



# The Political Lives of Temporary Projects:

Infrastructure and participatory urbanism  
in post-earthquake Christchurch.

Barnaby Bennett

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BA, BArch, Victoria University of Wellington

Doctor of Philosophy in Architecture

University of Technology Sydney





## Certificate Of Original Authorship

I, Barnaby Bennett declare that this thesis, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy in Architecture, in the Faculty of Design Architecture and Building at the University of Technology Sydney. This thesis is wholly my own work unless otherwise reference or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis. This document has not been submitted for qualifications at any other academic institution. This research is supported by the Australian Government Postgraduate Award. This research is supported by the Australian Government Research Training Program

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Date: 18 February 2019



## Note on referencing

This thesis employs a form of intext referencing called UTS Harvard. This is an adapted version of the standard Harvard style. I am supplementing UTS Harvard with a small change. In the thesis there are frequent references to temporary projects in the two books that are submitted with the thesis as Appendices F and G. Rather than doing a full intext reference every time a project is mentioned I use [page numbers] in square brackets to refer to projects in *Christchurch: the transitional city pt IV* (2013) and {page numbers} in curly brackets to refer to projects in *Once in a lifetime: City-building after disaster in Christchurch* (2014).

## Disclaimer

During the development of the thesis and over a period since 2011 I have co-authored a number of different papers, book chapters, and articles.. These texts have influenced the development of the thesis, however any quotes and ideas from these co-authored texts are referenced and seperate from the work in the thesis which is my own.





# Glossary

## Acronyms

ANT – Actor-Network Theory

CCC – Christchurch City Council

CERA – Canterbury Earthquake Recovery Authority

CCDU – Christchurch Central Development Authority

FESTA – Festival of Transitional Architecture

GFC – Global Financial Crisis

CTC – Christchurch: the transitional city Pt IV

LIVS - Life in Vacant Spaces

OIALT – Once in a lifetime: City-building after disaster in Christchurch

PD – Participatory design

STS – Science and Technology Studies

## Terminology

Blueprint – spatial plan for the central city of Christchurch developed by the CCDU, released in mid-2012.

Controversy – is a public disagreement around a complex issue.

Controversies about infrastructures - public disagreements about infrastructures.

Complex problems – synonymous with issues. Complex problems are problems that existing authorities are unable to manage sufficiently and so public groups form to give form to the problem and develop solutions – origins of this definition come from Walter Lippman (1926) and John Dewey (1926), and more recently developed by Marres (2005a, 2005b) and Latour (2005)

Infrastructural activism - a form of activism generated from the interaction between controversies, infrastructure and publics. See Chapter 5 for details.

Infrastructure – definition used in this thesis is guided by 9 characteristics of infrastructure developed by Star and Bowker (2009) – see table 3.1 for details.





Infrastructuring – verb form of infrastructure, originally developed by Star and Ruhleder (1996), and more recently expanded into a term by participatory designers who see it as a way of developing and building active public groups.

Issues – see complex problems.

Iwi – tribal group

Ngāi Tahu – iwi that covers most of the South Island of New Zealand including Christchurch.

Recursive publics - groups of people we are acting to achieve a political goal while undertaking an action as a group that is consistent with that goal. See Chapter 5 for details.

Recovery – a process in which a state of normal health is disturbed and then returns through recovery back to a similar state, often used to describe situations after disaster.

Reimagining – a process in which public groups use the opportunities created by disaster to reconsider aspects of their city and its infrastructure. See chapter 2.

Temporary projects – urban projects that produce public amenity which are understood to be non-permanent and that act as either temporary experiments or temporary replacements. In this research they needed to have been A. open to the public, B. created after 4 September 2010, C. offer a public amenity.

Public – the general public, indicates universal access such as public library.

Publics – definition developed by John Dewey (1927) indicates a group that is occurring in a specific historical context and is forming in response to a specific complex problem. Refers to discrete group, so publics can be plural, overlapping and temporal.

Transitional - A word used by the formal earthquake authorities in Christchurch to refer to the period between the disaster and the return of normal service and amenity in the city

Transitional projects/ movement - a collection of temporary projects that developed in Christchurch in the transitional period between disaster and return to normality.



