempowered, because of the undemocratic governmental situation. In order to achieve balanced development towards the future city, the government has to interfere in a way in the market force, but at the moment it is a "benevolent dictatorship of creating a wealthier environment." (X5, 2012). Respondent X15 (2012) emphasizes the importance of economic vibrancy for social resilience. Next to the fact that private businesses have the aim to make profit, they have a social role; "they are in a way part of the social capital of the community." (X15, 2012). Therefore, the Waimakariri District Council enables private businesses to conduct their activities in temporary accommodation of the council, because this service capacity is for the benefit of resilience of the whole community (X15, 2012).

Paradox around government involvement and resilience

Although the previous elaboration about the relationship between the influence of the government and the resilience of Christchurch was based on the assumption that good, suitable and balanced government involvement contributes to resilience, it is also possible that this relationship works in the opposite direction. Respondent X3 (2012) argues that if the government does not involve with the community, the community has to conduct and explore everything by themselves which leads to an increased community resilience. Respondent X10 (2012) states as well that in fact, the resilience in some areas has strengthened because of the community response to the disaster, and not because of the government and Civil Defence. Some people in communities organized themselves and were weeks ahead of the government response. In this way, they provided good support for their communities. According to respondents X13 and X14 (2012), in particular the coastal suburbs are very resilient, because "they had to do everything by themselves. There was no help, so they had to think about their own creativity and strengths." (X13 and X14, 2012).

Although respondent X11 (2012) argues that resilience is indeed the ability to operate independently, not all communities are able to do this (X10, 2012). Some communities may not have the resources to organize themselves and these communities will become less resilient by the low level of community engagement that the government integrates in the recovery process (X3, 2012). Therefore, respondent X3 (2012) states: "a government that is part of the community contributes to resilience."

Role of social engagement

The social engagement projects that were conducted in the recovery process of Christchurch did not contribute to the resilience of the area, according to most respondents. Respondent X9 (2012) states that it is important for resilience to dialogue together, to build yourself up as a community and to create a sense of community. "You weaken community resilience when you tell the community what to do and impose on a community. So on the whole, it is felt certainly for us most affected, it is felt like we are not listened to, you just have to wear it. You hear a decision in the media, you have no idea what is going to happen next. And that crushes people." (X9, 2012). So, respondent X9 (2012) argues that since people are not consulted in Christchurch, they feel disempowered.

However, according to respondent X6 (2012), when people wanted to have their say, they could participate in the Share an Idea campaign. This contributed to resilience (X6, 2012). Nevertheless, as mentioned before, it was hard for people to look at the future of their city at the time when they were still living tough conditions in the suburbs (X13 and X14, 2012). Respondent X10 (2012) neither thinks that the community engagement projects like Share an Idea contributed to resilience, because the ideas that were generated did not become central in the recovery plans. Respondent X4 (2012) agrees with this by saying that the social engagement projects in the end did not contribute to resilience, because people do not feel they have ownership of the recovery plans. Respondent X1 (2012) states that because public engagement has not been done genuinely and spread throughout the process, it did not contribute to resilience. An assumption with regard to social engagement is that as long as people feel they participated in the process, social engagement already meets its goal. However, respondent X11 (2012) reacts on this by saying that it could be true, but as soon as people know their contributions are ignored, it has an even worse effect than when there was no engagement at all.

Furthermore, respondent X11 (2012) argues that the institutional system before the event of a disaster matters for the success of recovery. Channels of engagement should beforehand already be established and this was not the case in Christchurch. In a post-disaster context normal channels of getting things done do not work anymore and therefore, new channels had to be created which did not contribute to resilience (X11, 2012). Respondent X6 (2012) states that it would be a contribution to resilience when people are able to make a distinction between participating when it adds value and when it does not.

Social capital and preparedness

Social engagement in communities is needed to create social capital in a society. "If you do not have social engagement, you do not have resilience. If you do not have social capital, you do not have resilience." (X7, 2012). High levels of social capital lead subsequently to preparedness and resilience for shock events, as is described in the theoretical framework in chapter 2. According to respondent X12 (2012), engagement with friends and neighbours is important for community resilience. Respondent X15 (2012) of the Waimakariri District Council argues as well that enhancing social connectedness within communities makes them in theory stronger for future shocks or disruptions. So, the Waimakariri District Council invested firstly in restoring and

strengthening social connectedness within the affected communities. They had a community development program for identifying who the community groups were that had been affected. In this way, they were able to help affected people and communities (X15, 2012).

