

Westgate, J. 2020. Anthropocene dwelling: lessons from post-disaster
Christchurch, *New Zealand Geographer*, doi.org/10.1111/nzg.12242

Abstract:

This paper takes circumstances of post-quake Christchurch as an analogue for Anthropocene emergency. I argue that Christchurch events are more than a reminder of the Earth's geologic volatility; for the Anthropocene-as-disaster it is a prompt to contemplate what it is to dwell on unstable ground. Urban locations – towns, cities, mega-cities – are all rendered vulnerable on the surface of an unruly planet, offering no absolute refuge from planetary fluctuations. Such unsettling is deeply felt, physically and psychologically, resulting in homelessness both literal and figurative. Ensuing analysis offers insight into potential strategies for unsettled planetary dwelling to come.

Keywords: Anthropocene, emergency, dwelling, homelessness, Christchurch

Introduction

The Anthropocene is a proposed term marking the onset of a new geological epoch in which human activity is argued to have significant planetary influence (Crutzen and Stoermer 2000, Crutzen 2002): disrupting biochemical cycles, altering the distribution of living organisms, impacting biodiversity, and creating material shifts in the stratigraphic record. Work within the social sciences, humanities and arts has interrogated the more-than-material dimensions of the Anthropocene, concerned with cultural, social, and political implications (see Davis and Turpin 2015; Löwbrand et al 2015; Lorimer 2016). The Anthropocene unsettles key tenets of modern Western thought and disrupts established ideas of what it is to be human (Rose et al 2012, 3; Steffen et al 2011, 862). Propounding the planetary agency of the ‘anthropos’, the idea of humans as a ‘force of nature’ challenges longstanding beliefs that humans are separate from and ‘above’ the natural world.

In this paper I focus on experiential, lived dimensions of Anthropocene conditions. I argue that an Anthropocene world is one fundamentally different to that which has been assumed:

constitutionally post-modern and post-natural. It is a world both unfamiliar and disturbing, and one in which humans – both individually and collectively – must grapple with suspended dwelling, requiring strategies for living with ongoing unsettlement and precarity.

To be unsettled is to feel unnerved, unbalanced, anxious and agitated. Such emotional registers tell us that something is not right; something is causing us to *feel* distressed. I take such feelings as significant indicators for directing exploration rather than anomalous signals to be mitigated; as a way of ‘slowing down’ (Stengers and Zournazi 2002, 250) thinking and action, circumventing the modernist impulse to respond to ‘problems’ through technological interventionism (Baskin 2014, 6) and the ‘post-political’ vacancy argued to plague an Anthropocene-as-crisis (Swyngedouw 2013). My approach is informed by an allegiance with critical geography, but further aligns with work reading the Anthropocene as a summons to alternative forms of scholarly engagement (Castree 2014; Rickards 2015) and exploring affective and emotional dimensions (Ginn 2015;

Braun 2015).

The unsettling recognition that we no longer reside within a familiar Holocene world provokes uncanny response: the world looks the same but is in fact alien to us. Both Freud (1919) and Heidegger (2010 [1927]) were concerned with experiences of feeling ill-at-ease in the world. Feeling 'at home' (from the German *heimlich*) contrasts with that of feeling 'not at home', or having a sense of 'homelessness' (from the German *unheimlich*). For Freud, the *uncanny* is "something one does not know one's way about in" (1919, 128). Such disorienting experience offers a site for interrogation; one where a rational criticality may be applied, but with an understanding that the outcome may not be the one expected or hoped for (see Royal 2003, 8). Heidegger expanded Freud's psychological and individual concerns by considering the human relationship with the world, contrasting ideas of *residing* and *dwelling* (de Beistegui 2005, 196). For Heidegger, to reside *in* a home insulates us from *dwelling on* our inherent human homelessness; that is, from experiencing the inherent 'wildness' of the 'natural' (non-human) world. Stepping outside the safety of one's dwelling – one's home – therefore functions as a vital transcendental exposure to the world. Anthropocene ecological disruption further troubles 'home': our *planetary* home itself becomes a site of alienation (Morton 2012, 14). Such ecological disruption in turn troubles our ability to 'go outside' and experience 'nature' – nature, in a pure, unadulterated sense, no longer exists.

The Anthropocene might be best approached as the 'disaster to end all disasters' (Clark 2014, 21); a kind of event which, following philosopher Maurice Blanchot (1995), marks a crisis of such extremity that it undermines our very capacity to make sense of the world. Such emergencies can overwhelm quotidian experience, provoking us to perceive, think, and act in new ways.

To this end I look to deeply unsettling events: moments with 'defamiliarising' potential that force conceptual reorientation within a suddenly unfamiliar landscape. Encounters beyond our own human control, whether with cataclysmic forces of the earth, or confrontations with indifferent non-human others, can deeply unsettle our perception of the world, as well as our own sense of

agency. Such moments of crisis and trauma become existential prompts able to render new insights about worldly dwelling. Following the work of Grosz (2008), Clark (2011, 2012, Clark et al 2018) and Yusoff (2013, 2016) I focus on the meeting point of anthropos and planetary dynamism; zones largely beyond human influence, and which offer illuminating potentials. Moments of tumult, such as those rendered by planetary fluctuation, confront fleshy and vulnerable bodies, exposing the asymmetrical divide between human and non-human, prompting us to fundamentally rethink our relationship to the world.

Christchurch: a city unsettled

Christchurch, the largest city in the South Island of New Zealand, and the wider Canterbury region, have been dealing with the after effects of a series of major earthquakes which struck some eight years ago. The reverberations of events are many, but in this paper I am concerned with how such large-scale disruptions unsettle and disorient people's lives, as well as both physical and imagined sense of home.¹ And, while earthquakes have occurred over the city's colonial history, the size of recent quakes was far greater than expected (Elder et al 1991), exposing a previously unknown fault line running underneath the region.

Within the field of disaster studies, the significance of place and human attachment is a key theme in understanding disaster recovery and resilience (Cutter et al 2008). The spatial disturbance of disasters powerfully *affect* one's familiar experience of place. The many losses that result – social ties, property and possessions, cultural practices, places of significance, orienting landmarks (Cox and Perry 2011, 164) – can create a profound sense of disorientation, resulting in feelings of loss and emotional distress (Greene et al 2011). Sense of self is psychologically attached to place: our homes and geographies are sites where we perform ourselves and create personal narratives that coherently connects past and present. Severe disruptions to place threaten feelings of stability and, ultimately, our sense of identity (Fullilove 1996). For Christchurch the disruptions to geography and to everyday life have been significant. A city once well-known has been rewritten,

fracturing familiar connecting lines. Those remaining in the city have been challenged to reorient and rewrite both their lives and conceptions of 'home'.