## Acknowledgements

Thank you, thank you, thank you.

To Prof. Desley Luscombe, especially for the support in getting me over the final few hurdles. To Dr. Jacquie Lorber-Kasunic and Dr. Jacqueline Gothe the supervision support, and the many meetings you attended. Love and respect to Dr. Ryan Reynolds for supporting me, and holding the door open to Christchurch. A special thanks to Dr. Susan Stewart for challenging me and opening my eyes to new ways of seeing the world. Lastly, to Tom Barker for getting me into this mess.

To Amalia Mayor for her love, endless support and patience. My parents for the endless encouragement and open ears. To my friends in Christchurch, Jessica Halliday, Coralie Winn, Sylvia Smyth, Andrew Just, Hugh Nicholson, James Dann, to Riverlaw Terrace and the Moss family. To Ferd and Grace - who will never meet, but who would have loved each other. To my friends from Whangarei, always.

To the many many people that supported the research. To Dr. Jenni Hagedorn for lasting the distance, and Ilka Staudinger, Mona Abd Al Salam, Dr. Jesse Stein, Dr. Nicole Gardner, and Dr. Buccah Sebitla for the research and emotional support. Ben Doherty for technical and ontological help. Vale and thanks to Theatre and Film Studies Department at University of Canterbury for the help in Christchurch, and Dr Chris Thompson, Rosalee Jenkin, Prof. Simon Kingham and CEISMIC Archive and Quake Studies for supporting the archiving of the transitional projects. Marrisa Taylor for help with the timeline. To Mark Southcombe at Victoria University of Wellington. To the research, support and teaching staff at UTS particularly Ann Hobson, Dr. Emma Rowden, Prof. Charles Rice, Iain Maxwell, Guillermo Fernandez-Abascal, Urtzi Grau, Endriana Audisho, Anthony Burke, Saskia Schut, Louisa King, Rhys Williams, and Juan Pablo Pinto. To Emma Johnson for editing a draft of the thesis in 2017, and Madeleine Collinge for copying editing the final thesis in September 2018. Special thanks to Byron Kinnaird and Nick Sargent for keeping the fires burning.



To the databases, archives, infrastructures, collections, and libraries, and the wonderful people that maintain them.

To the directors and supporters of Freerange Press, particularly Emma Johnson. Specific thanks to the co-editors of the two books submitted with this thesis, for making hard work good fun, particularly Eugenio Boidi and Irene Boles.

The participants who gave their time and energy to support this research: Coralie Winn, Andrew Just, Jason Cheyne, Liv Worsnop, Hugh Nicholson, Ryan Reynolds, Jessica Halliday, Juliet Arnott, Trent Hiles, Sharon McIver George Parker, Bailey Peryman, and Richard Barnacle.

To the transitional family who opened their arms to me in 2012 and have never let go. To the various transitional organisations and the people that funded them and everything you've done for the city and its people. Including Gaby Montejo and the social residency. To Erica Austin and Jonny Knopp for organising, photos and design.

To both the mainstream and alternative media in Christchurch for your careful documentation of the city, especially all the journalists at the Press and Gerard Smyth and Peter Young for capturing the changing city and its extraordinary people.

To the Australian Government for funding the research and supporting New Zealand when it needed it most.

To the people that co-authored work with me during the development of the thesis, especially Timothy Moore.

Lastly, and most importantly this thesis honours and is dedicated to Christchurch, to the extraordinary grace and humility shown by its people during a long and difficult recovery after disaster, and to the family and friends of those that were lost in the moments, days, and years after the disaster.





Barnaby Bennett





## Preface

A designer, two performers, and an architectural historian walked into a bar. The four friends joined me and around 60 other people on a relatively warm spring night, on 27 October 2012, to celebrate the launch of a new book called *Christchurch: The transitional city pt IV*. It was an unseasonably warm night, in a temporary bar, on the edge of the centre of a city in the east coast of the South Island of New Zealand, deep in the south of the Pacific Ocean. The bar, called Smash Palace, was one of the temporary post-quake projects featured in the book being launched at the bar that night, and was one example of the prominent breed of lively, half-formed, temporary projects emerging around the city at the time. The bar consisted of a scaffolding perimeter wall, a refurbished bus that served drinks and food, and a duck that lived in the garden at the front of the bus. The event felt festive and celebratory; most of the crowd had either helped make the book or had projects in it.