Nevertheless, respondent X7 (2012) expected that people, including himself, would be more resilient and prepared for a disaster than they proved to be in the aftermath of the earthquakes. Contemporary developments in societies towards simpler, cheaper and more efficient systems are in contrast to what resilience is about (X7, 2012). Therefore, he states that it would be good for local communities to be prepared and to have some strategies about surviving a few days without help.

Bounce-back or bounce-forward?

As is discussed in the theoretical framework in chapter 2, resilience can be regarded as a bounce-back or as a bounce-forward concept. In the case of Christchurch, the recovery plans and strategies state that the earthquakes have to be used as an opportunity to go to a new desired situation. Based on this, the respondents are asked whether they regard the earthquakes as well as an opportunity to bounce-forward, or whether they want to bounce-back to the pre-earthquake situation.

Many respondents argue that the situation will never go back to normal how it was before the earthquakes, but that there will be a 'new normal.' Nevertheless, some respondents note that there will indeed be a new normal, but that they are not certain about how that new normal will look like (X1, 2012). Respondent X2 (2012) states that people want to build back better, because it is impossible to go back to the pre-earthquake situation. The communities are different after the disaster because of the traumatic events and because of the story that people have gone through (X3, 2012; X8, 2012). Also, the governmental situation is not normal as long as CERA acts in Canterbury (X4, 2012). So, respondent X16 (2012) argues that people do want to use the earthquakes as an opportunity, "because it is so very obvious that there is no choice but the embrace it as an opportunity." People want to build back better, to learn from this and to share lessons about the experiences of Christchurch (X12, 2012). Respondent X8 (2012) explains that it is not a critique on how it was before, but an opportunity that has to embraced now (X8, 2012). Respondents X13 and X14 (2012) argue on the other hand that the new normal would be better, because the old normal was not that good in terms of social resilience. They hope the new Christchurch will be a less divided society (X13 and X14, 2012). However, many people regret that a disaster like the earthquake was needed to bounce-forward to go to a better situation (X4, 2012).

However, the journey towards a new situation is not easy. Respondent X7 (2012) describes that people have to get their own situation back on the rails, but at the same time embrace the opportunities to look forward. Moreover, Parker and Curtis (2012) argue that changing to a new normal or returning to the old normal depends on where people live; it is impossible to make a generalization for all of greater Christchurch. There is a new normal for affected people though, because they have a new identity as earthquake victims or survivors. When they move out of Christchurch they are "an alien in a normal world" and when they stay in the city they are "a normal person in an alien world." (Parker and Curtis, 2012). Respondent X10 (2012) thinks that there will be a new normal, but that is only for the 'centre of the donut' whereas the rest of the city will develop spontaneously. Furthermore, the infrastructure in greater Christchurch will for

the biggest part be rebuild to how it was before the earthquakes. Also, SCIRT only rebuilds infrastructure with earthquake damage. So, with regard to the infrastructure, resilience is to a certain extent going back to the old situation (X6, 2012).

Although people wanted to use the earthquakes as an opportunity go to a new desired city at the time of Share an Idea, now they are "seeking for elements of normal, but their idea of normal is a memory of what they enjoyed before. […] So, there is an attempt to return to what is remembered." (X10, 2012). Respondent X16 (2012) argues as well that people would like the situation to go back to normal, because they would like the old ways of working, ways of being, old power systems and old order structures back. In this respect, respondent X7 (2012) states that it is important to retain and remember and not to erase the memory of having had an earthquake.
Nevertheless, when comparing Christchurch with the city of Napier on the North Island of New Zealand, there will be a new normal because history starts again after a devastating earthquake (X4, 2012). According to respondent X9 (2012), people realize that it is going to take ten years to get to a new normal. In terms of the stages of a post-disaster transition – response, restoration, reconstruction and improvement – Christchurch two years after the earthquakes is moving from restoration into reconstruction (X15, 2012). In that respect, respondent X9 (2012) argues that people do not mind to wait such a period of time, as long as they are part of the process.

