# SWIMMING WITH IDEAS: WHAT HAPPENS TO CREATIVITY IN THE WAKE OF A DISASTER AND THE WAVES OF PRO-SOCIAL RECOVERY BEHAVIOUR THAT FOLLOW?

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**Abstract.** Creativity that is driven by a need for physical or economic survival, which disasters are likely to inspire, raises the question of whether such creativity fits with conventional theories and perspectives of creativity. In this paper we use the opportunity afforded by the 2010–2013 Christchurch, New Zealand earthquakes to follow and assess the creative practices and responses of a number of groups and individuals. We use in-depth interviews to tease out motivations and read these against a range of theoretical propositions about creativity. In particular, we focus on the construct of "elite panic" and the degree to which this appeared to be evident in the Christchurch earthquakes context. Bureaucratic attempts to control or limit creativity were present but they did not produce a completely blanket dampening effect. Certain individuals and groups seemed to be pre-equipped to navigate or ignore potential blocks to creativity. We argue, using Geir Kaufmann's novelty-creativity matrix and aspects of Teresa Amabile's and Michael G. Pratt's revised componential theory of creativity that a special form of disaster creativity does exist.

**Keywords:** Christchurch, creativity, disasters, earthquakes, elite panic, resilience.

## Introduction

Proactively creative individuals respond well to radical situations where "novel tasks" are faced that require "novel solutions". As disaster researcher, Charles Fritz (1996) points out, disasters tend to expose the illusory nature of everyday life as a kind of resigned and unfulfilling conformity and such exposures can threaten those in power. This explains the panic tendency of institutions in disasters to try to limit creativity, and this is reflected in official narratives of response and recovery that cheer and sentimentalise acts of helping rather than inviting or producing radical critiques of the *status quo*.

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The need to adapt to the post-disaster environment, and to compensate for what has been altered or lost, generates a different form of creativity. In the absence of a known theory that fits with what was observed during this study, we have amalgamated two models. We use Kaufmann's (2003) routine/novel task taxonomy, which allows creativity to be recognised by degrees in relation to whether novelty resides in the stimulus, the response or both. Amabile's and Pratt's (2016) updated componential model of creativity, which includes the importance of the affective nature of meaningful work, is also applied to assist in clarifying the nature of creativity that took place in Christchurch's post-earthquakes setting.

Abundant need can result in an abundance of unusual solutions to problems. Amusing and tolerated in "normal" times, a proliferation of the unique and imaginative in an already unsettling environment is likely to eventually be feared by those who find change unwelcome and threatening. Fritz (1996) and Rebecca Solnit (2010) provide support for the proposition that a creative "paradise" can be found in "hell". However, this moment or period is typically followed and curtailed either by "elite panic" responses in government and emergency management agencies or by the prior conditioning of ordinary individuals which encourages them to regard creativity and creative responses as inherently dangerous or threatening in some way.

In this paper, we begin to answer the following questions: 1. Can creative activity and output produced in a post-disaster setting be categorised as "creative", independent of its adaptive capabilities or support role in resilience? 2. To what extent did the appreciation and enablement of creativity suffer from the presence of "elite panic" in the five years following the Christchurch earthquakes? First, pertinent aspects of the literature will be presented in relation to the definition of creativity, disasters and the phenomenon of "elite panic". This will be followed by a description of the unique setting in Christchurch after the earthquakes before our methodology is discussed. The results section includes analysis and discussion. Specifically, the results section will address the research questions by presenting evidence that the creativity produced by study participants can be considered "creative", albeit by degrees. Further results – the perspectives of study participants – will be presented to show that the initial post-disaster period was supportive and enabling of creativity, while in the later period this waned. We will conclude by suggesting that this was due, at least in part, to "elite panic", despite efforts to counter it by some of those in authority.

