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The Student Volunteer Army: a 'repeat emergent' emergency response organisation

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This paper seeks to contribute to understanding of the factors associated with an effective emergent emergency response organisation and to provide new insights into this understudied area. It examines, through an analysis of a range of textual resources, the emergence and re-emergence of the Student Volunteer Army (SVA) during the devastating earthquakes in Canterbury, New Zealand, in 2010–11. This evaluation is conducted in relation to the four key features of an effective emergency response organisation: adaptability; direction; leadership; and communication. In addition, the paper aims to further understanding of 'emergency entrepreneurship' and thus of the values and strategies that underpin social entrepreneur organisations in times of normalcy. The paper concludes that the unique position of the SVA as a 'repeat emergent' emergency response organisation enabled it to innovate continually and to improve repeatedly its systems, relationships, and image, such that it exhibited features common to emergent and established emergency response organisations.

Keywords: emergency response, natural disaster, organisational development, organisational emergence, Student Volunteer Army (SVA), volunteering

Introduction

While primary responsibility for disaster response lies with established emergency response organisations, individuals and communities also often start up and mobilise their own groups to address the gaps in or the failings of official efforts (O'Brien and Mileti, 1992; Johannisson and Olaison, 2007; Majchrzak, Jarvenpaa, and Hollingshead, 2007; Nicholls, 2012; Gardner, 2013). Compared to 'established' emergency response organisations, these emergent organisations not only fulfil different functions in the post-disaster environment, but also usually operate using different systems and with different viewpoints. Some nuance can be introduced to the established organisation–emergent organisation dichotomy, however, by considering a third category: the 'repeat emergent' emergency response organisation.

One such group that fits into this classification is the Student Volunteer Army (SVA). Established by university students in the immediate aftermath of the 7.1-magnitude earthquake that hit Darfield, Canterbury, New Zealand, on 4 September 2010, the SVA mobilised volunteers to assist with clean-up and to check on the well-being of

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affected residents. The event, though, was merely the start of a protracted seismic sequence that continued over the next 18 months and produced more than 15,000 aftershocks.[1] Following each of the three major aftershocks in the sequence,[2] the SVA remobilised and performed similar work to its initial endeavour, coordinating the response efforts of approximately 1,000 volunteers per day at its peak immediately after the especially destructive (6.3-magnitude) earthquake on 22 February 2011.

The SVA 'started up' following each of the major aftershocks, drawing on its tried-and-tested strengths while simultaneously adapting and improving other aspects of its organisational makeup. Research makes clear that the start-up phase is critical, as it is during this period that the organisation's meaning—and thus, future direction—materialises (Herrmann, 2011). Whereas time and resources are likely to be dedicated to this crucial phase under 'normal' circumstances, the unexpected and urgent nature of many natural disasters means that emergent emergency response organisations do not have the time to plan. Presented with the opportunity to 're-emerge' continually—and hence to build on, adapt, and redevelop its organisational characteristics—the SVA was able to keep on developing its services and structures and enhancing its meaning, both during periods of reactive immediate post-disaster response and of between-disaster reflection. In addition to occupying this unique category of 'repeat emergent' emergency response organisation, the SVA constitutes a 'successful' emergency response organisation, satisfying all four components highlighted by Bhandari, Owen, and Brooks (2014) as critical to such success:

- adaptability;
- direction;
- leadership; and
- communication.

These two elements—the SVA's unique status between 'established' and 'emergent' emergency response organisation, and its success in satisfying the four organisational criteria—render it a unique case study of potential interest both to emergency response planners and organisational development scholars.

With these things in mind, this paper has two primary aims. First, it examines the SVA in the light of the four organisational features of adaptability, direction, leadership, and communication. Second, it considers the extent to which the SVA's success in these four areas is linked to its status as a 'repeat emergent' emergency response organisation, concluding that it is due in large part to the continual 're-emergence' of the SVA. In pursuing these objectives, the paper seeks to contribute to understanding of the factors associated with an effective emergent emergency response organisation and to provide new insights into this understudied area. Investigating such organisations, especially their successes, presents an opportunity to determine what drives them and to further understanding of not only 'emergency entrepreneurship' (Johannisson and Olaison, 2007), but also of the values and strategies that underpin socially entrepreneurial organisations in times of normalcy (Lewis, 2013).