The book launch took place on the closing weekend of the inaugural Festival of Transitional Architecture (FESTA). In the week prior, the new festival had attracted around 20,000 people in the central city for the first major public event since it was closed after a large earthquake severely damaged the region in early 2011. The book launch was just one of many unusual and celebratory public events that took place in the broken city in the years as it recovered from the series of devastating quakes that rocked the city between 7 September 2010 and Christmas 2011. The book being launched that night features 183 post-quake temporary projects, and was published by a small publishing company that I co-founded in 2007, called Freerange Press, and was edited by me and two colleagues, Irene Boles and Eugenio Boidi.

The projects contained in the book, and the arguments generated in this thesis, can only be understood in the context of the powerful earthquake that struck the city at 12.51pm on 22 February 2011. 185 people were killed by the quake. The earthquake was shallow and centred just a few kilometres south of central Christchurch, under the port town of Lyttelton. This quake ruptured the city's built fabric and changed its sense of identity forever.

The vertical accelerations generated by the 22 February earthquake were amongst the highest recorded worldwide, and the levels of earthquake shaking were up to twice the design strength specified





in the current Building Code. (Brand & Nicholson 2016, p. 161)

On the night of the earthquake, Mayor Bob Parker stated: 'We are in the middle of a major disaster in global terms. We are all frightened, we are all traumatised. None of us know exactly what will happen next' (Christchurch quake press conference 2011).

Most of the deaths in the city were due to the collapse of two buildings. One hundred and fifteen people were killed when the Canterbury Television building catastrophically collapsed and 18 were killed when the Pyne Gould Corporation building collapsed. A further 42 people were killed by other building failures and ten from non-building related deaths such as rock fall (Canterbury Earthquake Royal Commission 2012, p. 5). By 2014 over 14,000 smaller quakes had occurred, including over 50 that measured more than five on the Richter scale, and at least six major events (Farrell 2015, p. 69). The intensity and frequency of earthquakes can be seen in the graph (Fig. 0.4). While there was one deadly quake, it is important to realise the disaster was experienced as a field of events over an 18-month period.

After the February quake the central city was closed to the public by the central government for over two years (Brand & Nicholson 2016). Almost a thousand buildings were demolished in the middle of the city (Kim et al. 2017). Over 10,000 houses were demolished as a result of the damage in the rest of the city (MacFie 2013), and most houses in the region were damaged three or four times as a result of the multiple quakes (Swaffield 2013). The city's roads, sewerage, power, phone, and water infrastructure were all badly damaged (McColl & Burkle 2012). Shops, schools, universities, government buildings, police, libraries, and public facilities across the city were damaged and closed, often for years. The different organisations of the city's universities, local government, schools, and businesses struggled to cope with the scale of the problems. By 2015 it was clear that this small city of 375,000 people would be spending over \$45 billion on its rebuild and recovery (McCrone 2015), and would never be the same again. This realisation had a profound impact on both the land and the people of the city. Writer Nic Low (2012) wrote:

John Dodgson is an organist. To his trained ear it was the blast of a low C, the deepest note on the scale, coming from everywhere at once. He knew instantly what it was. My father, a jazz musician, knew it too. The sound came, and the fear came, and it surged