With this elaboration of strengths and weaknesses, the importance, and the role of (good) social engagement for the creation of a resilient Christchurch, the three sub-questions of this study are answered. The next chapter will give an answer to the main research question of this thesis.

Figure 6.1 – Picture of transitional city Christchurch: Re-Start container mall (Source: Author)

7. Conclusions and discussion

The aim of this study was to gain insights in the importance of social engagement in a post-disaster context and to obtain knowledge about the strengths and weaknesses of the recovery process of Christchurch. This chapter recapitulates the main results of this study, draws conclusions out of this and discusses the conclusions. The strengths, weaknesses, opportunities and threats for the recovery of post-earthquake Christchurch will be presented in a SWOT-analysis. In this chapter the focus is on the main research question of this study, which was: "What is the role of social engagement in the transition process of redeveloping the city of Christchurch after the earthquakes?"

7.1 Conclusions

The theory about transitions is discussed in chapter 2 of this thesis. Natural disasters often trigger a transition in a society, and these transitions have a multi-stage, a multi-level and a management character. The different stages of the conceptual model of a transition can be applied to the post-earthquake context of Christchurch, as is shown in figure 5.1 in chapter 5. Because a transition as a result from a disaster cannot be blocked or slowed down by forces on the meso-level, the post-disaster transition curve goes very abrupt and fast instead of gradually. Furthermore, the transition curve of Christchurch is different than the standard model, because of the multiple shock events that Christchurch experienced. The fact that Christchurch experienced ongoing seismic activity over the period of approximately two years, makes the recovery process of Christchurch complicated and complex. This results in a chaotic, turbulent and uncertain environment in which decisions have to be made. Planning in a challenging or crisis context is according to the theory often characterized as intuitive, less analytical and less consultative. Also, reality proves that decision-making in post-disaster contexts often follows a top-down structure.

Reasons for critique

However, bottom-up decision-making and engagement with communities is essential particularly in post-disaster recovery processes. There are some strong points, but also many weaknesses with regard to the recovery of greater Christchurch. In Christchurch, the different responsible governments understand and recognize the importance of community engagement, but it is not yet integrated in the recovery process as people would like it to be. There are various reasons for this. First, although some representatives of the different governments argue that they conduct a lot of engagement, community organizations feel that the government institutions only involve with other government institutions and with big stakeholders. CERA states indeed that a lot of engagement takes place with its strategic partners, which are mainly other government institutions. So, there seems to be a mismatch between what the decision-makers – governments – mean with (community) engagement and the kind of engagement that communities expect.

Second, following the multi-level aspect of transitions, governments on different layers play a role in the recovery of Christchurch. After the first earthquake in September 2010, the CCC was responsible for the rebuild of the city of Christchurch, as well as the Selwyn

District Council and the Waimakariri District Council were responsible for their affected areas. However, after the earthquake in February 2011, CERA was established as a new authority of the central government. Residents in greater Christchurch understood that the local councils could not lead the recovery of their areas by themselves. Nevertheless, people were confused by the division of responsibilities between the different governments and moreover, people blame CERA for ignoring the ideas and identity of the people of Christchurch in the final plans for recovery.

According to the theory, plans and strategies reflect the identity of a place and it is important that communities recognize their values in these documents for the future. Therefore, social engagement is needed to integrate the ideas and values of people in recovery plans. The interviews proved that social engagement is important especially after a disaster, because people need to own the plans and strategies for recovery. They have to feel that they participated and are part of the journey towards recovery of their city. However, the third reason why people criticize social engagement in the recovery process of Christchurch, is that the ideas and identity of people are only to a limited extent reflected in the final plans for recovery. Various good social engagement practices were conducted in Christchurch and the Share an Idea public participation campaign even won an IAP2 public participation prize. Nevertheless, although people can see their ideas reflected in the plans, it became clear that the government only integrated the ideas of people on an abstract level. Because of the launching of anchor projects and the focus on big businesses in the CBD, people think that on a more detailed and concrete level, their ideas will not be put into practice.

