# When Elvis Dances:
# Activating Community Knowledge through Participatory Creative Practices in Santiago, Chile.

*Simon Popple*

**Chapter Five**

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## Introduction

> **Juan:** Dogs run and hide… they don't know where to go. And the animals moo (mm, mm). They warn us (Interview 1 2017).

An encounter with a homemade earthquake detector fashioned from dried chillies, a toy Snoopy and an Elvis doll in a small rural community in Pirque, Chile brought home the importance of community knowledge and the value of creative participatory responses to local problems. Juan, the 70-year-old farmer we were visiting, shared his local knowledge and experiences of earthquakes and detailed how his community dealt with them. Most compelling was his testimony regarding local traditions in foretelling an imminent seismic event. His community had a two-step warning process: their animals would become restless several hours before an event, and they had the secondary line of defence in a home-made detector — in this case a dancing Elvis — that would give them a few minutes warning of an earthquake. If the chillies moved, the risk was minimal — a small tremor. If Elvis danced, then things were serious.

**Fig 5.1**

**A homemade earthquake detector fashioned from dried chilies, a toy Snoopy and an Elvis doll (Photography by Simon Popple).**

The visit was made in June and July 2017 as part of a UK Natural Environment Research Council project *Seismic Cities*, which looks at resilience to seismic events in and around Santiago, Chile. Chile is the most seismically active country in the world, experiencing tremors and minor events at least twice a month and consequently the population live with an ongoing sense of risk. In the course of the research, we looked at documenting how a range of citizens and organisations prepare for seismic events. Our focus was on asking what value digital technologies and participatory practices had in assisting communities in places of risk (Kindon, Pain and Kesby 2007). The team included Dr Tom Jackson from the University of Leeds and members of staff from the Universidad Catholica de Santiago with expertise in health psychology, engineering and sociology, led by Dr Paula Repetto and facilitated by Andrea Vásquez. We were particularly interested in how knowledge and training could be transferred between groups and citizens through the use of 'immersive' digital technologies and storytelling and in exploring the potential of communities using low cost technologies, participatory filmmaking, sound recording

and photography to autonomise and then scale these practices for other communities at risk (Corburn 2005).

Our work was predicated on the potential autonomy of communities to represent experiences within a specific place and share knowledge through the use of digital participatory practices (Lambert 2013). The approach built on a range of previous projects that had used the Arts and Humanities Research Council (AHRC)-funded *Pararchive Project* and the *YARN* (http://yarncommunity.org) digital platform to engage communities in participatory arts projects centered on storytelling and other creative practices in order to examine issues that were of concern within their own communities and across broader community networks (Popple and Mutibwa 2017). This chapter examines the role of Participatory Art (PA) within these contexts, drawing on examples of past and ongoing work with communities, and will particularly focus on the potential of PA to aid development, build cohesion and capacity, as well as reflecting upon the difficulties of sustaining, scaling and developing such projects to create autonomy and ownership within those communities (Brabham 2008). It will also examine the potential of intercommunal mentorship and the development of conductive education through intergenerational working as a means of further developing the application of PA methodologies and in translating our findings for other communities at risk.

**Risk, Place and Community Responses**

The context of risk, and particularly of communities at risk of external environmental factors such as earthquakes, pollution and tsunami, formed the background to the deployment of a PA approach in our research (Hacker 2013). The question of risk in

this context is framed by an increasing recognition of its presence, whether natural or as a result of social or economic activity, and where the power and authority of those directly at risk within specific contexts is often limited or actively opposed (Oliver-Smith 1996). Much work is directed at the aftermath of an event or amelioration of an ongoing situation, such as war or environmental disaster, and less on pre-planning, prevention or adaptations that take place in specific locations under differentiated socio-economic conditions. The example of the 1984 Bhopal disaster in India and its community-led response shows both the frequent failure of official preparedness for such events, and the abrogation of responsibility in their aftermath. Between 4,000 and 16,000 lives were lost in Bhopal, and over half a million people were injured according to official figures. Such trauma in the wake of an event like this can both solidify communities and politicise events, and offer new means through which affected communities can communicate and rebuild, using forms of creativity centred on common goals and solidarities (Button 2010; Petryna and Follis 2015). In this case, the focus of activism and campaigning was against the regional government and the giant US chemical company Union Carbide. Organisations like the NGO Muksan worked closely with marginalised citizens to provide education and arts programmes, whilst artists and activists were at the forefront of ensuring that the disaster was (and is) not forgotten (Carrigan and Barker 2014). The power of creative practices and PA projects to mobilise and strengthen community solidarity, build alliances and project voice are ongoingly demonstrated.