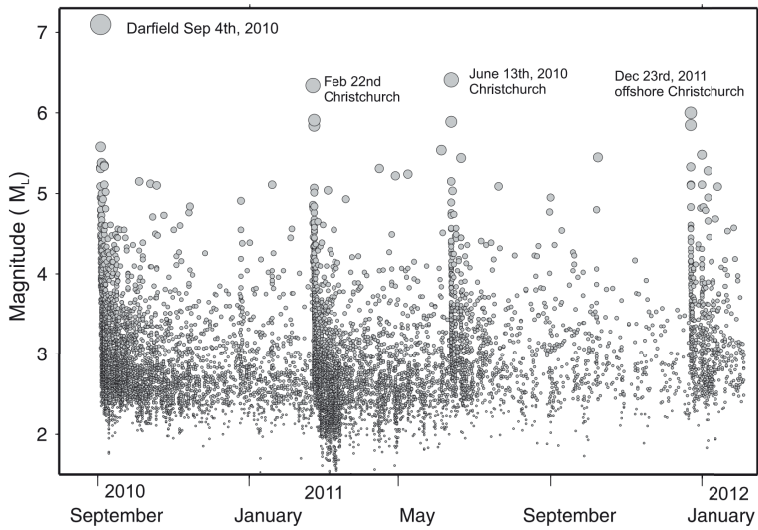


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Image 0.1: 'A photograph of a crowd gathered at Smash Palace for the launch of the book "Christchurch: The Transitional City."' (Halliday 2012).

Image 0.2: Catholic basilica 2012 (photo by author).

Image 0.3: 'Dust clouds above Christchurch' (Needham 2011).

Figure 0.4: Frequency of Canterbury earthquakes between 2010 - 2012 (Bannister & Gledhill 2012, p. 298).





up from a sound and a feeling into a mighty weight that roared through the house like an invisible freight train, twisting and popping the joists and beams, bursting open walls and floors. The ground tore itself up by the roots, and with sudden and extreme violence shrugged the people off.

The roar is louder than anything we can imagine. It's the sound of a tectonic plate moving, and buildings collapsing and books and furniture going over, and it rises up through the scale to the wild crash of every fork and glass and plate hurled from every cupboard in your house, in every house, in every street. It's the sound of *the ground beneath your feet*, and *bedrock* and *safe as houses* being torn down. It's the death of the city's narrative. Imagine the noise of it. Imagine the fear. (para. 18 - 19)

Local poet and commentator Gary McCormick (2012) personified the earthquake in a poem:

You miserable low life bastard.  
In September you were just the piano player, tinkling the  
ivories. In moustache. Pretty out there. Eyeing the women on the  
dancefloor.  
Then my o my you waited!  
I saw you the other day run up a blind alley full  
Of hatred and dark breath, Black cloud only pity us.  
  
You held us down on the jagged ground.  
You shook the streets and city buildings.  
You tore the spire from the Cathedral.  
And all those people.

For the people of Christchurch and Canterbury the years after the quake were a time of significant disruption, stress, and mourning. Few aspects of people's lives in the city were untouched by the quakes, as work, home, public, and leisure amenities were all affected.

In the years after the quake many people felt a strong sense of exclusion and isolation from the political processes of the remaking of the city, as a





conservative government worked closely with urban experts to implement a plan largely produced behind the scenes of the destruction. For many the temporary projects became both a visual and a pragmatic way of becoming involved in the recovery of the city. The projects provided tangible opportunities to support the city, and in doing this the social capital (Montgomery 2017) of the city was developed and built.

The immediate years after the quake are also now viewed with some fondness. The city was a strange mix of difficult stresses and delightful encounters. Everyday life was radically disrupted and communities came together to care for and support each other. New art and community projects proliferated around the city, supported by new organisations and producing lively forms of public activity. The temporary projects provided opportunities to participate in the making of the city and create a sense of social connection. But the city was also broken, with repairs that took years (Hayward 2013) (many still going at the time of publishing in 2019), a slow and difficult public insurance system for housing (Hayward & McDonald 2018), political controversy over planning decisions continues (Bennett et al. 2014), and the long slow stress of living among the almost endless disruption to people's lives.

I moved to Christchurch at the beginning of 2012 to pursue research in the city, and as part of an emotional response to the damage to the city in which my grandparents and father had grown up. When I arrived, the central city was still closed to public access, hundreds of buildings were being demolished, and almost all businesses in the central city were closed. However, the city was alive with creative energy and people were arriving from around New Zealand and other countries to lend their energy and support. I was attracted to the burgeoning groups of people present in the city that were using temporary projects and architectural forms to reclaim space for creative and participatory public activities.