Ingredients for resilience

After this elaboration of three reasons for critique on social engagement in the recovery process of Christchurch, the ingredients for the creation of a resilient city will be described. For the purpose of this study and based on the literature, resilience is regarded as the ability of communities and places to recover from shock events, and the ability to adapt to a changed situation. As appeared from the interviews, people feel discouraged and disempowered because the government did not engage with them as much and in ways as they would have liked. The literature proved that social engagement leads to social capital, which is subsequently needed for a resilient society. For the creation of resilience, governments should encourage community organizations to strengthen relationships within and between communities. Moreover, governments and government institutions should be aware of the existing links between people, of the existing community organizations and of the existing community leaders, in order to be able to connect with these people in the aftermath of a disaster.

There seems to be a paradox about the way and level of government involvement in the recovery process. Whereas a number of respondents argued that the role that the governments played in Christchurch weakened the community resilience, some other respondents stated that it strengthened the resilience. The experience that communities – and in particular the coastal communities of Sumner, Redcliffs and Mount Pleasant – had to organize the immediate response phase themselves without help from the government, strengthened their resilience. However, it has to be emphasized that the limitation of this is that not every community has the resources to organize such a turbulent and stressful situation themselves. So, the government has to provide communities with some direction and leadership towards a successful recovery.

As is discussed in the theoretical framework, resilience can be regarded as a bounce-back or as a bounce-forward concept. The plans and strategies for the recovery of post-earthquake Christchurch reflect the approach that the earthquakes have to be used as an opportunity to bounce-forward to a new desired situation. Also, all respondents want to build back better after the earthquakes and some of them refer to this as shifting towards a 'new normal.' So, the adaptive circle of resilience can be used as going towards a new equilibrium as a result of the post-disaster transition.

Two strong cases of the recovery process of greater Christchurch are the Waimakariri District Council and SCIRT. Both organizations use the IAP2 spectrum to determine how their engagement should look like. The scientific character of the decisions that SCIRT has to make and the technical activities that they perform, make that SCIRT conducts its engagement predominantly on the inform, and sometimes on the consult level of the spectrum. So, the highest level of the spectrum is not always the best; the form should be dependent on the context. Finally, the recovery in the Waimakariri district is organized based on the transition theory which states as well that the engagement should be adapted to the needs and wishes of the people which are different in each stage of the post-disaster transition.

The last ingredient for resilience and main message that is obtained as a result of this study, is that social engagement in a post-disaster recovery process has to be organized based on a combination of the IAP2 spectrum for public participation and the context of each stage of the post-disaster transition. As discussed in the theoretical framework, the IAP2 spectrum for public participation distinguishes five levels of participation: inform, consult, involve, collaborate and empower. Although CERA states that they aim to engage on the highest level of engagement – empower – as often as possible, the spectrum should be used to chose a form of engagement that is the best fit for the context. In a recovery process, this context changes in accordance with the different stages of a post-disaster transition. In Christchurch different areas are affected differently and therefore, the point in the post-disaster transition curve differs on which the neighbourhoods are located. So, whereas for some communities the chosen forms of engagement were appropriate and enough, other communities may have needed more and other forms of engagement. The post-script in the last chapter of this thesis will elaborate more on this and other lessons for post-disaster contexts.

7.2 SWOT-analysis of the recovery process of Christchurch

Figure 7.1 shows a SWOT-analysis of the recovery process of Christchurch. The major strengths, weaknesses, opportunities and threats as results from this study and as discussed in this thesis are presented in the diagram.