Research on emergency response organisations

Mirroring the seeming rise of natural and man-made disasters and increased documentation of these events, disaster response has become a subject of mounting interest in recent decades (Warren, 2010; Pathirage et al., 2012). Enrico L. Quarantelli's work in the early 1980s was among the first analyses to provide a fresh look at the post-disaster behaviour of both organisations and individuals. He claimed that established emergency response organisations could create major problems in the post-disaster environment owing to the inflexibility of their pre-prepared plans, and that, despite popular wisdom of disasters inciting panic among the population, people in fact usually react positively and sensibly to the extreme conditions and fear (Quarantelli, 1982).

Such understandings have become progressively more conventional as the study of post-disaster response has flourished. It is recognised now that immediate post-disaster periods often foster unusually high levels of community spiritedness. This collective response stems from the shared nature of a disaster—even among people who were themselves not directly involved but experienced the event through the media (O'Brien and Mileti, 1992). It is common for people who have gone through a disaster to come together, as connectedness is critical to people's resilience (Reich, 2006). By taking advantage of the agency fostered in collectives, people advance both their practical and emotional recovery following a disaster.

In terms of organisational approaches to disaster response, investigations into the behaviour of established emergency response organisations have revealed shortcomings (Paton and Auld, 2006; Bhandari, Owen, and Brooks, 2014; Scanlon, Helsloot, and Groenendaal, 2014). After interviewing individuals involved in response work after Hurricane Gudrun struck southern Sweden in 2005, Johannisson and Olaison (2007) noted that larger organisations seemed to lack the ability to deal with the disaster adequately and immediately, whereas smaller organisations proved more flexible and consequently better able to adjust to and satisfy the demands of the situation. Other key case studies of emergent response organisations, such as an assessment of the operations of a relief centre established after Hurricane Katrina (Gardner, 2013) and an analysis of coordination among such groups after Hurricane Katrina (Majchrzak, Jarvenpaa, and Hollingshead, 2007), also offer support for this observation.

Much of the research on post-disaster situations has exposed flaws in response and recovery procedures, including problematic coordination, poor communication, and unrealistic planning. As yet, however, there remains little on mechanisms that have worked well (Aldrich, 2012). This evaluation of the SVA, a successful disaster response organisation in terms of meeting the four criteria of adaptability, direction, leadership and communication, contributes to this gap in the scholarly literature.

Context

Christchurch is the largest city on the South Island of New Zealand, with a population of approximately 380,000. The region was not known for earthquakes, so the

7.1-magnitude event that struck Darfield (around 45 kilometres west of Christchurch) on 4 September 2010 thoroughly shocked the residents of Christchurch and surrounding areas. Buildings and infrastructure sustained considerable damage, and liquefaction covered large sections of the city. No loss of life was directly attributed to this earthquake, but it marked the beginning of unprecedented seismic activity across the region. The most serious aftershock occurred in Christchurch on 22 February 2011: a shallow and fast-moving 6.3-magnitude earthquake. A series of significant immediate aftershocks centred near the city's central business district (CBD) caused 185 deaths, thousands of injuries, and extensive damage. Other major aftershocks occurred in Christchurch on 13 June 2011 and 23 December 2011.

The SVA was founded in response to the September 2010 earthquake, and was remobilised for each of the three major aftershocks. Its establishment was in itself not unusual; individuals and communities often rally after a disaster and set up their own means of relief and recovery (Gardner, 2013). Yet, the SVA is unique in many respects, including its rapid and highly effective harnessing of online communication channels, the large number of volunteers that it attracted and mobilised, and the scale of its post-disaster work.

SVA engagement after each event followed a general pattern: a call for volunteers was posted on Facebook[3] and/or other social networking media, and then teams of volunteers were deployed to the hardest-hit 'low-risk' areas to assist with clean-up as required. This restriction to low-risk areas meant, first, that the SVA was generally able to operate independently of other organisations, setting its own pace, mobilising under its own leadership, monitoring its own progress, and updating structures as needed. Second, as low-risk areas were not prioritised by established emergency response organisations, the SVA was particularly prominent in the areas in which it did function. Its work primarily involved physical labour: volunteers assisted people, especially the elderly and those in the most badly-affected suburbs, by employing practical responses, such as shovelling liquefaction. Approximately 9,000 SVA volunteers cleared some 360,000 tons of liquefaction following the disastrous earthquake on 22 February 2011, amounting to roughly 75,000 volunteer hours (New Zealand Herald, 2012).