A number of organisations emerged after the quakes and filled the empty sites emerging around the city with community gardens, dance floors, and food markets. Gap Filler and Greening the Rubble were the earliest, and they focused on cultural and landscape interventions, respectively. The Christchurch City Council created funding avenues for the groups and started to implement its own temporary projects (Brand & Nicholson 2016). They helped start Life





in Vacant Spaces (LIVS) to provide opportunities for other members of the public, and by the end of 2012 other groups including FESTA (Halliday 2017), arts collective The Social (The Social 2017), and many others were part of this burgeoning post-quake creative scene. These projects offered important experiences to people: places to mourn together (Kakela 2014), to laugh (Reynolds 2014) and offer support (Lewis 2013), to engage in public activities, and to access amenity and public functions lost as a result of the quakes.

As the emergency transformed into recovery, temporary projects were used to produce cultural activities such as temporary cinemas, open air venues, urban festivals, bicycle powered cinemas, and urban food gardens. Within these interventions was a set of projects that supported the city while also producing an extra element of surprise, joy, or the presence of a rebellious attitude in their delivery. It was clear that something interesting was happening in terms of the use of temporary projects. It was also clear that these projects were not just being used to solve problems of amenity, but were engaging different groups of people in larger issues or controversies around the city. By 2015 between 500 and 1000 temporary projects had been created in the city; these became an important part of the recovery story, and were profiled in global media such as the *New York Times* (Bergman 2014) and Lonely Planet (Atkinson 2012). These projects engaged with thousands of volunteers, and many different community partners, and artists, but a significant percentage of them suggested that around half of these activities were generated by a relatively small group of organisations and people within them (analysis of *Christchurch: The transitional city pt IV*). This research focuses largely on a group of projects generated by Gap Filler, The Festival of Transitional Architecture (FESTA), Life in Vacant Spaces (LIVS), Greening the Rubble, and the Christchurch City Council (CCC).

The thesis began formally seven days before the 22 February 2011 earthquake. During 2011 I visited Christchurch twice. It was clearly a place suffering trauma and grief, and the city was undergoing massive public urban conversations and associated political battles, but it was also a place with a surprisingly rich and vibrant cultural scene, much of it activated by the events of the quakes. At this point there was something almost comically defiant about creating such small projects in the face of such a big disaster. I decided to move to the city and arrived in early 2012 to volunteer on the construction of Gap Filler's temporary (and still going) office [174]. I felt welcomed to the city and was soon



participating in several projects and had become accepted into a community of like-minded practitioners.

1 Approval granted by the UTS Human Research Ethics Committee titled UTS HREC 2012000064.

I became part of a community that was making, using, and supporting temporary projects, and joined a group – the transitional movement – that was interested in the complexities of these formally relatively simple interventions. I worked in Christchurch as both a practitioner and a researcher. I worked on projects to become part of the community, to inculcate myself with the issues as they continued to emerge in the years after the quakes, and to gather and archive information about different projects. As a participant in the urban recovery and rebuild of Christchurch, I contributed in a variety of ways: through design skills in projects such as Tati/Playtime [12]; with labour and time on projects such as the Pallet Pavilion [52] and the Gap Filler Office [174]; via ideas and feedback as part of a broader community to various conversations in public forums (Talking heads 2015); in participating on the board of the committee that established FESTA and Te Pūtahi: the Christchurch centre for architecture and city-making; and by contributing critical and reflective writing on the city, both through my personal efforts and through the creation and editing of books (Bennett, Boidi & Boles 2012; Bennett et al. 2014).

In May 2012 I applied for pilot ethics approval to start conducting interviews, largely to get a sense of what was important to people and why they were committing their time and energy to these ephemeral and temporary projects. Approval for this research and the associated risks and mitigations was granted by the Human Research Ethics Committee in July 2012 (and a further extension granted in July 2015).<sup>1</sup> Soon after this I became involved with the creation of the book *Christchurch: the transitional city Pt IV*.