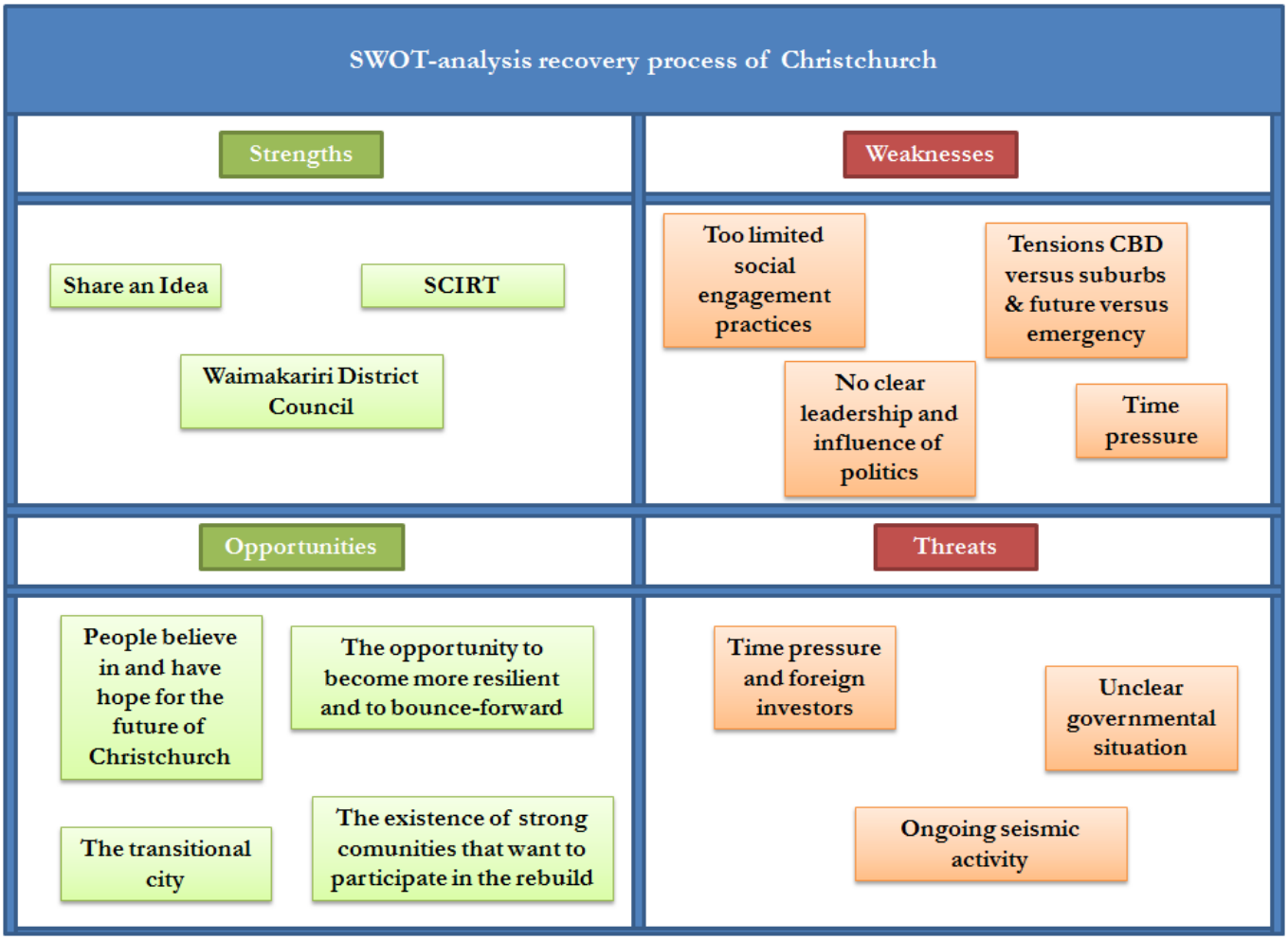

Figure 7.1 – SWOT-analysis of the recovery process of post-earthquake Christchurch (Source: Author)

7.3 Discussion

After the presentation of the conclusions it is important to reflect on the data collection, the data analysis and the findings of study. The first lesson that is learnt regarding the collection of data, is the fact that some interviews took place in cafes. Although these locations led to an informal setting, it was hard to transcribe the interviews because of a lot of background noise on the tapes. Second, language was not a barrier in the conducting of the interviews, but because (New Zealand) English is not the mother tongue of the researcher, it was inevitable that some things were not immediately completely understood. Furthermore, the beginning of the process of recruitment of participants was difficult. It was hard to get in contact with respondents, because of full agendas. Also, possible respondents were contacted through email first. When this did not lead to many responses, the researcher started to call possible participants. Soon this led to a full schedule of conducting interviews.

The next issue to mention is the choice of respondents as part of the data collection. As discussed in the methodology in chapter 4, a stakeholder analysis is made prior to contacting respondents and conducting the interviews. Although a representative as possible group of stakeholders in the recovery process of Christchurch is interviewed, the results of this study could have been different when other respondents were interviewed. Although probably the same main messages would have been obtained, it is possible that there would be slightly different nuances on a more detailed level.