Threats to the lived environment and social cohesion demand new approaches to seeking sustainable, democratic and consensual solutions to the problems of living with risk (Janes 2015). It is still usual to see communities as victims, and not as the

key actors in such situations. Central to this challenge is the community itself and the creative harnessing of shared knowledge, activism, experience and attachment to the place or locale at risk (Jones and Murphy 2009). Issues of trust, ownership, provenance and relevance have in many respects created an environment in which risk awareness and disaster planning, especially officially sponsored information, is perceived as dehumanised and detached from the *lived* experience of the issues it is intended to diagnose and the citizens it is intended to support. We encountered examples of mistrust, and rejection, of official information and, as studies focused on the value of community generated data have shown, such mistrust has the potential to change the basis on which important decisions are taken (Corburn, 2005; Parks and Roberts, 2006). Citizens can be increasingly involved in and drive issues that directly affect them in their own *habitus* or respective lived environments. Here there are different ways of thinking about emplacement in which a digitally-focussed PA approach can expose the complex and differentiated ways in which communities perceive their environment.

Many people inhabit different contexts in their daily lives and travel between work and home, from countryside or suburb to the city and vice versa. In many of our interviews, we explored different perceptions of risk and the importance of preparedness within these different contexts. Sometimes we found that whilst people might have made provision for their families in the home, there was little or no provision within the context of a workplace. At other times the opposite was true. In either case, each person had specific ideas in relation to a particular place or context. Yet while those who lived near to the major fault lines were more acutely aware of the threat, they did not necessarily have well-developed strategies for

preparing. For example, staff at a suburban health centre in Santiago, close to the main fault-line, spoke about the disparity between perceptions at work, where they were responsible for the welfare of staff, patients and visitors on the one hand, and their own families on the other. Speaking about the centre, the director commented that earthquakes 'can happen again at any time and you have to be always prepared', yet staff acknowledged their own unpreparedness at home (Interview 2 2017).

In the centre, we worked to explore the participatory actions they had taken to adapt their environment to future risks and to the potential of producing immersive models of their evacuation routes. As the consequence of a previous earthquake, the centre had been structurally damaged and the thousands of medical records, all paper-based, had been shaken from their shelves and become totally disorganised. In response, staff had simply nailed spans of wood across the gaps between their archive shelves to brace them against a future event. This simple solution was self-created and was seen as something that could easily be shared with similar organisations. The use of digital media to help share such experiences and provide broader participation in considering these issues led to a discussion about other risks that could be similarly modelled and communicated. This resulted in our working with staff to produce 360-degree photographs of the key escape routes from the building and the direction to external safety zones. As the participatory photography took place, ideas about how to make the routes interesting and attractive to ensure that users would engage with the project began to emerge. Tom Jackson suggested that we 'gamify' the routes to allow people to explore the environment and discover the best way to escape the building — turning the process into a variable narrative

experience. We saw further evidence of the value of such narrativisation in transferring learning by using interactive digital technologies in an engineering competition at the Universidad Catholica de Santiago, where the winning entry was an earthquake based interactive video game called *Surviving Chile*.

> S1: We are 'Surviving Chile'. We are doing a video game with a simulation of the experience of an earthquake […] and we are teaching how to react and how to survive during a natural disaster. This is focussed on children. We want them to play the game in schools […] you have a mission to find a safe zone (Interview 3 2017).

In many of the other scenarios we examined in Chile, there seemed to be a direct tension between officially sanctioned and targeted advice, on the one hand, and local and personal planning based on previous experiences and perceptions within different community settings on the other, leading to a rejection of the official 'top down' framing of the risk and the events associated with it.