This book acted as both a survey of the temporary projects that were created in the city between 2010 and 2012 (early 2013 for the 3<sup>rd</sup> edition), and it was also a project carried out as part of the practices of being a publisher and with an interest in ordering and archiving things. In 2013 and 2014 new projects continued to emerge, and political debate about the nature of the future city, and the way that it was going to be determined, raged. At this time, it was clearly too soon to start drawing any lessons or evidencing claims about the research, so during this period I continued to write reflectively, take photographs, and was increasingly reading and reflecting on the key writing and theoretical insights





generated from engagement with Science and Technology Studies (STS) and Actor-Network Theory (ANT) texts and scholars.

During this period, I was reading texts by Bruno Latour (1987, 1993, 1996, 2005a), John Law (1992, 1999, 2004), and Jane Bennett (2001, 2004, 2009) and was starting to understand the value in studying things as they are brought into being, and as they fall apart, and how public controversies help document these processes. During this period I found it difficult to make clear distinctions between my practices as a designer and those as a researcher. As part of the process of making this distinction I wrote a number of scholarly articles in this period that examined the pedagogical potential of working on temporary projects for students (Bennett & Reynolds 2014), the relationship between design and democracy in the city's blueprint (Bennett et al. 2014), and the contrasting modes of city-making in the city's proposed convention centre versus a collection of transitional projects (Moore & Bennett 2014). It was also in this period that we created *Once in a lifetime: City-building after disaster* (2014), which was designed to help give shape and form to the various swirling controversies occurring in the city.

Many of the practitioners creating these projects were part of a struggle over whether Christchurch was being rebuilt with similar priorities as before the quakes, or reimagined, which requires a more open and discursive process. The 2015 movie *The art of recovery* used these two competing positions to create its main narrative. On one side were the different people who had worked on the transitional projects, arguing for a more participatory and experimental approach; on the other side were the Canterbury Earthquake Recovery Minister and government officials who framed the temporary projects as playing a (sometimes) useful role while the permanent city was being built (*The art of recovery* 2015). These positions can be understood via differing concepts of infrastructures – the first was the desire for a quick and uncontroversial re-establishment of the infrastructures of the city – a rebuild – and the second was a call for public discussion and experimentation during this process, often based on a sense that the infrastructures of the old city were not working as well as they might have been. This thesis is, at its heart, about how temporary projects relate to these differing views on the city and its infrastructure.



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Images 0.5 - 0.10: Various  
photograms of central  
Christchurch 2012 - 2015  
(photos by author)

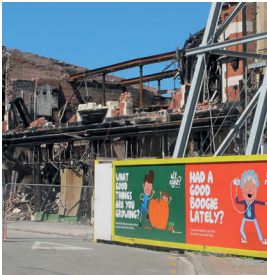
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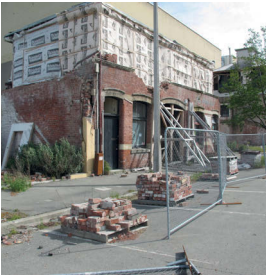
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As the recovery developed further into 2015 there was a strong sense, as described in Chapter one, that the movement, and the impact of the temporary projects was starting to change. At this point I amended my HREC ethics approval so as to undertake a further series of interviews. These interviews were targeted on significant creators or actors within certain temporary projects, as I was interested in fleshing out and giving form and colour to the reasons and motivations to these projects. These interviews and the earlier ones produced a body of material that was analysed in two distinct phases, first in 2015 when I started to understand the significance of using controversies as a way to conceptualise the value of the temporary projects, and second in 2017 and 2018 when the significance of the controversies about infrastructure became apparent.

Two books submitted with this thesis, *Christchurch: The transitional city pt IV* (CTC) and *Once in a lifetime: City-building after disaster in Christchurch*, are an extension of this struggle to understand, to give order to, and to articulate the various issues, complexities, and occasional joys of this time (submitted as Appendices F and H). These books and the many projects they document were generated by groups of people brought together and activated by the impact of the quakes, including the four people described above entering the bar: Andrew Just (designer and co-founder of the creative urban renewal group Gap Filler), Coralie Winn and Dr Ryan Reynolds (members of Free Theatre and co-founders of Gap Filler), and Dr Jessica Halliday (architectural historian and director of FESTA). These and other colleagues and friends are important actors in my experiences of the city.