This issue is for instance reflected in the focus on the coastal suburbs as well as on the eastern suburbs with regard to the differences between the areas in affectedness and recovery. This focus is a result of conducting interviews with respondents from these areas. The recognition of Waimakariri as a strong point of the recovery process is as well subject to the choice to conduct an interview with a representative of this area. However, many other respondents pointed to the Waimakariri district as an example of good social engagement. Nevertheless, the labelling of Waimakariri as a good practice does not mean that other affected districts that are not interviewed as part of this research are bad practices. With the choice of the sixteen interview respondents, a comprehensive insight is obtained in the role of social engagement in the recovery process and data satisfaction is achieved. Moreover, the aim of this study was not to give general statements for the whole of greater Christchurch – which is possible when a representation of the whole population is studied – but to obtain insights in the way people value the role of social engagement in the recovery process of Christchurch.

Also, the period in which this research is conducted has some implications for the results of this study. Two years after the earthquakes, the recovery process was still ongoing and very actual. First, the activities that happened during the period of this research influenced the outcomes. Many respondents had to deal themselves or they knew other people that had to deal with insurance and zoning issues during the period of this research. Second, this study included an analysis of several recovery plans and strategies. However, during the study period other plans were created and still other plans have to be developed, such as the transport plan and the education plan. So, it was not possible to include and analyze all plans for recovery in this study. Furthermore, the question whether the social engagement activities and the government influenced the resilience of the city was hard for respondents to answer, because the recovery process was and still is ongoing. More research in a later stadium of the recovery process of Christchurch is required to answer these questions.

Furthermore, the way people regard the recovery process depends upon how they themselves are affected by the earthquakes. The information that is generated from the interviews and from the participatory observations, is influenced by the individual experiences and situations of people. Also, because politics is interwoven in the recovery process, the results of this research can be influenced by politics and can be politically loaded. On the other side, the data that is obtained through the interviews is subject to the interpretation of the researcher. Because the obtained information is analyzed through the subjective lens of the researcher, it is impossible to erase the underlying subjectivity of (qualitative) research.

With regard to the data analysis, the aim was to analyze the data with the software program NVivo. This program was available at the AERU at Lincoln University, but coding had to be done manually because of the practical limitation that it was not possible to conduct the data analysis with NVivo in the Netherlands.

8. Post-script: Lessons for other contexts

This post-script is devoted to provide lessons for other contexts about how to organize social engagement in a post-disaster recovery process. These lessons are based on the study that is conducted in post-earthquake Christchurch. Several lessons will be described that have to be followed in order to reach a successful integration of social engagement in the recovery process.

First, governments and (government) institutions in pre-disaster contexts have to prepare themselves institutionally for the event of a disaster. There has to be a clear division of responsibilities between governments on different layers and a protocol has to be created for the engagement of the different governments with the communities.

The second lesson is that it is important to identify communities. Governments have to know which community groups exist, who the community leaders are and there has to be a reciprocal awareness of the connection between the government and the community. In the case of a disaster, the government can reach the communities through these pre-existing links and is able to assess the situation in a community.

Third, after the event of a disaster an assessment has to be conducted of the situation in every neighbourhood. The way in which engagement takes place should consequently be dependent on the situation in an area. When a place suffers from a disaster, there are often differences in the level of and way in which areas are affected. There is a link between the situation in an area and the stage of the post-disaster recovery transition in which an area is positioned. Therefore, the type of engagement of the IAP2 spectrum has to be dependent on the context of a particular stage in the transition.

Figure 8.1 shows the post-disaster transition model combined with the different forms of participation according to the IAP2 spectrum. The pre-disaster stage is a stable situation in which the highest forms of participation – collaborate and empower – can be used. The situation is very unstable in the next stage of emergency and crisis. Therefore, the government has to take a leading role and should inform the people about the situation. When appropriate, engagement can take place in a consult form. The next stage of restoration is still characterized by a crisis situation, but there are parts of a city that are slowly shifting into a more ordered situation. Because there is more stability, engagement can take place in the forms of consulting and involving. More and more areas are shifting out of chaos in the reconstruction stage which makes that the government can work together with the people on the level of collaboration. There are nevertheless still issues and areas where involvement is most appropriate. In the last stage of improvement, the situation is back to order instead of chaos. In this stable environment, engagement can again take place on the highest levels of collaboration and empowerment.