## 1. Literature review

### 1.1. Creativity

Novel and valuable, useful or appropriate (Hennessey & Amabile, 2010), original and effective (Runco & Jaeger, 2012), creativity researchers have a variety of ways of expressing what has been considered a near consensus with regards to a "standard definition of creativity" (Runco & Jaeger, 2012, p. 92). Both components are considered necessary if something is to be considered a creative product. Novelty or originality alone is insufficient (Feist, 1998). "Originality can be found in the word salad of a psychotic" say Mark A. Runco and Garrett J. Jaeger (2012, p. 92). Unless the idea, artefact or problem solution is beneficial to an individual

or community, say Amabile and Julianna Pillemer, most of those who theorise about creativity would not consider it a creative product (2012).

The task of determining the nature of creative output or production in a post-disaster setting is on the back of a long and challenging tradition of attempts to define what some believe is the indefinable. We have found that using Kaufmann's (2003) matrix to ascertain degrees of creativity a useful and revealing method. It allows for variation without diminishing the gains of any earnest attempt at implementing the unexpected to produce societal benefits for a disaster-stricken community.

## 1.2. Disasters

Overall, there appear to be relatively few studies that directly associate creativity and disasters in the wider relevant literature. One study found relates to creativity used in the emergency response to the World Trade Center (WTC) attacks on 11 September, 2001. James Kendra and Tricia L. Wachtendorf noted that "creativity enhances the ability to adapt to the demands imposed upon individuals and organisations during a crisis and bolsters capacities to improve in newly emerging physical and social environments" (2003, p. 121).

Adaptation, required in disasters, and creativity are not equivalent but they are often merged in sometimes uncritical, romanticised narratives of resilience and recovery. Creativity is regularly discussed or intimated as contributing to resilience. For example, Amy V. Lee, John Vargo and Erica Seville (2013) discuss a model of organisational resilience, prepared in the wake of the Christchurch earthquakes by locally-based group, Resilient Organisations, which shows creativity to be just one of 13 indicators of resilience. Raven Marie Cretney and Sophie Bond mention the actions of one celebrated local group's contribution in the aftermath of the quakes: "The organisation is self-described as 'an inspiration and a model for communities wishing to build community resilience and sustainability through innovative projects and collective creativity" (2014, p. 13). This, too, illustrates how creativity is viewed as contributing to resilience. Einat Sabina Metzl has been involved in research that largely focuses on the after effects of Hurricane Katrina in New Orleans (2007, 2009; Metzl & Morrell, 2008). She has attempted to locate creativity more specifically within the process of resilience. Metzl considers that creativity has been marginalised as merely a component of resilience. Metzl and Malissa A. Morrell state that "this may be due to the historical place of creativity within psychology and the problems associated with its systematic research" (2008, p. 6). They continue by saying that "May (1975), for example, states that creativity has been treated as a stepchild of psychology because it is often understood as a regression or neurosis" (Metzl & Morell, 2008, p. 6). In the context of findings that suggest creativity may be considered threatening, it is unsurprising to see that earlier attempts at understanding it resulted in its being considered negatively. Ann S. Masten and Jennifer L. Powell (2003) make links between creativity and resilience suggesting that creativity and resilience involve adapting to given set of circumstances. However, again, sharing a quality relegates creativity to a characteristic that is *associated with* resilience.

Disasters expose the illusory nature of everyday life and reveal it and unfulfilling conformity, according to Fritz, who spent five decades involved in disaster research (1996). Over

that time, he held key positions that involved personally investigating and overseeing mass operations to gather information about communities in post-war and other post-disaster situations (Fritz, 1996). The work largely focuses on the unexpected beneficial aspects of disasters. It is Fritz's belief that people become their best selves when a post-disaster situation provides them with purpose, meaning and like-minded company to share it with (1996). His research illustrates this through examples that include the positive post-blitz experience of the English in World War II, when "the traditional British class distinctions had largely disappeared" (Fritz, 1996, pp. 3–4). Fritz explains that despite both Japan and Germany experiencing mass atrocities and physical devastation during the same war, within a relatively short timeframe after the war "both countries were expanding their productive capabilities far beyond expectations and beyond their pre-war rates of production" (1996, pp. 7–8). In relation to disasters, the findings presented in this paper will be aligned with Fritz's observations.