This tension had also been forcibly demonstrated in a previous project I ran, which had looked at participatory responses from oppositional communities within the context of the 1984/5 UK miners' strike to a broadly managed and officially sanctioned history of the strike (Bailey and Popple 2011). The project, called *Strike Stories*, began from a perspective of examining how official histories and archives misrepresented specific communities and their environments and how communities could respond and talk back to the archive, creatively remaking and retelling their stories as part on an ongoing and collaborative process (Buchanan and Bastian 2015). It sought to think about how a bottom-up process of PA practices could create new narratives that came from, and resonated with, communities' own perceptions of themselves, their sense of place and lived experience. In response to the BBC's news archive of events, two distinct communities, one of local miners and their

supporters, the other a group of regional police officers drafted in to control the strike, decided that their response was best managed through creative filmmaking (Popple 2009). Both groups felt that there was not only a risk to the reputation of their communities from extant media representations, but to a way of life with strong and dynamic working cultures. The miners, in particular, faced the evisceration of their industry, landscape and traditions. The Police felt that they had unfairly been labelled as aggressive supporters of the then Conservative government, that they had become 'Maggie's Boot Boys'. They found common voice through the films that they created — sharing local knowledge and experience to promote their own counteractive cultural creativity. The films dealt directly with issues of alienation, loss and mourning of working traditions, industry and cohesive community identities. In reflecting on their experience of this PA approach, respondents noted both a sense of ownership of these films and their ability to speak on behalf of their broader community. There was a recognition of the privileged position they were in, given that they were a small group and this, in turn, became a key driver for developing the *YARN* online platform that could provide the same affordances for a much broader range of communities, and allow for the co-voicing of issues and for the contestation of experience using the ethos of the AHRC's Connected Communities theme (Facer and Enright 2016).

The sense of ownership and perspective associated with place was something that was palpable in the *Seismic Cities* project as well. What was revealed in the rural setting of Pirque, from which the homemade earthquake detector originated, varied very markedly from perceptions in the urban metropolis of Santiago — and from the poor suburbs to the rich high-rise centre of the city, which lies directly on the main

fault line. Juan, one of our interviewees, revealed a laid back and accepting response to earthquakes which were seen as part of the natural cycle and one which his culture does not see as devastating — but rather something to live with and around. His interview particularly highlighted the way in which the experience was normalised in his community because of the regularity of events and tradition of coping in a resource poor environment.

> **Interviewer:** Are people very relaxed here? Are people not worried…?
> **Juan:** No, no. We are already accustomed to earthquakes (Interview 1 2017).

Although we were shown obvious structural damage to buildings such as the local Catholic Church, the general nature of the environment seemed unaffected and there were no obvious signs of officially sanctioned preparedness for future events. The majority of the population lived in single-storey adobe houses that could easily be repaired or rebuilt. Juan explained that since the houses were simple and only one-story high there was effectively little to fall down and that the risk to people was minimal. Whilst he remembered the major earthquake of 1960 and the fact that it had killed around 7,000 people, these deaths had taken place in cities rather than small villages in rural communities with which he was associated. This contrasted markedly with attitudes in more urbanised centres, where there was a sense that people needed to pay attention and prepare — but importantly on their own terms and not in a unified 'officially' sanctioned manner. One direct factor within their own community was a belief system grounded both in local custom and religion. In discussing the role of religion, it was telling that, like other forms of support, it was contingent.

> **Interviewer:** So, do you feel protected by your faith?
> **Juan:** Well, in the moment of the impact [of an earthquake] we all pray to God and we ask him for clemency, but just in that moment. Then, the earthquake happens, and we are still alive and no… it happened, and we forget God.

Then comes another movement and we remember God again (Interview 2017).

Whilst the later school's case study will explore the sense of emplaced contingency that operated around different contexts and will illustrate how a PA approach could operate across geographical boundaries, it is important to recognise that Juan also identified three crucial principles that underpinned our research in metropolitan and city-based locations. Firstly, that it is important to focus on the power of storytelling to communicate and disseminate knowledge about what to do in the context of an earthquake (Favero 2018). There was a strong sense that both personal and community experience formed the basis of the story, and that the agency of the storyteller was important in validating its message.

> **Interviewer:** Imagine if there is somebody that had never experienced an earthquake before, how do you think you could teach them what to do?
> **Juan:** Well, I think the best way is through stories, I think so. For example, this happened to me and it resulted in that, so do it as I did (Interview 1 2017).