Such 'homelessness' in post-disaster scenarios becomes an existential condition: an emergency disrupting quotidian life allowing new social forms to unfold. Anthropologist Victor Turner (1969, 1974) was the first to focus on investigate 'liminal', phase-change states 'betwixt and between' normal social conditions. Disaster studies scholars apply such thinking to emergency contexts seeking to draw connections between disaster, liminality, and recovery (see Baker et al 2007). Most effectively, the anti-structure rendered within disaster scenarios can provide openings for citizens to break from restrictive ties to existing structures (Hearn 1980), and allow the formation of post-disaster *communitas*, where strong community ties are forged in response to challenging circumstances (Jencson 2001). Post-disaster Christchurch is an example of such suspended dwelling.

Suspension is a salient concept in understanding Anthropocene emergency. To be suspended is to stop, pause, or hang. This can mean to halt something from being active, either permanently or temporarily, but also to hang or float within gas or liquid. Fundamentally, suspension is a key material concern for global environmental change given the many billions of tonnes of carbon, sulphate, and other particulate substances that fossil fuel use releases into the atmosphere each year (see Crutzen 2006). However, suspension can also be an inducement to an art of noticing, and being sensitive to atmosphere's affective dimensions (see Choy and Zee 2015). Conceptual suspension is rendered clearly through critical phase-shift moments: within liminal and emergency situations prompting dissolution or disintegration, most dramatically in the shift between Holocene and Anthropocene worlds.

Such conceptual state-change extends through to an ontological fluidity and dynamism which overwrites that of a stable, Cartesian-inscribed Holocene. Suspension comes with a material dimensionality which in turn entails movement and flux. Suspension and dissolution occur within the volume of a medium, often liquid or gas, but also solid: geological phenomena are a forceful

reminder that the seemingly solid ground beneath our feet is far from fixed. Attentiveness to the vital and 'vibrant' qualities of matter (Bennett 2010), reinvigorates Heraclitus' percipient meditations on the material world's inherently dynamic qualities. Anthropocene debates open up concern for complex and non-linear thinking alongside flux and instability (Grove and Chandler 2017). My focus on geological flux, and subsequent suspension follows boundary-crossing work between planetary and cultural dimensions of the Anthropocene (see Clark 2012), and that calling for attentiveness to deceptively 'solid-fluid' qualities of the world (Simonetti and Ingold 2018). Seismic events are indicators of ongoing planetary flux and, while discernible by visible surface marks, their energies and impacts reverberate deeply, cracking, folding, and liquefying through the depths of strata on which we stand.

I visited Christchurch some five years after the first earthquake. Still in a liminal recovery phase, I undertook exploration of the city and surrounding impacted areas, as well as interviewing residents about their experience of events and lingering impacts on their lives. From this in-field investigation I draw out key post-quake themes and discuss how such experience of suspended life offers insight into Anthropocene dwelling.

Reorienting and remapping place

Disasters have the ultimate capacity to render ground uninhabitable, making rebuilding or a return to normal life – human or non-human – impossible. For most of us such 'unthinkable' scenarios (Kahn 1962) are difficult to envision, but they can and do happen.² For Christchurch the magnitude of ground disturbance was significant enough for proposals of relocating the central city to a more geologically stable site to be argued during post-quake assessment (see Sibly 2011). Ultimately, rebuilding in-place was chosen, and this meant geological and ground instability would be a concern not only for immediate reconstruction but remain a lingering issue for the city's foreseeable future.

The rebuild process has been more complicated than expected, being politically fraught, costly, and drawn-out. The decision opened up possibilities beyond just simple restoration of the central city, allowing a more comprehensive reimagining (Pawson 2014).

The New Zealand Government initially acted swiftly, establishing an entity responsible for overseeing the reconstruction process (Christchurch Earthquake Recovery Authority (CERA)), and appointing a Minister to oversee projects and expedite the reconstruction process. However, the rebuild soon after became a tussle over the new masterplan map of the city. Christchurch City Council, charged with developing a new city plan to be submitted to Government, undertook wide public consultation to develop a draft Central City Plan (CCP).³

The first stage was undertaken within six months and forwarded to Government where it remained without any consultation or review. The Government then controversially proceeded to develop their own rebuild plan which ignored many key themes developed in the Council plan.

The revised central-city masterplan included the development of precinct areas and anchor projects which overwrote many existing structures: the historic 1930's Majestic Theatre would be demolished to allow for road widening; the old council buildings would be replaced with a transport interchange; an arts and shopping precinct would be replaced with a new sports stadium; the existing Town Hall would be demolished to make way for a performing arts space.

Such an overbearing approach proved unpopular with the public. Over a thousand buildings in the central city precinct had been either severely damaged or demolished, and proposals to remove more in a manner regarded poorly considered, provoked widespread criticism. The Government plan treated the city as a blank canvas: an empty site on which to inscribe new lines. Far from being blank the city had many built-up layers of history, organic social flows, and existing infrastructure which residents of Christchurch felt were being bluntly overwritten.

The heavy-handed Government intervention with the rebuild process has been criticised as a form of 'disaster capitalism', where post-crisis response led by right-wing economic ideology exploits disruptive conditions circumventing normal democratic process. The Government's proposal was

argued to be not just a spatial plan but a mapping of political and economic interests favouring those in power, and indifferent to the wider needs of the city and its citizens (Paton and Johnston 2017, 175). Where Christchurch's state of emergency had opened up new lines of possibility normative political forces sought to steer this along more normative trajectories.



Figure 1: View of Cathedral Square at the heart of Christchurch city. The Anglican cathedral can be seen image-left, fenced off and braced by supportive scaffolding. (Source: Author.)

The fate of the city's iconic Anglican cathedral illustrates the friction in rebuild debates. Built in the late 1800s ChristChurch Cathedral has survived numerous earthquakes. The recent quakes, however, toppled its 63-meter steeple and caused severe structural damage (see Figure 1). The Anglican Church voted to demolish and replace the structure – a decision contested both internally and by numerous public groups. Not only was the building heritage-listed, for many it is an important architectural feature as well as iconic symbol for the city. Numerous parties became involved in the debate: the church, the heritage lobby, architects and engineers, as well as the public. After much legal tussling the issue was taken to the Supreme Court for resolution. At the end of 2015 the Court resolved that the Cathedral would be reconstructed (Wright 2015), and after a two-year lag the Anglican Church finally announced plans for the Cathedral's rebuild (Gates 2017).