## 1.3. Elite panic

Solnit's *A Paradise Built in Hell: The Extraordinary Communities that Arise in Disaster* (2010), through comprehensive analysis of some of the most significant disasters of modern times, finds that disasters can be the best of times and the worst of times. She talks about the phenomenon of "post-traumatic-growth" when the "devastation of loss provides an opportunity to build a new, superior life structure almost from scratch" and "people valued the sense of urgency, solidarity and depth, a shift away from an everyday diet of trivia to major questions about life, death, politics and meaning" (Solnit, 2010, p. 221). Once the initial trauma of events has waned, a social "paradise" of sorts can follow. However, it appears that this phenomenon is almost always short-lived.

Fritz writes of how a spirit of recovery can diminish:

> "During the integrative phase, characterized by a strong feeling of mutual suffering and in-group solidarity, it reaches its greatest degree of influence and potency as a therapeutic system of interaction. Thereafter it wanes and begins to disintegrate, as people return to normal pursuits and the process of social differentiation begins to manifest itself" (1996, p. 29).

Disaster events can prompt real societal change but as Solnit suggests, in reference to the "9/11" terrorist attack in New York in 2001, the "event itself got hijacked" (2010, p. 221). Solnit and others (Tierney, 2009; Clarke & Chess, 2008) consider this can be attributed in part to what is referred to as elite panic. Kathleen J. Tierney defines this as a situation where "elites fear disruption of the social order" and "challenges to their legitimacy" (Solnit, 2010, p. 127). It seems the "elites" – those with power and authority in the pre-disaster society – are far less comfortable in a disaster-affected setting where the previous *status quo*, for now, no longer exists. They find it difficult to cope, while others, used to a more marginal existence, begin to thrive in a setting that, says Solnit, delineates "a world view in which civil society triumphs and existing institutions often fail" (2010, p. 27). She also draws upon the findings of Enrico Quarantelli, a contemporary of Fritz, who claimed that "they (institutions) don't improvise rapidly or well […]" (Solnit, 2010, p. 152).

As corollary A. Cooper Drury and Richard Stuart Olson, have an explanation for this:

> "Disasters overload political systems by multiplying societal demands and empowering new groups on one hand while disarticulating economies and disorganizing governments (as well as revealing their organizational, administrative, and moral deficiencies)" (1998, p. 55).

Elite panic is suggested to have been a response of the elites to the disconnection and fearfulness of the non-elites after Hurricane Katrina in New Orleans in 2005 (Clarke & Chess, 2008). This panic was also seen in the aftermath of the WTC attacks of 2001. "This spirit of brave resolve and deep attention, this awakened civil society, seemed to alarm the Bush administration, which immediately took measures to quell it" (Solnit, 2010, p. 222).

## 2. The setting

As the post-disaster setting is an integral part of this research it is necessary to understand the spatial and physical context of this study. Christchurch, New Zealand's second largest city, with a population of approximately 350 000 people, and a land area of about 450 square kilometres, was devastated by a series of earthquakes between September 2010 and June 2011 (Cubrinovski, Robinson, Taylor, Hughes, & Orense, 2012). As well as the tragic loss of 185 lives, more than 6600 people were injured during, or within the first 24 hours following the most devastating earthquake of 22 February, 2011 (Ardagh, Richardson, Robinson, Than, Gee, Henderson, … Deely, 2012). Many of the city's heritage buildings, housing and infrastructure were destroyed or unusable for a long period. The Christchurch central business district was cordoned off, which "displaced 50,000 central city jobs" (Chang, Taylor, Elwood, Seville, Brunsdon, & Gartner, 2014, p. 1).

The research reported in this paper is unique in the creativity literature as this, as far as the authors are aware, is the first earthquake-related study specifically on creativity *per se*. Furthermore, the Canterbury situation was not limited to one event, Christchurch experienced thousands of earthquakes and aftershocks over a sustained period. In fact, six years later, and given recent earthquakes were within relatively close proximity, many here would hesitate to describe the setting as *post*-disaster with total confidence.