In addition to its huge physical contribution to post-disaster clean-ups, the SVA also played a crucial role in catering to residents' emotional needs. The volunteers contacted large numbers of people, many of whom were stressed and traumatised, by door knocking. In this way, they were able to check on people's welfare. The energy and spirit of the volunteers was such that residents felt uplifted and cared for (Grant, 2012). This sentiment was captured in and perpetuated by the media (see, for example, Ensor, 2011; Moore, 2011) and became a 'grand narrative' (Dey and Steyaert, 2010) of the earthquake response, creating 'public memory' of the event much like that which has been documented as occurring in Japan after the Tōhoku earthquake and tsunami on 11 March 2011 (Rausch, 2014). Although any grand narrative can be challenged to some degree by counter-narratives and little narratives (Dey and Steyaert, 2010), the media's portrayal of the SVA has allowed no space for such

alternative takes to find resonance. This reporting largely accounts for the hugely positive image of the SVA within Canterbury, New Zealand, and the rest of the world. For instance, 58 per cent of the 359 respondents to the 2012 Local Issues Survey circulated by Christchurch's *The Press* rated Sam Johnson's leadership of the SVA as 'extremely good' and 33 per cent rated it as 'very good', well above that of any other local figure (Gorman, 2012). Furthermore, as of September 2014, the SVA Facebook page boasted more than 28,000 'likes', with regular posts keeping the page active and its readership engaged.[4]

The SVA as an organisation developed fitfully, with periods of reactive immediate post-disaster response followed by periods of between-disaster reflection. Following the earthquake in September 2010, Johnson, then a third-year law student at the University of Canterbury, established a Facebook event called 'Student volunteer base for earthquake clean-up'. When the pressures of disaster response lifted, he and his team decided to turn the group into a club, affiliated to the University of Canterbury Students' Association, called the Student Volunteer Army. Along with the name, organisational tools and symbols were developed, including a website, Facebook page, and logo. As a result, the group underwent a process of formalisation and legitimisation, which was critical to its acceptance by authorities (Lewis, 2013). As well as its systems and its established core team and raft of past volunteers, this official acceptance facilitated the organisation's response capacities for later earthquakes. Research into other post-disaster situations has revealed that relationships and connectedness established and built upon prior to a disaster are critical to effective response (Johannisson and Olaison, 2007).

With its experience of the September event, and the university club established and its symbols in place, the SVA of February 2011 was 'more efficient and more effective' in its response (Sam Johnson, cited in Latitude, 2011). As observers have noted, September provided the organisation with an opportunity for a 'practice run at disaster response' (O'Steen and Perry, 2012, p. 31). Building on its disaster response knowledge following subsequent earthquakes, the SVA later established the Volunteer Army Foundation (VAF) as a 'parent' body for the university club with an explicit focus on youth-led disaster response programmes, thus continuing to adapt to retain its relevance to contemporary circumstances.

Methodology

This study analysed publically available media texts that reported on the activities of the SVA to determine how the elements crucial to the success of an emergency response organisation (adaptability, direction, leadership, and communication) were linked to the SVA's repeated emergence and social entrepreneurship. The texts examined were the SVA's Facebook page, an interview given by key SVA members Sam Johnson and Jason Pemberton to the Museum of New Zealand Te Papa Tongarewa, and materials available in the SVA/VAF archives, including conference presentations

and opinion pieces written by members. Each source was scrutinised for commentary on the SVA's adaptability, direction, leadership, and communication, particularly for any evidence of reflection and subsequent operational changes. While recognition of the majority of organisational evolution was (not surprisingly) most evident during periods of between-disaster reflection, material produced during the immediate post-disaster response phases also pointed up key innovations. The SVA's phenomenal social media presence—its Facebook page had more than one million interactions over a two-week period at the height of the February 2011 crisis, requiring monitoring by two full-time volunteers (Sam Johnson, cited in Grant, 2012)—was particularly important in this regard, as it has created a record of the behaviour of individuals at such times (Howell and Taylor, 2011).