The scale of debate over just one building shows the Cathedral's potency as both a structural and psychological feature of place. The Cathedral is an intimate constituent of the city's historical

colonial founding, captured in its very name. For the post-disaster task of reorientation – of remaking identity in a now-unfamiliar landscape – reconstructing familiar points and lines of connection is crucial (Cox and Perry 2011, 401). However, the tension in rebuilding – what to restore, what to remake, and what to change – becomes a signal for the difficulties in letting go of familiar place maps, further entangled with political ideologies of place-making. The discomfiting loss of being made homeless can make us yearn for a return to our once-familiar dwelling, however doing so is not only not always *possible*, but it is not always *advisable*.

Rebuilding on unsettled ground

Where Christchurch's geology has been largely a specialist, professional topic, it appeared to have become of more widespread interest, led by concerns with ground and stability. Within interviews, as well as casual conversations, geology was a common topic when discussing post-quake life, especially in relation to homes. Knowing a property's geotechnical details appeared to have become routine, and discussion quite naturally turned to results of ground-core sampling, soil types, and the size of building foundations.

If geological zones are spaces where humans are absent – dwelling only on the surface – then earthquakes cut across boundary lines, acting as powerful reminders of concealed planetary potencies always underfoot. Crustal cracks and folds, volcanic cones, craters and maars, are visible surface marks of planetary fluctuation. Other traces can be subtle. Christchurch is situated on the edge of a large floodplain. As one approaches by plane, faint braided lines are visible on surface ground – remnants of old river channels. A braided river occurs in instances where there is a high sediment load and the waterway runs through environments that have dramatically decreased channel depth. The surrounding Canterbury Plains consist of moraine gravels deposited during glacial periods from 3 million to 10,000 years ago. More recently, as the bordering Waimakariri and Rakaia Rivers have created alluvial fans, the topography of the region has been reshaped. When Christchurch was settled in 1850 the Waimakariri River was at the northern extent of the

floodplain fan and preventing the river's return to old channels now obstructed by the location of the city has required ongoing river management. Appreciating rivers and their flows is important in understanding the situation due to the resulting consolidated silt ground composition.

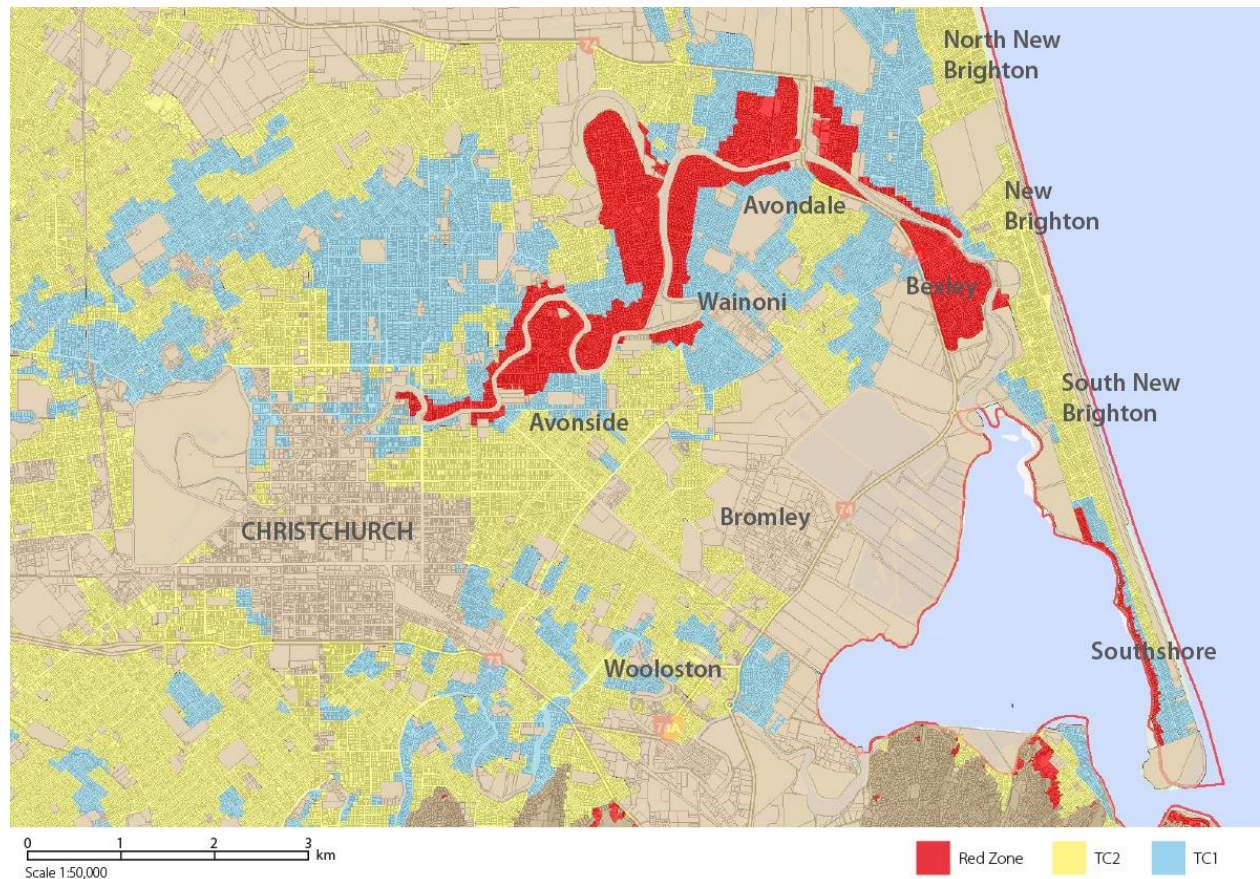


Figure 2: Map of wider Christchurch showing the zoning designation applied after the quakes. (Source: Environment Canterbury.)

After the quake Christchurch became a city of zones, classified for geotechnical safety (see Figure 2). Green zoning indicated residential land considered safe (TC1), with additional zones demarking areas requiring more investigation: TC2, minor damage and liquefaction possible; TC3, moderate damage and liquefaction possible. Red zoning encompassed residential land regarded as too risky to build upon. Immediately after the quake the central city precinct was classified a Red Zone and evacuated. A Red Zone was also established in the city's northeastern suburbs bordering the Ōtākaro Avon River, and ground severely impacted by quake damage. At the time of my

fieldwork the area was largely vacated following a Government land purchase scheme to compensate property owners⁴.



Figure 3: The landscape of the residential Red Zone, with some buildings having been demolished and removed due to safety concerns (Source: Author.)