Following the major Christchurch earthquakes, the creative response of community members was internationally recognised (Bergman, 2014). Some examples of creativity seen in Christchurch after the disaster included; a bar in a bus, an automated outdoor dance floor on vacant land, a shopping complex housed in upcycled shipping containers and uniquely landscaped outdoor spaces amongst the rubble. These kinds of ventures commonly appeared in the city as groups and individuals responded to the new environment in what appeared to be novel and creative ways (Revington, 2013).

## 3. Methodology

The participants of this exploratory study had been – or in many cases still were – involved in the enactment of a novel idea that resulted in commercial or community benefit. The de-

gree of novelty of each idea varied from extremely unique to not known to have previously occurred in Christchurch.

Forty-five participants were interviewed using semi-structured, in-depth interviews. Participants were asked to answer questions in relation to the following topics: their creative idea, personal and contextual influences, motivational factors, obstacles and enablers and their experience and views in relation to the earthquakes and resulting environment.

Interviews were recorded and transcribed verbatim. Written transcripts were coded for key and recurring themes using MAXQDA, as well as manually.

Twenty-six of the participants were recruited using a purposive approach due to being featured in the media in relation to their creative ideas. The other 19 interviewees were suggested by other participants using a snowball sampling technique, or referred to by organisation leaders. The participants were grouped into four main categories: Social/community (S); Commercial (C); Social and commercial (SC) and Art/entertainment (A). The code in brackets is used to label the data presented in the following results section.

## 4. Results

The participant group was comprised of 23 men and 22 women. Each participant can be considered a creative or cultural entrepreneur as each was pursuing an opportunity to create benefit (value) in a novel way. Six of the participants were aged in their sixties, nine in their fifties, nine in their forties, fourteen in their 30s and seven in their twenties. Fourteen of these participants were involved in creative ventures, but with commercial goals, while seven could be considered commercial at least to the extent of remaining in existence, at least until the time of writing. Two participants were acting in their role as an employee of a government department and the other 17 were operating for either a social enterprise, not-for-profit organisation or creating – often public – art work.

### 4.1. The nature of creativity in the post-disaster setting

Creativity that is driven by a need for physical or economic survival, which disasters are likely to inspire, raises the question of whether such creativity fits with conventional theories and perspectives on creativity.

As discussed earlier, the post-disaster setting provided an environment that those who are used to adaptive thinking responded to almost instantly; certainly, more quickly and ably than those who were extremely comfortable with the pre-disaster *status quo*. In effect, the situation led to creativity being "fast-tracked". It is our belief that some – the creatives – were ready and equipped to take advantage of the opportunities that resulted from the type of shock to society that Fritz says "disrupts habitual, institutionalized patterns of behaviour and renders people amenable to social and personal change" (1996, p. 55). New realities emerge that lead to redefining and restructuring the context of the affected society. Those who are comfortable with risk and operating outside of the usual social structures may welcome the chance to modify their surroundings. "The breaking of the 'cake of custom' is often perceived by many groups in the society as desirable once the immediate problems of rescue, medical care, and subsistence become solved" (Fritz, 1996, p. 56).

In post-disaster Christchurch people responded generously with time and willingness to volunteer or join groups that were intent on solving problems through an alternative sense of order that came to exist amongst the chaos. In particular, those who had keenly felt the stresses associated with pre-quake, everyday existence appeared to relish the opportunity to be involved in a unique experience (Mamula-Seadon, Selway, & Paton, 2012). Fritz suggests partaking in a distorted environment with others sharing the experience can provide "a more satisfying conformity than can be achieved in the usual formal social structure, which often contains 'impossible' standards of behaviour" (1996, p. 62). Fritz's research provides a general political critique but stops short of a study of acts of creativity under duress. It is our intention to begin the process of determining a theory of creativity in a post-disaster setting. An amalgamation of aspects of Kaufmann's (2003) taxonomy that differentiates between creative acts based on whether the stimulus, response or both are novel, and Amabile's and Pratt's (2016) dynamic componential model of creativity in our view provide the basis for such a theory.