Between 2011 and 2015 I took around 2000 photographs of the city and the temporary projects. These form a collection that has been gifted to the earthquake archive run by Canterbury University, called CEISMIC. The database of projects that are gathered in *Christchurch: The transitional city pt IV* has also been given to CEISMIC. The photos in this thesis have all been previously published as part of the CEISMIC: Canterbury earthquake digital archive or in *Christchurch: The transitional city pt IV* or in *Once in a lifetime: City-building after disaster in Christchurch*. All the photos used in this thesis are in the public domain.

In 2016 I moved back to Sydney to gather the material and reflect on what had come out of this complex, difficult, and confusing period while I was in the



city. To add some more material to answer the questions that were emerging in this period and to bridge between the textual interviews and the collections of photos, I undertook a further photo-elicitation exercise. This produced new research material that gave a good sense of the tone of the emotional attachments through the different periods of the city as it recovered. In 2017 and 2018 I continued to review the material that was generated during the four years I spent in Christchurch. In this period I began to notice the persistent role of infrastructures in the problems of the city and in the ways that the temporary projects were acting upon the city. The writing of Susan Leigh Star and associated colleagues began to resonate with this theme that was emerging in interview material. In chapter 5 I present the main findings of the thesis, which focus on the relationship between the temporary projects and the different controversies about infrastructure occurring in the city as it recovered.

In many ways this thesis should be understood as a reflection on the collective activities of this group of people between the years 2011 and 2018; the thesis is part of a reflective practice that is trying to understand the political character of the temporary projects that emerged in this difficult time. This concern for practical outcomes is an extension of the fact that I trained as a designer and developed activist interests before I become a scholar and researcher. As such, I take a pragmatist approach to the research and see its value in supporting efforts to improve and better understand the practices that sustain and create social life in cities, especially for cities experiencing controversial changes such as those recovering from disaster.





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Barnaby Bennett





## Abstract

In early 2011 a violent earthquake struck the small city of Christchurch, in the South Island of New Zealand, leading to the death of 185 people and the demolition of 80% of the central city. In the months and years after this disaster hundreds of small and temporary urban projects emerged to support the city, to challenge aspects of the government's leadership, and to raise concerns about long-term problems for the city. The temporary projects provided public amenity through the provision of venues, galleries, urban farms, gardens, restaurants, dance floors, games, and memorials. Over 80 essays and texts have been written about this collection of temporary projects, but despite the obvious political context the character of the temporary projects as political agents has not been seriously considered (Wesener 2015, p. 2).

The research addresses this gap. It tracks the development of the temporary projects between the years 2011 and 2016 documenting them, as part of a reflective practice, through a survey of 180 projects, interviews with participants making the projects, and case studies of different typologies of projects. The research uses a theory of political action (Lippman 1925; Dewey 1927) that developed in the 1920s and has been more recently reintroduced into contemporary discussions by Bruno Latour (2005) and Noortje Marres (2005).

Through this process it became apparent that temporary projects were being created in response to problems of infrastructure. This reflects a trend articulated by urban scholars (Farías and Blok 2016) who argue that the most urgent problems of our time (transport, climate change, energy, food) are infrastructural in character and that controversies around infrastructure are thus an important site of political action.

Using characteristics of infrastructure established by Susan Leigh Star (1996, 2009, 2010) the research interprets four types of temporary project that reflect their capacity to address both short- and long-term issues while also providing public amenity and developing new emergent public groups. The research concludes that the temporary projects demonstrated a form of infrastructural activism because they enabled the development of recursive publics (Jiménez 2014), this generated activity in relation to common concerns while also supporting alternative, and often more local, forms of infrastructure. This research produces a novel analysis of participatory urbanism that develops the scholarship about the temporary projects in post-disaster Christchurch, and contributes to contemporary discourses on activism, design, infrastructures, controversies, and temporary urbanism.