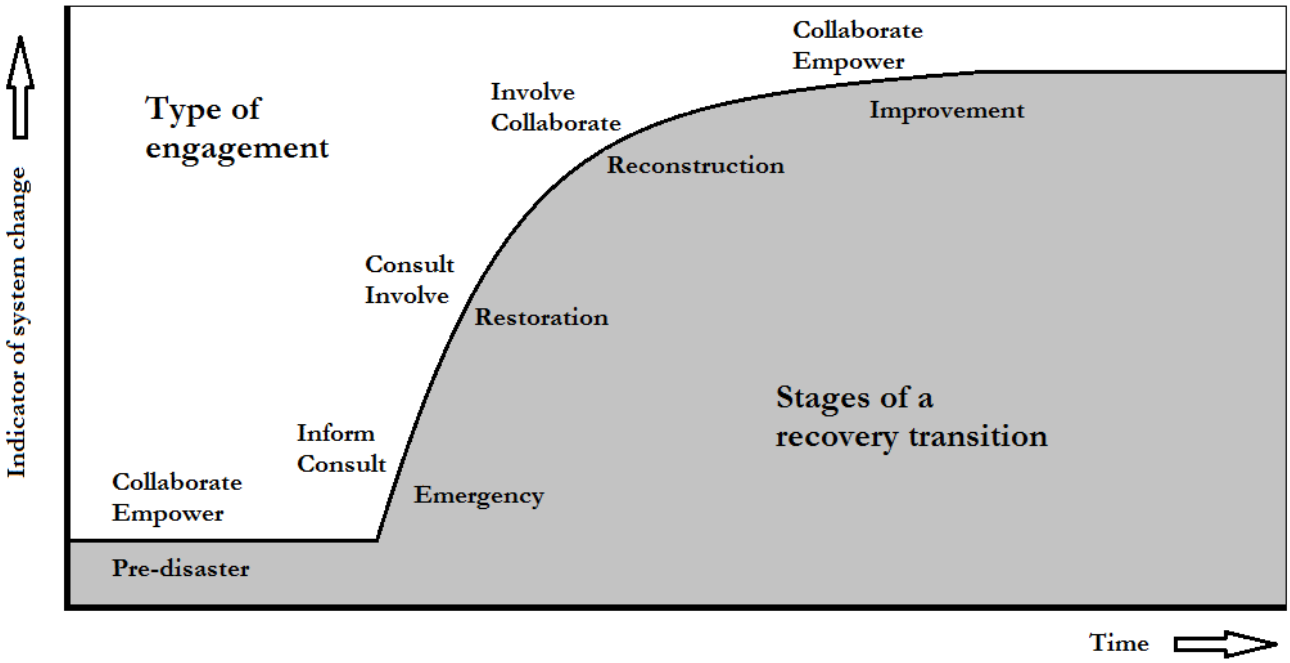

Figure 8.1 – Social engagement in the stages of a post-disaster transition (Source: Author)

This model has to be used as a guiding principle for engagement in a post-disaster context. The aim of the model is not to provide a hard rule for engagement, since every post-disaster context is different and there are various issues within one post-disaster stage for which a different form of engagement might be most suitable. So, the context within the stages can differ which makes that other forms of engagement may have to be applied. For instance, in the restore phase, collaboration and empowerment are the best forms of engagement for a social issue whereas in the same stage informing can be best applied to a technical issue. So, in general the lesson is to determine the situation in an area with the help of the transition theory and to base the form of engagement on the situation.

The fourth lesson is that social engagement has to be conducted during the entire recovery process. People have to feel that they participate in the journey towards the future, because they need to have ownership of the plans and strategies for their city. It is important that people see their ideas and identity reflected in the plans for the future. Engagement should not be conducted as a 'tick-the-box' exercise, because as soon as people feel they are not engaged and not taken seriously, they feel disempowered and they lose the connection with their city. Continuing appropriate social engagement contributes to the creation of resilience.