Kaufmann's matrix evolved out of the need to define creativity in a way that did not simply rehearse definitions of intelligence:

> "Popular definitions of creativity, by focusing on novelty and appropriateness, do not distinguish the concept of creativity in a satisfactory way from standard definitions of the concept of intelligence, which also focus on novelty and appropriateness as key defining features. A solution to this conceptual dilemma is offered by way of making a clear-cut distinction between novelty on the stimulus and novelty on the response side" (2003, p. 235).

As mentioned earlier, novelty and appropriateness are most often seen as the determiners of a creative act or output. Kaufmann disagreed with previous studies, like that of Larry Briskman (1980) which viewed creativity as something that could be orchestrated to deliver objective novelty (Kaufmann, 2003). Belief in such a formula implies that individual creativity or domain skills have no bearing on the ability to produce subjective novelty as the character of the outcome would be predictable and dictated by the conditions and process. As Kaufmann says:

> "This line of thinking may, however, be criticised for leading to an excessively constricted and exclusive definition of creativity. By placing the concept of creativity on the 'Einsteinian' level, so to speak, the theorists may exclude too large a domain of activities that seem clearly to entail creativity, as ordinarily and reasonably conceived. Such a position is also difficult to reconcile with a concept of degrees of creativity, which, is a notion that is deeply entrenched, makes good sense and should be preserved" (2003, p. 240).

In the case of post-earthquakes Christchurch, the unprecedented and unpredictable environment was a contributing condition to the creative process and outcome. This resulted in a range of responses and consequently a variation in the quality of creative products. In this section results from interview data, relating to the nature of the creativity seen in the post-disaster context will be presented before drawing some conclusions.

The study participants' creative acts are first categorised according to the types of creativity identified by Kaufmann (2003), before some examples from participant interview transcripts that illustrate motivation to perform meaningful work are provided.

All initiatives in which this study's participants were involved can be considered creative to some degree. That is, none were familiar tasks with familiar solutions – at the very least they were novel within the radically unfamiliar post-disaster setting of Christchurch. Eight could be classed as "adaptive intelligence". These ventures resulted in familiar solutions, but the approach taken by the creative idea enactors was novel.

Much of this type of creativity was seen amongst communities after the Christchurch earthquakes. The examples that Cretney and Bond used to illustrate the point, presented earlier in the paper, that links creativity and resilience, would fall into the "adaptive intelligence" category of Kaufmann's taxonomy:

> "Whilst aiming for these goals, Project Lyttelton has established numerous projects such as a highly successful Farmer's Market, a timebank, a community garden, film nights, a fundraising platform for other community organisations and a community owned and run food co-operative" (2014, p. 13).

Examples presented as adaptive intelligence share the qualities of usefulness and novelty that Kaufmann (2003) says are difficult to distinguish from more general intelligence.

The majority of the creativity that the study participants were involved in enacting can be considered "proactive creativity". This is perhaps unsurprising as this type of creativity is usually triggered by a disturbance or deviation, which, of course, earthquakes automatically produce (Kaufmann, 2003). Artistic creativity best aligns with this category. Various artists who create in a range of mediums were interviewed for this study. It seems that they were producing novel responses to their surroundings, but in a familiar way.

Perhaps not unexpectedly, those producing novel responses to novel tasks are represented least. There were only six. This category represents the purest creativity. Bearing in mind Kaufmann's cautioning that novel tasks can, by definition, only produce novelty; therefore, novelty of some form is not difficult to achieve, but appropriateness is far from assured.

## 4.2. The importance of meaninful work

To further determine the nature of post-disaster creativity it is important to understand what prompted action and what the enactors of creative ideas intended to achieve. In most cases – a significant majority of those interviewed – stated or intimated that they hoped to do "meaningful work"; which Amabile and Pratt (2016) indicate enhances motivation and, in turn, the dynamic nature of the creative process.

Not all aspects of Amabile's and Pratt's (2016) dynamic componential model apply to the creative processes performed by participants in this research. Amabile is primarily an organisational researcher and the model is clearly best suited to explaining the process within organisations, where innovation rather than creativity is the desired result. However, this model, built on Amabile's earlier work (1983, 1996, 2000) is, in our view, the most applicable to creativity in this setting because environmental influences are a prominent component.