Secondly, that communities could benefit each other through the sharing of knowledge across regional and national boundaries. Juan's interview made particular reference to similar experiences of their regional neighbour, Colombia, and his own desire to know how the citizens of that country cope and hear their stories about the effects of a recent serous earthquake.

> **Interviewer:** If you had access to a computer, would you like to know the stories of other people who have lived through an earthquake overseas or in Chile?
> **Juan:** Yes, I would like to know how it is, because I'd like to know more about what happened in Colombia (Interview 1 2017).

And finally, that those best placed to assist in the dissemination of stories and knowledge are often the youngest members of society. As someone who did not even know 'how to turn a computer on' Juan felt that school children were the best

educated as to what to do and the best placed to teach intergenerational communities.

> **Interviewer:** And do you think that the younger people here are aware?
> **Juan:** Yes, because children are being taught in the schools about that (Interview 1 2017).

**Participatory Arts, Digital storytelling and Immersive technologies**

The core focus of our approach to the *Seismic Cities* project was to address community engagement by exploring the participatory, creative use of digital media for telling community stories and the sharing of experientially-based knowledge and combine it with self-created virtual environments to contextualise and situate those stories (Sletto 2009). The combination of storytelling and immersive sensory participatory practices acts as a powerful tool for self-expression and, when attached to digital resources, can amplify community voice and draw in broader and more distributed communities. There are, of course, dangers that such an approach might over privilege certain actors within a community or exclude those without confidence, status or access to digital tools (Flinders et al. 2016). Guidance on working with communities on the production of community media are clear about the need to ameliorate these factors as much as possible, but they are certainly a persistent and destabilising influence (Light and Millen 2014). There are additional factors that require careful consideration, such as the uncritical adoption of digital tools and the 'digital optimism' that has pervaded many research initiatives (Denison and Stillman 2012). So whilst there is, as Cornwall notes, 'an opportunity for democratizing citizen engagement' through the digital, there is also a cautionary corollary (Cornwall 2008, p.37). There needs to be a careful and balanced examination of the contexts and competencies that pertain to the environment in which work is taking place and the

longer-term sustainability of the creative resources that are produced (Bonacchi and Moshenska 2015). Whilst researching co-production on a previous project, the Economic and Social Research Council-funded *Island Stories*, which examined storytelling practices on the Scottish Isle of Bute, it quickly became clear that there can be resistance to using digital tools even when they are freely accessible, and that analogue practices are preferred by many community members. Exclusion can be both a matter of a resource poor environment or a conscious choice.

> It is individual participants who dictate how engaged, upskilled or empowered they wish to become… It was also clear that while the opportunity to utilise digital tools for heritage storytelling was welcomed by some of the local community members on Bute, others remained less convinced, choosing instead traditional venues for sharing (or imparting) knowledge. Some were willing fieldwork participants, but unenthusiastic interpreters, preferring to leave their raw data in the hands of others to do with as they wished (Duffy and Popple 2017).

The use of a PA approach and a collective sense of 'making' was something we were keen to introduce to the *Seismic Cities* project, in order to try and redress some aspects of this problem. Our choice to deploy cheap, lo-fi, technologies and work through conductive networks and community leadership further allowed a broader range of participants to co-create photographs, sound recordings and 360-degree images in order to support the development of community resources. Such technologies do depend on levels of digital connectivity. However, they also allow groups of individuals within a community to co-create materials that can be uploaded at a later date and that, in their increasing simplicity, offer lower barriers to their use. They allow for the user to locate themselves directly within a specific story or, in this case, risk-based environment, and locate their knowledge within a specific context, through the affordances of geo-tagging and lo-fi immersivity. As research on the increased use of so-called 'reductive technologies' has shown, the means of production of participatory activities are increasingly in the hands of ordinary citizens

who can use wireless and 4G networks to publish their knowledge and creative outputs. As Mikko Villi notes, such technologies allow citizens to say, 'Hey, I'm here Right Now', illustrating the possibility of a photograph or film to mediate their 'present presence' (Villi 2015, p.3). The sense of presence, of belonging and of being able to communicate and mediate an experience through a creative act of participatory 'making', runs through recent discussions of increasingly available technologies — especially the iPhone and other smartphones, which have become a means of live broadcasting (Gómez Cruz and Meyer 2012). The self-broadcasting and on-the-spot storytelling that such technologies allow, along with digital platforms like *YARN* that can support and publish the stories generated, advance the more limited and resource heavy model of PA that emerged from the *Strike Stories* project.