Access to the area was not restricted and I was able to visit it. In contrast to time spent in the central city and other surrounding suburbs, the Red Zone was decidedly eerie (see Figure 3). Most properties in the Zone were vacant. Some houses appeared normal, apart from looking unkempt with long grass and overgrown gardens, but others showed clear signs of earthquake damage, walls broken and windows missing. On other sites only piles of rubble remained. Evidence of ground displacement was visible in the fractured and uneven road surface. Such unkemptness reminded me of travelling in less developed countries: Nicaragua and Guatemala, where conflict or lack of governance capacity produces broken-looking landscapes. But to encounter such conditions in New Zealand felt odd. Most uncanny in such a familiar suburban landscape was the absence of any human activity: no other people, no other cars – driving or parked. A quiet stillness permeated, such as you might find in the midst of a forest, but oddly present in an urban setting.

My tour guide was an academic from the University of Canterbury, Eric Pawson, who, having experienced events first hand, has undertaken research on post-quake effects (see Pawson 2011, 2015, Dionisio and Pawson 2016). In conversation during the tour he reiterated the significance of

geology in understanding the situation in Christchurch and the post-quake response of choosing to remain and to rebuild on unsettled ground:

You couldn't think of a worse place to build a city with the risk of liquefaction. Parts of the city are old river channels, and other parts are old sand dunes. By 'old' I mean less than 10,000 years... extremely recent, geologically speaking. You've got areas until recently – up to 1900s – were swamps. So, one of the reasons the earthquakes caused so much damage to underground structures and buildings is because basically the city is built on a 'bowl of porridge'!

And, even with all the geotechnical assessment, mapping and zoning, Professor Pawson remained sceptical about ongoing security within 'safe-build' zones:

I'm just astonished that this sort of thing [the rebuilding in TC2/3] is going ahead in such vulnerable places because it entirely depends on the flood defences on the southern part of the Waimakariri river not exceeding their design limits.

Put more simply, the underground topography of the city has been severely altered. Such conditions make the decision to keep the city in place and to rebuild grate against a relocation argument – as radical as that might have been. Why, then, had the decision been made to rebuild? Cost, it seems, was a leading factor. Beyond psychological attachments to place, contemplating the scale of such a task on many fronts – social, political, legal, logistical, and economic – is daunting. The cost of purchasing even just the 7,000 properties in the Red Zone has cost the Government more than NZ\$1 billion (Scott and Carville 2016); there are over 100,000 homes in the wider Green Zone. Simply, the Government could not bear the cost of such compensation.

Wanting to rebuild one's home in-place is understandable. For the process of reorienting after experiencing disruption reinscribing familiar lines may be more appealing than relocating and rewriting new ones. Rebuilding on ground known to be unstable nevertheless poses deep geotechnical challenges. For Christchurch, paradoxically, ground was understood to be unstable *before* the quakes, and yet now, afterwards, a rebuild impulse prevails. I'm struck that such thinking has a similar tenor to hubristic eco-modernist Anthropocene response seeking to reinforce modernity's tenancy (Asafu-Adjaye et al 2015). Infused with an over-confidence in the human capacity to subdue and control natural agencies, our species' Holocene desire for settled

life persists, even when encountering deeply profound asymmetries rendered by planetary forces.

Impermanence and gap filling



Figure 4: Living with ever-changing flows marked by traffic cones had become a part of everyday life in post-quake Christchurch. (Source: Author.)

The orange traffic cone emerged as an evocative symbol for post-quake life (Figure 4).

Associations with hazards, boundaries, and impermanence are encapsulated within this simple object. Such markers allow guiding lines to be temporarily traced on an always-changing city map, demarking safe and non-safe spaces, altered walking paths and traffic ways. The experience of living in Christchurch had become one of ongoing flux and reorientation as the shape of the city changed – sometimes on a daily basis.

A mundane task such as driving to work had become an unpredictable trial. Talking with people about coping strategies, one person explained matter-of-factly she just allowed much more time to travel. On one day a trip might be fine but on the next, due to altered layout, the same trip might take twice as long, perhaps more. After almost five years those I spoke with appeared to have developed their own unique strategies. Obtaining current information was important for planning, as was timing, and being aware of daily traffic dynamics. So, also, was knowing the ‘good’ routes and potential alternatives. But, more than anything, developing an attitude of flexibility appeared key; accepting that life now involved dealing with constant change: best approached by taking

things in one's stride and learning to live with impermanence and ongoing disruption.



Figure 5: The Cardboard Cathedral. (Source: Stephen Goodenough/New Zealand Geographic.)

A significant problem for post-quake reorientation has been attending to the substantial empty space rendered on the city map, but at the same time remaining responsive to ongoing adjustments. Strategies had been devised to address this at different scales. Seeking a temporary replacement for the damaged Cathedral, the Anglican Church engaged Japanese architect Shigeru Ban to develop a provisional one. Ban focuses on 'disaster architecture', and has a minimalist philosophy using largely paper and other traditional Japanese building materials to develop temporary structures (Barrie 2014). The resulting 'Cardboard Cathedral' is intended as a fill-in space able host civic events and concerts (see Figure 5). Opened in August 2013, it was one of the first significant non-commercial buildings to be constructed as part of the inner city rebuild.

The Cathedral is nowhere near as grand and imposing as the one it temporarily replaces. A simple

triangular-shaped building, the cathedral rises 21 metres, wider at the front and narrowing to the rear. The front face is comprised of geometric stained glass, and the roof and other walls are covered in sheets of translucent plastic core-fluting. The 'cardboard' moniker is slightly misleading as, while materials are technically classified as cardboard, the products are formed from wood pulp and have the structural integrity of timber. Cardboard tubes 60 centimetres in diameter form the architectural skeleton of the building, running vertically up to the apex. Other materials include timber, steel and plastic.



Figure 6: Re:Start City Mall, 2013. (Source: Wikimedia Commons.)

Another temporary feature was designed to replace the damaged City Mall shopping precinct previously in the city centre. Re:Start City Mall (Figure 6) was a temporary shopping venue formed largely from metal shipping containers, developed by a trust set up to find ways to bring people – and retail activity – back to the city centre given most businesses had been forced to relocate, giving people little reason to visit the central city. The project was funded with an initial loan of

NZ\$3.36 million from the Christchurch Earthquake Appeal Trust and temporary shops were fashioned from standard shipping containers: strong enough to withstand further quake threats, but modular and moveable, allowing the mall to be relocated as reconstruction of the inner city progressed. Re:Start was officially opened less than a year after the first quake, in October 2011, with 27 shops.

The Mall had been relocated just before my visit, and its previous location was being built upon with structures designed to be more permanent. Not originally intended to remain active for so long, it had been debated whether the Mall should remain at all. However, strong public support and additional funding led to the installation being relocated rather than disbanded. Additionally, slow progress with the inner-city rebuild meant that a replacement retail precinct was unfinished. The Re:Start Mall remained in operation at that location until mid-2017 when it was finally closed, although the containers were moved to a new location and a new rebranded mall was opened (Mathews 2017).