Therefore, it is not expected that the model in its entirety applies, yet – as aforementioned – the components regarding motivation do.

Amabile and Pratt assert that the importance of the problem to be solved will dictate the effort invested in generating alternative solutions. It becomes valid due to the likely disarray of the post-disaster environment, in which "meaningful work" may be beneficial but is not always an enjoyable experience (2016). They refer to research findings from Edward L. Deci and Richard M. Ryan (2008, p. 182) which "suggests that individuals who experience meaningfulness, for example, in doing an activity, are also likely to experience positive affect while engaged in that activity" (Amabile & Pratt, 2016, p. 30). This suggests that those working to enhance the post-quake circumstances for themselves and others were likely motivated by the desire to do something that has meaning. This is another prominent feature in Fritz's work; that disaster survivors thrive in a situation that offers them the opportunity to act more meaningfully than in their everyday lives (1996).

One of the participants revealed that: "I'm driven by a desire to want to do something that is going to benefit the world […] so wider society, not just affecting myself affecting others and affecting the environment in which we live in. That really drives me to benefit my environment" (SC14). Others consider their actions to be part of a longer plan: "'This is a journey'. I didn't feel like I had a choice in the end" (SC22), or felt dedicated to a greater cause: "I needed to find a way of feeling resourceful and responsible for the Earth" (S27). Others wanted to use the new environment to promote social values. One participant wanted to ensure "that the values that we say we're trying to promote within the city, are the values we say we're upholding in our own organisation" (S04).

### 4.3. A paradise in hell

Post-quakes Christchurch enjoyed a robust spirit of recovery. Comments like "I feel there's more solidarity and togetherness. The sense of a shared experience" (A42) were not uncommon during interviews. One participant noted that "After the quake the community started coming together a lot more. Neighbours started knowing each other" (A33). This helped provide the community support needed to reenergise the devastated central city by attracting people back into the space. People were keen to volunteer and just wanted to "do something" (A03).

The increased community spirit was enhanced by the positive feelings some expressed feeling post-quake. Despite a sense of guilt from some who were ashamed of enjoying aspects of the period, a range of benefits were acknowledged: "What a fun time! It was ghastly […] but I miss the excitement. Even the bad bits when the aftershocks were going on […] you're feeling an emotion, and then when you get back into the drudgery of everyday life […] I don't miss the earthquakes, but I miss living life day-to-day" (C08). Some simply exclaimed that "It was a thrill" (S04) or "I loved it" (SC12). Another participant enjoyed his newly found freedom: "It was actually quite beneficial because it put an end to it all. I was living in Lyttelton and the house I was living in got red stickered […] the restaurant I was working in fell down […] and I broke up with my girlfriend. So didn't have anywhere to live, no long term relationship and I didn't have a job" (SC14).

Everyday concerns related to routine living often vanished: "You didn't have to go to work. You didn't have to worry about a lot of things you were normally worried about" (A36).

The situation even led to business success: "We couldn't have done it as successfully straight away if there hadn't been a quake. I sometimes feel a little bit guilty about that" (C16).

There were a significant number of comments from participants (C13, A21, A35, S20, S26) that indicated appreciation for the fact that a city often labelled, as conservative was now more receptive to creativity: "Now you can't wish an earthquake on any place or any people, it's horrible, I don't even like myself for thinking like this, but I do think Christchurch needed a bit of a shake-up" (SC40).

Creativity led to further creativity, creating energy and momentum: "People kept getting in touch by email and Facebook and saying "Let's do something" (S04). People were prepared to do things and go places they would not normally consider: "There was a willingness of individuals to allow unusual events to happen" (A36).

There was also a noticeable reduction in restrictions. The authorities were more flexible or oblivious to aspects of what was occurring in the unprecedented environment: "The Council and local government relaxed the laws around consent issues for temporary projects, which enable experimentation to flourish" (A21). It was particularly easy to activate ideas in the early post-quake period. "It was a clear run. Because I was the only person spending money, I walked in the door and they said 'this is great!'" (C30).