Jason Vincent A. Cabañes' research with diasporic Filipino communities is a case in point and demonstrates the power of self-voicing and self-mediating through a form of participatory practice, in this case the diasporic restaging of familiar social practices, such as traditional Sunday picnics, in new locations in Hong Kong to bridge the gulf between diasporic peoples (Cabañes 2017). As Kate Nash, Craig Hight, and Catherin Summerhayes have also suggested, such immersive approaches to digital storytelling through virtual reality (VR) offer the potential of empathetic relationships and transnational understanding. That said, we are at the early stages of really understanding the solidity and value of such relationships, and need to develop both process and concept to maximise their affect (Nash, Hight, and Summerhayes 2014). Similarly, ongoing research in collaboration with the *Language and Nature in Southern and Eastern Arabia* network has revealed the importance of using participatory digital tools to preserve local languages and knowledge about the natural environment (Watson 2017). Digital training workshops held as part of this

project in 2018 were particularly concerned with developing participatory tools appropriate to the digital context of the research, and in finding technologies that could be owned by the participants on the ground in remote and nomadic contexts on the Arabian Peninsula.

## Case study: Immersive PA in Support of School Earthquake Drills

Through our own previous experiences, and in conjunction with approaches being pioneered by our colleagues in Chile, we increasingly observed the efficacy of focussing creative participatory methods on specific locations and within defined community groups, in order to explore the use of digital storytelling tools and lo-fi 'immersive' technologies, specifically 360-degree photography and binaural sound recording (Pink 2008). As research at the aforementioned health centre evidences, a series of projects, during which participants co-produced creative articulations of emplacement that allowed people living, working and studying in those contexts to picture and translate their knowledge within a defined context, led to work with a local school on the outskirts of Santiago. We had learned that it is crucial to treat each environment as a separate and nuanced context— and not rely on a top down universalist approach. At the same time, as is noted in several chapters in this volume, it is also important not to overvalue the potential of PA (Jenkins 2006). This is why we carefully discussed perceptions of place and risk within the specific context where we were working, as well as discussing how best PA and digital solutions could be deployed (Banks et al. 2013). Conditions were favourable for the use of our selected technologies and PA approaches. There was stable Wi-Fi

coverage and a body of enthusiastic and knowledgeable students who had experienced tremors and frequent earthquake safety drills.

In preparation for our work together, we discussed the school and its experiences of seismic events with its Director, and how our proposed work could help to provide resources for the school and its broader community (Toyosawa, Karasawa and Fukuwa 2010). As part of the discussion, the director spoke candidly about the challenges they faced and the particular issues that impacted on their ability to safeguard their pupils.

> **Director:** I think we are in a process to improve the way in which we get prepared to live with these shocks in our everyday life. And this process has been very complex. The complexity has been that we need to create a culture that involves this risk (shocks, earthquakes).

> **Director:** Our biggest problem was the quantity of parents/guardians who arrived at the school just after the shock. That situation wasn't considered in our programme. They arrived asking for their children: 'My son, where is my son? 'And that situation is a warning that we need to do more. We need to do more as a community, we need to develop a standard. Nowadays things work because they work naturally, but I think we are missing things to do. We feel the progress in preparedness, but we need to unfold more things (Interview 4 2017).

The other key finding was that in the creation of the 'culture' that was described by the Director, the building of trust was essential to changing behaviour and sharing knowledge about the fact that their children are safer at school than at home and that parents are, by their actions, negatively contributing to the event.

> **Director:** In one word the key concept is trust. Trust that we are looking after their children as they do. And they don't have that trust (Interview 4 2017).

As a consequence, we collectively decided that if the students could produce their own safety guide and virtual and immersive models of their environment, then this would act as a means of establishing trust, providing a PA solution to assuring their own parents of their safety and establishing the veracity of the school as a safe

space during a seismic event. We determined that allowing the students to self-create immersive and standard photographs and sound recordings of their environment during one of their regular earthquake safety drills would be the best way of deploying their own insights and knowledge of their environment, understanding of the risk itself and the value of remaining in their safe space. The school was designed to withstand tremors and had carefully planned and staged procedures that the current generation of students were wholly familiar with, unlike their parents and grandparents. As a first stage, we worked with the students to train them in the technologies we were using (and the equipment we were going to leave for the school) and then allowed them to determine how they would represent the drill the school was staging for us. Various groups emerged that wanted to use the 360-camera, make sound recordings and sound trails of the escape routes and use standard photography to document the drill and these activities.