To gain an understanding of how the SVA was portrayed in the media, articles published in New Zealand newspapers were also consulted. These were accessed using the PressDisplay and Australia/New Zealand Reference Centre online databases as well as http://stuff.co.nz, which hosts the websites of Fairfax Media's New Zealand newspapers. Articles were selected if they contained the keywords 'Student Volunteer Army' or 'Sam Johnson' or the acronym 'SVA'. The search produced a corpus of 52 newspaper articles, yielding valuable information on the context in which organisational emergence occurred and additional data on the 'repeat emergence' process.

A qualitative textual analysis was selected as it was judged the best way to study retrospectively the repeat emergence of the SVA. The media texts and interview transcripts were created at the time this process was happening and so provided a 'real-time' window on the events. The texts were largely descriptive and written in an appreciative, non-critical manner. When assembled chronologically they constituted a rich and consistent SVA emergence story; one of youthful initiative and altruistic practice mediated in large part by social media.

Complementing the first stage of the text search, a second stage involved collecting website and social media posts and further interview data. These texts embellish the SVA emergence story with other voices and offer a means of triangulation. This second stage was deemed necessary to address the incompleteness and subjectivity of media reporting and ensured that a variety of voices contributed to the exploration of organisational emergence and 'emergency entrepreneurship' (Johannisson and Olaison, 2007).

As authors bring to the writing process their own personal ideologies, intentions, and style, which are shaped to varying degrees by social discourses and the authors' circumstances and perceptions of their target audiences, a text can never be assumed to be neutral or objective. It is an interpretation in the same way as the meaning that emerges from reading it. As Park, Griffin, and Gill (2012, p. 373) observe:

> *A newspaper article, for example, represents textual interpretations of events by its author – often in stark contrast with the interpretation of others – and reflects the author's political disposition and his or her assumptions about the intended audience.*

Table 1. Articles referencing the four key organisational features

Organisational feature	Number of articles	Indicative comments
Adaptability	22	'"Sam [Johnson] explained the differences between how the Student Army responded to the September quake compared to the February quake," said Soong' (Sunday Star Times, 2011).
Direction	20	'Johnson said that he wanted to focus on improving inter-generational activity and neighbourhood relations' (Sachdeva, 2010). '"We want to promote selflessness and make it part of the student lifestyle, almost as it volunteering is in one's DNA. . .", said Williams' (Robinson, 2014).
Leadership	32	'Student leader Dem Doroschenko said the volunteer army's committee met last night to discuss how long it could continue working' (Brown, 2011). 'Student Volunteer Army founder Sam Johnson has yet another award to add to his growing list of achievements – even if he is slightly embarrassed by it' (The Press, 2011).
Communication	20	'Requests for help from earthquake-affected residents, referrals from agencies such as Civil Defence and the Christchurch City Council, as well as offers of assistance, are registered online' (Porteous, 2011).

Source: authors.

The first methodological consideration of this research was therefore to design an approach that acknowledged authors' subjectivities, whereas the second was to ensure that the influences that shaped reading of the texts were identified and taken into account when analysing them. Consequently, the 52 newspaper articles were assessed for any detail pertaining to the adaptability, direction, leadership, and communication of the SVA, and the number of texts that referenced each organisational feature were calculated (see Table 1).

These qualitative data were then used to examine the effectiveness of the SVA as a 'repeat emergent' emergency response organisation.

Discussion and findings

As noted, Bhandari, Owen, and Brooks (2014) have proposed four key organisational features that determine the effectiveness of an emergency response organisation: adaptability; direction; leadership; and communication. In gauging the importance that Australian and New Zealand emergency fire-service personnel place on them, this study found differences of opinion among staff members of established versus expanding and extending (volunteer-based) organisations. The employees of established organisations tended to place more significance on direction and leadership, with adaptability and communication seen as less important. Conversely, members of

volunteer-based organisations primarily valued good leadership—in addition, they made reference to the characteristics of flexibility and stability. Communication was viewed as least important among respondents from both types of organisations.

The preference of emergency personnel for working with and relying on their own team presents a challenge to effective disaster response, especially given the large number of agencies involved in any such process. During a disaster, managers are required to make quick decisions under pressure, often without knowledge of the full situation (Paton and Auld, 2006). It is likely that this communication gap and its resultant vacuum constitute key motivators for the emergence of spontaneous disaster response groups (Majchrzak, Jarvenpaa, and Hollingshead, 2007).