Christchurch City Council (CCC) was acknowledged by a number of study participants for their helpful support, so are known to have acted more flexibly with intent: "The Council could see the need for transitional projects to help re-enliven people, so they gave some core funding" (S39). In fact, reasonably easy access to funding of was an important enabling factor of creativity in the context: "The fact that we got such early funding made it super easy" (S26). AC43 said: "There was a few million dollars that was put into projects in the central city […] we received about $60 000 from that which was our capital investment, which made it possible. It made everything possible. And then other support from the City Council wanting to revitalise the city and things like that".

## 4.4. A paradise lost

At the time of writing, six years after the most devastating of the seismic events in Christchurch, the city is still in disarray (Wright, 2016). The rebuild is progressing and some innovative buildings have appeared (Killick, 2015). However, the environment appears now less welcoming of the quirky, creative and interesting that were once so prominent in the early post-quake period. A type of "normal" is returning.

It was known that the principal local authority, the Christchurch City Council, was supportive of transitional projects in the transitional period, so it would be unfair to suggest that the city had experienced an overt "elite panic". However, the same cannot be said for the central government authority that was assigned the role of overseeing the rebuilding of the city. The Canterbury Earthquake Recovery Authority (CERA), enacted by central government using emergency powers, did not receive praise from any study participant. In fact, there was belief that their actions thwarted the creative initiatives of the city in a number of ways: "I'll happily sing the praises of Christchurch City Council and our experience has been great. Central government has been worse than you can possibly imagine to

work with" (S04). Others were more vehement in their comments: "I'm very happy for you to offer the comments about CERA, because CERA was an undemocratic structure that was foisted on the city without the city's permission by the central government that made a set of assumptions, including that Christchurch voted Labour (the political party in opposition) and therefore could be screwed" (S39).

CERA and "big business" are seen, by many of those interviewed, to be responsible for the over planning that appears to have left little room for creativity to flourish. This seems disappointing and demotivating to some participants: "I can appreciate that you can't just let it happen, you've got to have a plan, but these ideas of precincts […] that's never going to work […] and you see these lovely little things flourishing in areas […]" (C28). An internationally renowned career sculptor participant said: "There is too much focus on the cost and not the value of art" (A37).

For now, it appears that spontaneity has been quelled and ideas are limited: "I think there's been a lot of resignation here. Like we're getting back to 'normal' now. Sort of resting on our laurels as a city. People are tired and it's easy to just take the simple option rather than the challenging option. People can be loath to criticise what's going on, even if it's mediocre for this reason. Perhaps they're fearful that if they criticise, it may stop and then we'd be back to nothing again" (S20).

Funding for creative exploits is now less available as the city moves to a different phase: "Post-earthquakes there was a lot of funding that lasted through to about 2015. In 2015 Council warned us that they were being restructured. The whole thing was going to tighten up. They were moving on to a thing called regeneration […] so you go from recovery to regeneration, which basically means a lot of money has been pulled out of the rebuild […] think about the horrible convention centre […]" (AC43).

Regulations are perhaps stronger than ever: "I think it is more difficult now. I think that has come about because the Council are quite jittery and there's huge health and safety issues" (A01). However, despite such laments there is realisation that the more unfettered situation could not last forever: "Now, the machines of government […] the teams are back! So the processes are back. So when you approach people they say '"Great!' Can you take it through these four committees?" (C07).

## Conclusions

We argue that a theory of post-disaster creativity does exist, but one which is connected to and not impoverished when compared to, existing creativity theory. Disaster creativity appears to be often enacted by "outsiders"; those who are comfortable in settings that are not "normal" or are used to, and enjoy, living on the fringes of society. This means they are pre-adapted and ready to act at a time when others are feeling dislocated. Disaster creativity seems to be driven by a desire to perform "meaningful work" when opportunities to do so are plentiful. This is enabled by an increase in community spirit that results in a willingness to participate, a greater acceptance of non-traditional, even quirky, alternatives to fill the gaps left by now-unavailable pre-disaster goods and services. Disaster creativity in Christchurch was further enabled by a city council that was supportive of novel solutions to transitional problems, at least in the earlier