Additionally, numerous examples of self-organised response emerged post-quake at both local and regional levels. The rupture of disasters can, surprisingly, generate responses of caring, generosity and innovation (Jencson 2001; Clark 2005) – evidence of the concern and empathy we have for others facing shared adversity. As physical lines are disrupted, less perceptible social lines become stronger, serving to reweave renewed maps of shared space. A reinvigorated sense of community was mentioned by many of the people I spoke with, and also evidenced by the formation of neighbourhood support groups (Paton et al 2013, 12). The Student Volunteer Army used social media to coordinate thousands of students to assist with local disaster-recovery (SVA 2016), and farmers within the wider Canterbury organised the Farmy Army to help those impacted (Piddock 2011). Additional groups formed driven by a concern with remaking Christchurch's urban space, wanting the city rebuild to be responsive to local needs and informed by public ideas. Gap Filler was one such initiative.

Focused on creating installations in the many cleared, vacant building spaces around the city, Gap

Filler had produced an assortment of temporary, creative, and community-minded designs and activities: a dance stage, a sonic art installation, a mini-golf course, a pizza oven, temporary meeting spaces, and many others. The group's formation was, in part, a response to the Christchurch Arts Centre, along with other gallery, practice and creative market spaces being badly damaged. Concerned that their closure would force artists to leave the region and, at the same time, wanting the creative community to have an active voice in the reshaping of the city, Arts Voice Christchurch was formed as an advocacy group to officially represent arts organisations. A number of self-organising creative initiatives were developed, including Gap Filler. Initially structured as an informal collective the organisation has developed into a small not-for-profit operation allowing for some paid staff, but heavily reliant on volunteer involvement.

The 'gap' is an important concept for understanding the work of the organisation, which is informed by George Simmel's ideas about early twentieth-century urban experience (Reynolds 2014). For Simmel, living in urban spaces was individually constraining and depersonalising, and necessitated responses to liberate and reinvigorate space (Simmel 1971 [1903], 338). Within cities gaps are everywhere. If buildings and formal structures define the 'positive' space of the city, the 'negative', empty spaces in between become voids full of possibility – not just spatially but also temporally and politically. The potential of gaps comes from their seeming insignificance: they are everywhere and often disregarded. For Gap Filler such indifference, combined with the impermanence of projects, means that gaps are spaces where radical experiments can be undertaken. A project with limited lifespan poses minimal threat to established ideas but, by allowing unconventional forms to emerge, gaps become sites for alternative political expression. In some cases, projects are so-well liked they become longer-term fixtures.

The disruption of disaster therefore provides an opening for inscribed place and connection lines to be redrawn and remapped. However, additional benefits can be found in the unsettling exposure to suspended states. Experiencing liminal and flux conditions can help prompt awareness that impermanence is, in truth, a persistent state of being and, additionally, cultivate 'antifragile' (Taleb 2012) sensibilities. By welcoming temporariness, voids and gaps, we open up

possibilities for novel spatial and social configurations, which further act as a reminder that planetary living and dwelling is far from a fixed, static or stable affair.

Stress points; fracture lines; reconstitution

Periods of suspension or liminality must eventually settle, returning to more stable and normalised states.⁵ For Turner (1969) either the individual returns to the surrounding social structure or 'normative communitas' emerges, by which liminal communities develop their own internal social structure. Christchurch's recovery phase sought to return the city to a stable but renewed state. However, for all the effort and tussle involved in creating a new map, at the time of my visit Christchurch did not have the feel of a city being rebuilt. With few buildings having been reconstructed in the central city, many sites – and indeed city blocks – remained empty: voids imbued with a desolate atmosphere.

For all the resilience shown by those I talked to, I also noticed signs of underlying fatigue. Many were tired of ongoing disruption to their lives and wanted some semblance of 'normality' to return. Admittedly, my visit to Christchurch was during a period when the rebuild process was considered to be 'stalled' due to multiple issues such as on-going political wrangling, economic instabilities and lack of investment, and other unforeseen problems that had slowed down plans (McCrone 2014).

Other indicators of ongoing stress were visible as I explored the central city. Placards and flags hung in protest against the Government, CERA, and insurance institutions. Some voiced anger at imposed decisions which had led to buildings being removed without consultation. Other signs expressed frustration with institutional process and ongoing delays, such as receiving compensation for property damage. One sign affixed to the side of a badly damaged property read: "5 years. No rebuild. Still waiting" – with the number 5 overwriting the number 4 beneath.

I also noticed posters for a mental health campaign plastered throughout the city. "It's *all right* if you're over it right now" was the key message on one. Another, more encouragingly, proclaimed

“It’s *all right* to feel proud of how we coped”. Canterbury District Health Board and the Mental Health Foundation of New Zealand had developed the campaign as a response to increased mental health issues. Prior to the earthquakes the Canterbury population had a mental health profile on par with or better than the rest of the country, reflecting its comparative affluence (CERA 2014). But, post-quake, mental health issues had increased dramatically, with rising anxiety and depression, accompanied by marriage break-ups, drug issues, and school difficulties for young people (All Right? 2017). In the Canterbury area there had been a 43-percent rise in adults seeking professional help and a 69-percent rise for children and youth (Humphrey and Renison 2015). Post-traumatic stress after a disaster event is common (Galea et al 2005), and for those in Christchurch ongoing uncertainties and stresses have continued to be felt.

Such friction points to the challenging realities of reorienting, re-mapping lines, and rebuilding one’s ‘home’ at city and regional scales. The political discord suggests that Government and institutional responses were not wholly effective and sympathetic to circumstances, and that alternative conceptual frameworks may be more appropriate. And, while the term ‘rebuild’ is appealing because of associations with agency and action, it may be misleading and actually counterproductive if action is not forthcoming.

A more tempered outlook is offered by Kit Miyamoto, an international structural and earthquake engineer working in Christchurch, who suggested that rebuilding of infrastructure at the scale required for Christchurch should be thought about over a 50-year timespan which would allow time for those parts of the city that were disrupted to be rebuilt more ‘organically’ (Macfie 2013). The short spans of political cycles can make longer-term thinking and planning difficult, but the scales attached to the conditions of Christchurch necessitate such consideration: not just in remaking the city, but also recognising long-term geological associations.

Miyamoto’s recommendation also alludes to alternative ways in which the lines of city can be redrawn. The Government’s intervention in the planning process sought to impose a particular ideological mapping: one not only attached to an exclusive political-economic agenda, but led by

an idealised conceptualisation of how the city should function. Christchurch writer, Johnny Moore (2014), argues that the multi-layered complexities of the 'real' world can often be missed in such prescriptive visions:

The dirty underbelly of a city is never imagined in utopias. But the goal should not be to manufacture a better city; it should be to create an environment in which a better city can emerge.