**Fig 5.2**

**Children documenting an earthquake drill in Santiago 2017 (Photography by Simon Popple).**

The resultant recordings revealed a deep engagement with the process, and a serious understanding of the importance of preparedness, along with the unique

insights of the students themselves within their familiar environment. What was hugely revealing about the value to their approach was the nuanced and unexpected way in which they interrogated each other and the staff, offering different perspectives than those enforced by adult planners and safety regimes. The students engaged in discussion about the safety of their buildings, the best escape routes, based on intimate local knowledge, and produced representations of the world from their particular perspective.

> **Child 1**: Why is this place safe?
> **Child 2**: Err, I don't think this place is safe because it has a roof and this roof could fall.
> **Interviewer 2**: Do you think this place is safe?
> **Child 3**: Ehh more or less, because maybe, we can, for example, I don't know, be protected by the roof.
> **Interviewer 2**: Does anyone else think that this place is safe?
> **Child 4**: Yes
> **Interviewer 2**: And why?
> **Child 4**: Because it has a roof and if something falls it will not fall on our heads
> **Child 2, Child 3**: We will die! We will die! (enthusiastically)
> (Interview 5 2017).

As Andrea Vásquez et al. note:

> current research shows that children's voices are still rarely incorporated in disaster planning and research. Since most of our knowledge about their experiences before, during and after disaster comes from an adult perspective, Disaster Risk Reduction (DRR) planning may fail to identify children's real needs to the detriment of their safety and wellbeing (Vásquez et al. 2017, p.166).

Our work precisely addresses this issue. In one series of photographs made to accompany the sound trails, the first image is unfamiliar and disorientating — until you realise that it shows the underside of a child's desk covered in chewing gum. This is the starting point of their drills. They have learned to take shelter under their desks until the alarm sounds for them to evacuate their buildings. Subsequent research followed, using the kit we donated to another Chilean School, in relation to

tsunami drills on the coast. Work here, conducted by Vásquez, tested and confirmed our assumptions about the value of creative PA approaches, and the ability to scale, and translate, knowledge about the children's perspective on risk to parents and broader communities. As we begin to seek new opportunities to explore our findings and take advantage of technological developments, reductions in cost and improvements in connectivity, the abiding principles of a creative participatory approach become more embedded and more tangible. Using the evidence of our own small-scale experiences to model approaches and translate ideas to new contexts allows us to refine our methods, building on previous research to situate the creative participation that lies at the heart of our approach (Zurba and Berkes 2014).



**Fig 5.3**

**The underside of a child's desk covered in chewing gum. (Photograph taken by pupil volunteer during an earthquake drill, Santiago 2017).**

**Conclusion — Where Next?**

Challenges related to the environment, sustainability, social autonomy and communication are shared across a range of local, global and glocal communities. Their ability to deal with these issues varies according to economic and political conditions, and the experiences and stories that emerge from these contexts

have the potential to inform and educate others and develop autonomy within a range of communities (Ingold 2000). Digital media can support personal narratives and storytelling in order to help diverse communities support themselves through the sharing of expertise and mentoring (Burcher 2018). A creative participatory approach can certainly facilitate this, but with the obvious caveats relating to capacity, opportunity and infrastructure. Moreover, the approach can provide a key route through which personal voices, community experience and important local knowledge can emerge and be valued. The creative manifestations of the lived experience of citizens and their associated stories can lead to the development of global solutions to localised problems, greater empathy and understanding from, and between, communities, government and broader society (Bollmer 2017). This is where our future focus needs to lie — in the continued development of such methodologies and technologies that can afford greater enfranchisement and shared autonomy. Global digital solutions are a long way off — but local responses to local issues provide the insights we need as researchers and collaborators to model and scale our work and to bring communities at risk into dialogue. They are the experts in their local contexts — we are merely the facilitators (Hart et al. 2013).

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