Emergent response organisations are action-oriented and learn by doing, transforming as necessary to respond to the task and environment at hand (Majchrzak, Jarvenpaa, and Hollingshead, 2007). Of the four core organisational features outlined by Bhandari, Owen, and Brooks (2014), therefore, adaptability is inherent to such groups. In contrast, because systems, leaders, and mandates are not in place prior to a disaster, emergent organisations frequently can lack clear direction, leadership, and communication (Majchrzak, Jarvenpaa, and Hollingshead, 2007), the three remaining features deemed critical to a successful emergency response organisation.

The SVA, comprising its own unique category of 'repeat emergent' emergency response organisation, is strong in terms of adaptability, direction, leadership, and communication. While there is some artificiality to dividing emergency response into these four categories, as there is undeniable overlap between them, examining the SVA according to each of them helps in determining the elements of its success and how this success relates to its 'repeat emergent' status.

Adaptability

Neither carefully pre-prepared operational guidelines nor routine practices will necessarily be followed during a disaster (Bhandari, Owen, and Brooks, 2014). The general confusion of the context, compounded by the possible displacement of staff, the disruption of services, and the destruction of facilities, means that established emergency response agencies are likely to face situations for which they have not prepared. In some cases, guidelines and practices may not be relevant, and remaining committed to pre-event plans can hinder or even damage response mechanisms. Unlike established organisations, however, adaptability usually is inherent to emergent emergency response organisations because of their rapid formation in reaction to particular (typically unmet) needs and within constantly changing circumstances (Majchrzak, Jarvenpaa, and Hollingshead, 2007).

By virtue of their formation for a particular purpose and within a specific setting, the majority of emergent emergency response organisations exist for only a short period of time. As with any temporary organisation, these groups often display distinct traits resulting from their time-bound, context-specific nature, which commonly can be characterised by the aspects of *time*, *team*, and *task* (Braun, Ferreira,

and Sydow, 2013). The SVA fits with this pattern: it was established initially to operate within a restricted time frame (for two weeks from 4 September 2010), with a particular group of people (the volunteers), and with the intention of achieving a specific outcome (the clean-up of the low-risk but badly damaged suburbs).

With each new earthquake response, the SVA's mandate remained in essence the same, although the specific circumstances of each disaster necessitated constant re-rendering of the time, team, and task trilogy. In reality, the SVA was required to renegotiate constantly the time span; volunteers were free to come and go as they liked, creating a continually rotating band of volunteers and periods of volunteer drop-off; and although the overarching task may have seemed clear, multiple smaller assignments also came to the fore in response to the changing conditions. Flexibility was critical to the SVA's ability to deal with the constant changes and challenges.

The SVA proved itself exceptionally able to adjust continually to the challenges of the post-disaster context. One example was the organisation's ability to operate even though the number of people volunteering at any one time could rarely be predicted and was subject to constant fluctuation. Volunteer numbers were occasionally overwhelming; Johnson admitted he was stunned to see the rapid increase in support for the Facebook event he created in response to the earthquake in September 2010 (Sam Johnson, cited in Latitude, 2011). Conversely, at other times the numbers dwindled, as in mid-March 2011, three weeks after the first major aftershock, when people began to return to university or to work (Brown, 2011).

The repeated nature of the disasters meant that SVA volunteers—the majority of whom were subject to the same property damage and emotional trauma as the people they helped—began to weary of the situation as time passed. Johnson noted that the volunteer response waned with each major aftershock (Hannan, 2011). In recognition of this fatigue, and because it occurred shortly before university examinations, the SVA responded differently after the earthquake in June 2011. Instead of a rallying call-to-arms, Johnson initially committed the organisation only to critical work, such as checking on people's well-being and clearing driveways, stating that it would launch a large-scale relief effort once students had finished their examinations (Mathewson, 2011). He also appealed to student volunteers from across New Zealand to allow Canterbury-based volunteers a chance to recuperate during the holidays (Carville, 2011; Student Volunteer Army Facebook page, 15 June 2011). Other groups were also encouraged to work alongside the SVA to assist with the clean-up (Sunday News, 2011). Yet, despite this operational shift, 730 volunteers participated in the joint SVA–Farmy Army response less than one week after the earthquake in June 2011 (Student Volunteer Army Facebook page, 18 June 2011).