Once governments start dreaming about an imagined future it becomes apparent that utopia is a place mainly inhabited by an exclusive group. There's no crime, no traffic jams, no homeless people sleeping on park benches...

Reality gets engineered out in grand plans and one person's paradise is another person's hell. (p161)

In contrast to a blueprint or masterplan an 'organic' approach allows for relationships to emerge over time.

Suspended planetary dwelling

In this paper I have taken circumstances of Christchurch as a coarse analogue for Anthropocene emergency. Both are disasters (though at different scales) rendered by geologically attached, asymmetrical planetary forces with the capacity to make well-known conditions of 'ground' and 'home' unfamiliar. Such comparison has limitations, but the geological asymmetries found in Christchurch manifest profound disturbances: impacts which run deeply, and are a reminder that 'ground' is more than the visible surface on which we stand, extending many layers beneath us.

More broadly, the Anthropocene thesis further problematises disaster categorisation – whether 'natural' or 'human-made' – firstly due to increased planetary-systems entanglement, and secondly stemming from intensified human dwelling within marginal and precarious geographical zones.

For Christchurch, deep physical disturbance agitated, fractured, and liquefied the city's ground, profoundly transforming it both above and below. When ground is disrupted, undergoing elemental transformation, the solid world for a while becomes fluid. The ensuing disorder within emergency gives rise to liminal antistructural states where established social forms are effectively

suspended, allowing new associations and relationships to emerge. For Christchurch, inscribed lines were erased presenting a seemingly blank canvas on which a new map could be redrawn. However, remapping and the reorienting work of placemaking is influenced not only by politics but by deeper ideological attachments. A tension exists between that of rewriting and reinscribing place lines: whether 'rebuilding' should follow the previous image of the city or whether a new and unfamiliar map should be drawn. Previous lines – both physical and affective – remain, and to overwrite these takes both effort and time. The need to reorientate ourselves on ground made unfamiliar may compel us to reinscribe – 'rebuild' – what was once there in an effort to re-establish those lines and patterns familiar to us. But this may not always be possible, or even advisable.

The social disruption of emergency can have both beneficial and harmful effects. Post-disaster *communitas* can result, where strong community ties are forged in response to challenging circumstances (Jencson 2001) – although ongoing psychological stress can be harmful. New modes of social organisation may also manifest. The political tussle around Christchurch's re-mapping, while contested, ultimately led to a more democratic consultative process. Other emergent and 'makeshift' responses, such as the Cardboard Cathedral, Re:Shift Mall, and GapFiller's projects are novel reorienting responses which offer interim groundedness during suspended dwelling. Additionally, we might read these as experimental and existential performances with the beneficial potential to acculturate citizens to impermanence and flux.

Christchurch events are an apposite reminder of the Earth's dynamic qualities. Seismic events are merely punctuated moments marking the ongoing geologic movement and flow of the planet's crust; a reminder of profound forces and expansive temporalities beyond quotidian human concern. Transposed to the emergency of Anthropocene dwelling, this suggests the need to move beyond surface attachments and to a planetary 'geo' politics beyond a horizontal and synchronous globality

(Clark 2015, 31). The Anthropocene-as-disaster is fundamentally one extended over geological

timescales, suggesting a 'slow' emergency (Rickards and Kearnes 2016). And, while it may be true that some effects will continue to accrue and be felt over tens-of-thousands or more years, impacts will not necessarily emerge gradually or subtly, but rather precipitate under mercurial conditions (Dominey-Howes 2018). Christchurch's geological and planetary scale entanglements act as a reminder of the asymmetrical forces that can shake and disrupt the collective homes we have built. Urban locations – towns, cities, mega-cities – are all rendered vulnerable on the surface of an unruly planet, offering no absolute refuge from Anthropocene planetary instabilities (McCarthy et al 2010). Whether impacted by changed climatic conditions, fluctuating weather events, or rising sea levels, each location will face its own challenge.

Dwelling in the Anthropocene requires us to grapple with a sense of planetary homelessness as we are thrown into a world unsettled and unfamiliar. To devise reorientating strategies we must re-evaluate fixed attachments, and develop sensibilities more attuned to ineffaceable uncertainty, volatility and flux. Letting go of familiar and stable attachments is not easy – whether in one's own everyday life, or through the foundational ideas by which we perceive and engage the world. Anthropocene scholarship, itself, has contested attachments to entrenched linear and steady-state ontologies (Simonetti and Ingold 2018, 26), making investigation of locations outside such Euro-centric, or male-centric capture fruitful (Haraway 2015).

Christchurch events offer useful insights into suspended and unsettled Anthropocene dwelling not only due to its geographical distance from the Western core, but because it offers an example of dwelling on inherently unstable ground. Situated on the edge of the Pacific Ring of Fire, at the meeting point of Pacific and Australian tectonic plates, the island-nation of New Zealand is a land shaped by inexorable planetary friction and unsettling. Interrogating geologically charged peripheral locations – which also includes Iceland (Clark 2011), Japan (Cole et al 2016), and Chile (Simonetti and Ingold 2018) – tell us something about Anthropocene experience not because they are sites of human domination, but just the opposite: they are asymmetrical zones reminding us of planetary agencies beyond human ken and control.

Ironically, it was Nietzsche who prophetically implored us to build homes on the sides of volcanoes as a metaphorical provocation for 'living dangerously'. However, the ultimate folly of living on unstable ground is doing so unconsciously, and remaining ignorant to the reality that at any moment your world can be shattered.