Finally, a post-disaster recovery process should not be rushed. A high time pressure has a negative influence on the possibilities for social engagement. Although a place needs to be rebuild as soon as possible, there has to be a balance between a fast recovery process and the integration of social engagement in it. This balance will enable the satisfaction of the short term recovery needs of people, as well as the integration of their long term recovery wishes in plans for the future. Moreover, the transitional city has to be embraced in order to make people part of the journey towards a successful recovery.

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Interviews respondents

X1 (2012)	Member of Parliament
X2 (2012)	Canterbury Earthquake Recovery Authority
X3 (2012)	Sumner Community Organization
Parker and Curtis (2012)	CanCERN
X4 (2012)	Christchurch City Council
X5 (2012)	Canterbury Business Leaders Group
X6 (2012)	SCIRT
X7 (2012)	Lincoln University and Greening the Rubble
X8 (2012)	Landcare Research and Magnetic South
X9 (2012)	WeCan
X10 (2012)	Greening the Rubble
X11 (2012)	Lincoln University
X12 (2012)	Canterbury Earthquake Recovery Authority
X13 and X14 (2012)	Mount Pleasant Community Organization
X15 (2012)	Waimakariri District Council
X16 (2012)	Gap Filler

Appendix A: Interview guide

General interview questions
Social engagement in the aftermath of a natural disaster: A case study of post-earthquake Christchurch

Introductory questions

1. Can you please introduce yourself?
    a. Where do you come from/live?
    b. Education, previous jobs?
2. Can you describe your involvement with the rebuilding process?
3. How did you become involved in the rebuilding process?
4. Can you explain the activities/projects that you are/were involved with?

Public engagement

5. Can you describe how and when public engagement was incorporated in the process of establishing the plans and policies?
6. Do you know about some public engagement projects from the government and can you describe them?
7. How did/do you participate in the rebuilding process?
8. How are your ideas and input translated in the final Central City Plan?
9. How are according to you the ideas and input of people translated to the final Central City Plan?
10. What do you think about the rebuilding process and public engagement in that?
11. What is the importance of public engagement in the rebuilding process according to you? Why? Can you give some examples?

Resilience

Explanation…

12. How did the way and level of government involvement strengthened or weakened the resilience of the city?
13. How did the way social engagement was included in the rebuilding process contribute to the resilience of Christchurch?
14. Do you think the situation is getting back to normal again, and why?
15. Does a return to normal mean that the city is back in its old situation, or is there a new normal, and why?

Appendix B: Consent Form

Consent form
Social engagement in the aftermath of a natural disaster: A case study of post-earthquake Christchurch

1. I am currently conducting research about social engagement in the rebuilding process of post-earthquake Christchurch. My supervisors are Prof. P. McCann from the University of Groningen (The Netherlands) and Prof. P. Dalziel and Prof. C. Saunders from the Agribusiness and Economics Research Unit (AERU) in Lincoln University (New Zealand).
2. I would like to interview you about your experiences and involvement with regard to rebuilding processes of the city of Christchurch. The interview will take about an hour.
3. I would like to record the interview so that I can obtain an accurate record of your views. Only Prof. McCann and I will have access to the tapes and/or their transcripts.
4. Everything you say during the interview will be treated confidentially. That is, if you wish to stay anonymous, your name will not appear on the transcript or in any further publication.
5. The results of this research will be published in my master's thesis and other academic courses, and may be published in academic journals, and academic conferences.
6. If you agree to take part in this interview, you have the following rights:
    a. To refuse to answer any particular question, to terminate the interview at any time, and to switch off the voice recorder at any time.
    b. To ask any further questions about the interview or research project that occurs to you, either during the interview or after.
    c. To remain anonymous. Anything that may identify you will not be included in conference papers, academic articles or any other report about the findings of the research without your explicit consent.
    d. To ask any question by calling me on 022 173 2389 or via e-mail: Melanie.Bakema@lincoln.ac.nz.

"I consent to be interviewed for this research on the above conditions"	YES	NO
"I wish to stay anonymous"	YES	NO
"I wish to receive a copy of the transcript of the interview"	YES	NO
"I wish to receive a copy of the findings"	YES	NO

(Please circle your choice)

Place and date:
.....

Name participant:
.....

Signature participant:
.....

Name interviewer:
Melanie Bakema

Signature interviewer:
.....