post-quake recovery phase. The benefits of "disaster creativity" as opposed to "non-disaster" creativity can be considered as being due to an environment that has been disrupted in such a sharp way as to favour a creative and more or less instant kind of gap-filling. Content is more important than form, which allows greater acceptance of the unknown as a community progresses into the immediately unknowable. However, we caution against the potential for "elite panic" institutional responses to infect post-disaster narratives. Shock moments merely throw things as they were before into greater relief, and in that sense they may present a threat to social order. However, our findings suggest that creativity in shock moments attempts to be transformational without threatening the overthrow of law and order. At a day-to-day level the CCC did show sympathy to the arts and artists but extra layers of bureaucracy from central government and, in addition, the sobering reality of inquests and commissions of inquiry into fatalities and building collapses, tempered the otherwise buoyant atmosphere of new possibilities. This did not stifle creativity and, as the earlier table shows, the responses were sometimes at the deepest level in terms of Kaufmann's matrix.

It is hoped further analysis will result in greater knowledge regarding how "disaster creativity" could be developed. Other aspects are emerging that warrant greater investigation; for example, the pros and cons of the ability to fast-track the enactment of creative ideas after a disaster, due to a lack of social and bureaucratic restrictions. Also, the seemingly almost unanimous belief that creativity – in any setting – must be judged on output alone requires probing. However, from what has been gleaned from the perspectives of 45 creative idea enactors in post-earthquakes Christchurch lessons can be learned about the benefits of being open to novel ideas. The efforts of these individuals, and others like them, resulted in a response that indicated Christchurch citizens could accept – even expect – a "non-normal" rebuild. This may not have occurred if they had not been "forced" into seeing the value of alternatives – the unexpected – in the absence of normality or "the new normal" as it has come to be known amongst Christchurch residents. Perhaps it remains to be seen if the brief flourishing of deeper creativity will leave legacies or become revived. Although six years seems a lengthy time by some standards, significant cultural change can take much longer. In the meantime, lessons regarding the potential benefits of taking a chance on implementing creative, unexpected solutions to problems can be taken from the Christchurch experience and applied in non-disaster settings.

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# PASIPLAUKIOJIMAS SU IDĖJOMIS: KAS NUTINKA KŪRYBIŠKUMUI ATSITIKUS NELAIMEI IR VĖLIAU NUVILNIJUS ATGIMUSIO PROSOCIALINIO ELGESIO BANGOMS?

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## Santrauka

Kūrybiškumas, kurio priežastis yra fizinio ar ekonominio išgyvenimo poreikis ir kurį gali inspiruoti nelaimės, iškelia klausimą, ar taip suprantamas kūrybiškumas atitinka jam skirtas konvencines teorijas ir perspektyvas. Šiame straipsnyje atspirties tašku tampa 2010–2013 m. įvykę žemės drebėjimai Kraistčerče (Naujoji Zelandija). Stebime ir vertiname daugelio grupių ir individų kūrybines praktikas ir atsakus. Siekdami išsiaiškinti motyvus ir palyginti juos su daugeliu teorinių teiginių apie kūrybiškumą, naudojame išsamius interviu. Ypač daug dėmesio skiriame „elito panikos" konceptui ir lygmeniui, ties kuriuo jis iškyla kaip akivaizdus Kraistčerčo žemės drebėjimų kontekste. Biurokratinės pastangos kontroliuoti ar riboti kūrybiškumą nesugebėjo jo visiškai nuslopinti. Tam tikri individai ir grupės, atrodė, buvo pasirengę atitinkama linkme kreipti ar nepaisyti galimų kūrybiškumui iškylančių kliūčių. Remdamiesi Geiro Kaufmanno naujumo ir kūrybiškumo matrica bei Teresos Amabile ir Michaelo G. Pratto pataisyta komponentine kūrybiškumo teorija, tvirtiname, kad yra ypatinga nelaimių sužadinama kūrybiškumo forma.

**Reikšminiai žodžiai:** Kraistčerčas, kūrybiškumas, nelaimės, žemės drebėjimai, elito panika, atsikūrimas.