References

- All Right? 2017. All Right? website. Accessed 20 November, 2017: <https://allright.org.nz>
- Asafu-Adjaye, J., Blomquist, L., Brand, S., Brook, B.W., DeFries, R., Ellis, E., Foreman, C., Keith, D., Lewis, M., Lynas, M. & Nordhaus, T. (2015). *An Ecomodernist Manifesto*. Oakland, CA., Breakthrough Institute.
- Baker, S., Hunt, D. & Rittenburg, T. (2007). Consumer Vulnerability as a Shared Experience: Tornado Recovery Process in Wright, Wyoming. *Journal of Public Policy and Marketing*, 26, 6–19.
- Barrie, A. (2014). *Shigeru Ban: Cardboard Cathedral*. Auckland, Auckland University Press.
- Baskin, J. (2014). *The ideology of the Anthropocene?* MSSSI Research Paper No. 3, Melbourne Sustainable Society Institute, The University of Melbourne.
- Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Durham, NC., Duke University Press.
- Blanchot, M. (1995). *The Work of Fire*. Translated by Charlotte Mandell. Stanford, CA., Stanford University Press
- Braun, B. (2015). Futures: Imagining socioecological transformation – An introduction. *Annals of the Association of American Geographers*, 105(2), 239–243.
- CERA. (2014). *Canterbury Wellbeing Index June 2015*. Christchurch, Canterbury Earthquake Recovery Authority.
- Castree, N. (2014). The Anthropocene and geography III: future directions. *Geography Compass*, 8(7), 464–476.
- China Daily. (2008). Beichuan county town to be made a memorial. *China Daily*, 23 May, 2008. Accessed 10 January 2016: http://www.chinadaily.com.cn/china/2008-05/23/content_6707116.htm
- Choy, T. and Zee, J. (2015). Condition – Suspension. *Cultural Anthropology*, 30(2), 210–223.
- Clark, N. (2005). Disaster and Generosity. *The Geographical Journal*, 171(4), 384–386.
- Clark, N. (2011). *Inhuman nature: sociable life on a dynamic planet*. London, Sage Publications.
- Clark, N. (2012). Rock, life, fire: Speculative geophysics and the Anthropocene. *Oxford Literary Review*, 34(2), 259–276.
- Clark, N. (2014). Geo-politics and the disaster of the Anthropocene. *Sociological Review*, 62 (Suppl. 1), 19–37.
- Clark, N., Gormally, A. & Tuffen, H. (2018). Speculative Volcanology: Time, Becoming, and Violence in Encounters with Magma. *Environmental Humanities*, 10(1), 273–294.
- Cole, D. R., Dolphijn, R., & Bradley, J. P. (2016). Fukushima: The geo-trauma of a Futural Wave. *Trans-Humanities Journal*, 9(3), 211–233.

- Cox, R. & Perry, K. (2011). Like a fish out of water: Reconsidering disaster recovery and the role of place and social capital in community disaster resilience. *American Journal of Community Psychology*, 48, 395–411.
- Crutzen, P. (2002). Geology of mankind. *Nature*, 415(6867), 23–23.
- Crutzen, P. (2006). Albedo enhancement by stratospheric sulfur injections: A contribution to resolve a policy dilemma?. *Climatic change*, 77(3), 211–220.
- Crutzen, P. & Stoermer, E. (2000). The Anthropocene. *Global change newsletter*, 41, 17–18.
- Cutter, S.L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E., & Webb, J. (2008). A place-based model for understanding community resilience to natural disasters. *Global Environmental Change*, 18, 598–606.
- Davis, H. & Turpin, E. (2015). Art and Death: Lives Between the Fifth Assessment and the Sixth Extinction, in Davis, H. & Turpin, E. (Eds.) *Art in the Anthropocene*. London, Open Humanities Press: 3–22.
- de Beistegui, M. (2005). *The New Heidegger*. London, Bloomsbury Academic.
- Dionisio, M. & Pawson, E. (2016). Building resilience through post-disaster community projects: Responses to the 2010 and 2011 Christchurch earthquakes and 2011 Tōhoku tsunami. *Australasian Journal of Disaster and Trauma Studies*, 20(2)6, 107–116.
- Dominey-Howes, D. (2018). Hazards and disasters in the Anthropocene: some critical reflections for the future. *Geoscience Letters: Official Journal of the Asia Oceania Geosciences Society (AOGS)*, 5, 7.
- Elliot, J., Nissen, E., England, P., Jackson, J.A, Lamb, S., Li, Z, Oehlers, M. & Parsons B. (2012). Slip in the 2010–11 Canterbury earthquakes, New Zealand. *Journal of Geophysical Research*, 117, B03401.
- Freud, S. (1917). Mourning and Melancholia, in Strachey, J (Ed. and translator), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 14). London, Hogarth Press: 67–104.
- Freudenburg, W. (1997). Contamination, Corrosion, and the Social Order: An Overview. *Current Sociology*, 45, 19–40.
- Fullilove, M. (1996). Psychiatric implications of displacement: Contributions from the psychology of place. *American Journal of Psychiatry*, 153, 1516–1523.
- Galea, S., Nandi, A. & Vlahov, D. (2005). The Epidemiology of Post-Traumatic Stress Disorder after Disasters. *Epidemiologic Reviews*, 27(1), 78–91.
- Gates, C. (2017). "Cathedral decision will kick-start millions of dollars in donations". *The Press*, 9 September, 2017. Accessed 1 Feb 2019: <https://www.stuff.co.nz/the-press/business/the-rebuild/96673748/christ-church-cathedral-is-to-be-restored>

- Ginn, F. (2015). When horses won't eat: Apocalypse and the Anthropocene. *Annals of the Association of American Geographers*, 105(2), 351–359.
- Greene, D., Tehranifar, P., Hernandez-Cordero, L.J. & Fullilove, M.T. (2011). I used to cry every day: A model of the family process of managing displacement. *Journal of Urban Health*, 88(3), 403–416.
- Grosz, E. (2008). *Chaos, Territory, Art: Deleuze and the Framing of the Earth*. Durham, NC., Duke University Press.
- Grove, K. & Chandler, D. (2017). Introduction: resilience and the Anthropocene: the stakes of 'renaturalising' politics. *Resilience*, 5(2), 79–91.
- Heidegger, M. (2010 [1927]). *Being and Time*. Translated by Stambaugh, J. Albany, NY., SUNY Press.
- Humphrey, A. & Renison, P. (2015). Earthquake stress triggers mental health issues. *The Press*, May 25 2015. Accessed 20 March 2017. Available: <http://www.stuff.co.nz/the-press/opinion/68769392/earthquake-stress-triggers-mental-health-issues>
- Jencson, L. (2001). Disastrous Rites: Liminality and Communitas in a Flood Crisis. *Anthropology and Humanism*, 26(1), 46–58.
- Kahn, H. (1962). *Thinking about the unthinkable*. New York, NY., Horizon Press.
- Lorimer, J. (2016). The Anthro-scene: A guide for the Perplexed. *Social Studies of Science*, 47(1), 117–142.
- Lövbrand, E., Beck, S., Chilvers, J., Forsyth, T., Hedrén, J., Hulme, M., Lidskog, R. & Vasileiadou, E. (2015). Who speaks for the future of Earth? How critical social science can extend the conversation on the Anthropocene. *Global Environmental Change*, 32, 211–218.
- Macfie, R. (2013). *Report from Christchurch*. Wellington, Bridget Williams Books.
- Mathews, P. (2017). From Re:Start to finish: the Christchurch pop-up mall winds down, *Stuff*, 29 April, 2017. Accessed 20 June 2017: <http://www.stuff.co.nz/the-press/christchurch-life/91973727/from-restart-to-finish-the-christchurch-popup-mall-winds-down>
- McCarthy, M., Best, M. & Betts, R. 2010. Climate change in cities due to global warming and urban effects. *Geophysical Research Letters*, 37(9), 5.
- McCrone, J. (2014). Christchurch rebuild: a city stalled. *The Press*, 9 March, 2014. Accessed 16 December 2017: <http://www.stuff.co.nz/the-press/business/the-rebuild/9805314/Christchurch-rebuild-A-city-stalled>
- Moore, J. (2014). Beware when opportunity knocks, in Bennett, B., Dann, J., Johnson, E. & Reynolds, R. (Eds.) *Once in a Lifetime: City-building after Disaster in Christchurch*. Wellington, Freerange Press: 160–163.
- Morton, T. (2012). The Oedipal Logic of Ecological Awareness. *Environmental Humanities*, 1, 7–21.

- Norris, F., Byrne, C., Diaz, E. & Kaniasty, K. (2001). *The Range, Magnitude, and Duration of Effects of Natural and Human-Caused Disasters: A Review of the Empirical Literature*. White River Junction, VT, National Center for PTSD.
- Paton, D. & Johnston, D. 2017. *Disaster resilience: an integrated approach*. Springfield, IL., Charles C Thomas Publisher.
- Paton, D., Mamula-Seadon, L. & Selway, K. 2013. *Community Resilience in Christchurch: Adaptive responses and capacities during earthquake recovery*, GNS Science Report 2013/37. Lower Hutt, GNS Science.
- Pawson, E. (2011). Environmental hazards and natural disasters. *New Zealand Geographer*, 67(3), 143–147.
- Pawson, E. (2015). What Sort of Geographical Education for the Anthropocene? *Geographical Research*, 53(3), 306–312.
- Piddock, G. (2011). Don't worry – Farmy Army are on the case, *Stuff*, 17 June 2011 Accessed: 20 December 2016: <http://www.stuff.co.nz/timaru-herald/news/5161331/Don-t-worry-Farmy-Army-are-on-the-case>
- Reynolds, R. (2014). The desire for the gap, in Bennett, B., Dann, J., Johnson, E, and Reynolds, R. (Eds.) *Once in a Lifetime: City-building after Disaster in Christchurch*. Wellington, Freerange Press: 167–178.
- Rickards, L. 2015. Metaphor and the Anthropocene: presenting humans as a geological force. *Geographical Research*, 53(3), 280–287.
- Rickards, L. & Kearnes, M. (2016). *Thinking through slow emergencies*. Briefing note for the slow emergencies workshop, Institute of Australian Geographers Annual Conference, Adelaide 2016. Accessed 25 October, 2017: <https://slowemergencies.files.wordpress.com/2016/07/se-briefing-note3.pdf>
- Rose, D., van Dooren, T., Chrulew, M., Cooke, S., Kearnes, M. & O'Gorman, E. (2012). Thinking through the environment, unsettling the humanities. *Environmental Humanities*, 1, 1–5.
- Royal, N. (2003). *The uncanny: An introduction*. Manchester, Manchester University Press.
- Scott, M. & Carville, O. (2016). Christchurch earthquake: Eerie images of city's red-zone, five years on. *New Zealand Herald*, 17 February 2016. Accessed 20 March, 2017: http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11591021
- Sibly, K. (2011). *Christchurch – Past, present and future*. Submission to the Canterbury Earthquakes Royal Commission (ENG.SIB.SUB.0001.1). <https://canterbury.royalcommission.govt.nz/documents-by-key/20111201.1445>

- Simmel, G. (1971 [1903]). The Metropolis in Mental Life, in Levine, D. (Ed.) *On Individuality and Social Forms*. Chicago, IL., University of Chicago Press.
- Simonetti, C., & Ingold, T. (2018). Ice and Concrete: Solid Fluids of Environmental Change. *Journal of Contemporary Archaeology*, 5(1), 19–31.
- Steffen, W., Grinevald, J., Crutzen, P. & McNeill, J. (2011). The Anthropocene: conceptual and historical perspectives. *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, 369(1938), 842–867.
- Stengers, I. & Zournazi, M. (2002). A ‘cosmo-politics’–risk, hope, change, in Zournazi, M. (Ed.) *Hope: New philosophies for change*. Annandale, NSW., Pluto Press: 244–272.
- SVA. (2016). Student Volunteer Army website. Accessed 20 December 2016: <http://www.sva.org.nz/history/>
- Swyngedouw, E., 2013. The non-political politics of climate change. *ACME: An International Journal for Critical Geographies*, 12(1), pp.1–8.
- Taleb, N. (2012). *Antifragile: Things that gain from disorder*. New York, NY., Random House.
- Turner, V. (1969). *The Ritual Process: Structure and Anti-Structure*. Somerset, Taylor and Francis.
- Turner, V. (1974). *Dramas, Fields, and Metaphors: Symbolic Action in Human Society*. Ithaca, NY., Cornell University Press.
- Wright, M. (2015). Anglican Church to consider reinstating Christ Church Cathedral. *The Press*, 23 December, 2015. Accessed 7 January 2016: <http://www.stuff.co.nz/the-press/business/the-rebuild/75408052>
- Yusoff, K. (2013). Geologic life: prehistory, climate, futures in the Anthropocene. *Environment and Planning D: Society and Space*, 31(5), 779–795.
- Yusoff, K. (2016). Anthropogenesis: Origins and Endings in the Anthropocene. *Theory, Culture & Society*, 33(2), 3–28.

Endnotes

¹ To be clear, I do not argue that events in Christchurch are the result of Anthropocene (anthropogenic) agencies. Although earthquakes can be triggered by large-scale human activity, such as mining or significant landscape modification, the Christchurch quakes are the result of fundamentally ‘natural’ causes, resulting from a complex interaction of up to seven geological fault lines (Elliot et al 2012).

² The Chernobyl nuclear power plant accident in 1986 forced the reallocation of 250,000 people; the Great Sichuan earthquake in 2008 in central China killed 70,000, left 4.8 million homeless, and required a town of 20,000 to be relocated (China Daily 2008).

³ The Council engaged Danish firm Gehl Architects, renowned for their innovative people-centric planning approach, and who had recently undertaken a liveability assessment of the city. Gehl organised a public consultation process in which anyone could submit ideas. The ‘Share an Idea’ campaign gathered more than 100,000 ideas which led to five key themes being identified: a green city; an accessible city; a stronger built-identity; a compact central business district; a place to ‘live, work, play, learn and visit’.

⁴ A few residents remained in the Zone, unwilling to accept the Government’s compensation offer.

⁵ In chemical terms suspended mixtures, as opposed to colloids, are unstable once formed; suspended particles will seek to eventually

settle out of their medium (Choy and Zee 2015, 213).