Exhaustion and burnout also affected the top echelons of the organisation. In response to the earthquake in December 2011, the fourth SVA response effort in 15 months, Johnson reportedly claimed it was 'exceptionally hard to get out of bed' after yet another late night mapping the SVA's clean-up patterns (Greenhill, 2012). Johnson has been open about the doubts and the tiredness: when asked about his role, he said that '[t]here are moments like, "How are we going to do this again and

how's it going to work this time?'" (Greenhill, 2012). Nevertheless, the organisation persisted with its clean-up endeavours, adapting as necessary to suit the time, team, and task at hand.

The SVA, however, not only adapted *during* each post-earthquake disaster response phase but also *between* each of them. In other words, it adapted reactively to the particularities of the various disaster situations, but also adapted reflectively based on its experiences. Forced by the nature of the seismic sequence in Canterbury into the status of 'repeat emergent' emergency response organisation, the SVA has been able to use the lessons of each disaster response phase to reflect on and refine its systems and image.

Perhaps the greatest indicator of the SVA's capacity to adapt is its transformation from a temporary to a permanent organisation. This longevity has required a reformulation of the three critical underlying elements of *time*, *team*, and *task* (Braun, Ferreira, and Sydow, 2013). Most critically, the organisation has reoriented its time and its task away from intense, responsive, short-term relief work to future-focused, enduring, preventative work. It has managed to create enduring structures and processes, as well as to redefine its mission, morphing into a sustainable organisation with long-term life and direction.

The SVA had already become an official student club of the University of Canterbury prior to the earthquake in February 2011, but its subsequent disaster engagement has heightened its reputation. Its mission—'Making service part of the student lifestyle by inspiring and activating students to be the change in their community'[5]—builds on Johnson's initial intentions to improve public perceptions of students and to facilitate students' entrance into volunteering, but similarly it acknowledges the history, role, and lessons associated with the disaster response actions of the SVA. The organisation strives to transfer the goodwill of the post-disaster context to the non-disaster context, with the aim of making volunteering part of the 'student lifestyle' (Bayer, 2013; Robinson, 2014). The institutionalisation of both the organisation and its ethos is not unique; one comparable example is the formalisation of emergency response organisations and (disaster) volunteering opportunities following the Kobe earthquake in Japan on 17 January 1995 (Atsumi and Goltz, 2014). In a city that remains susceptible to natural hazards, the SVA continues to operate as a disaster response agency as well, such as when its volunteers assisted victims of flood-hit areas of Christchurch in March 2014 (Napier, 2014).

In addition to the SVA club, the organisation has also established the VAF. This parent body is a registered charity with employees and a long-term plan. It supports the SVA but works specifically with the community on furthering volunteering aspirations and the involvement of young people in disaster response. Through the VAF, the SVA has not only traversed the temporal boundaries of a disaster, but also the spatial ones. It contributed knowledge to disaster relief efforts following the tsunami in Japan in 2011 and Hurricane Sandy in the United States in October–November 2012, working with student groups to develop systems similar to those used during the Christchurch operation.[6] Both Johnson and Pemberton have also been involved in United Nations projects working with youths in disaster settings.

The organisation is well aware of the changes it has implemented. Noted at the top of Johnson's presentation for the 2011 Emergency Management Conference in Wellington—which he never gave because the February 2011 earthquake interrupted his travel plans—is the comment: 'The research and preparation into this speech played a major part in the development of the February Student Volunteer Army' (Johnson, 2011). Such commentary indicates an awareness of need to learn from experience, and points to the SVA's ability to adapt after each progressive response phase. Not only is the organisation aware of the changes it has implemented, but also it has been open about sharing lessons. In May 2011, for instance, Johnson spent time with a group of intermediate school students due to compete in an international competition on emergency planning, highlighting the SVA's different approaches to the September 2010 and February 2011 earthquakes (Sunday Star Times, 2011).

Direction

There are many reasons why people volunteer. Altruistic motivations include personal values, commitments, and concerns for a particular community (Herrmann, 2011), but emotional rewards or the possibility of career advancement or up-skilling can also play their part (Harré, 2007). While these drivers remain central to an individual's decision to volunteer after a disaster, one can also discern another incentive: actively engaging with the situation provides people and communities, whether directly or indirectly affected, with a key means of making sense of events (Lewis, 2013).

Different motives prompted people to volunteer with the SVA. For some people, spending time with the SVA was a way of taking positive action in the face of a disempowering experience; for others, the work was a distraction from their own worries; still others joined purely for altruistic reasons. Yet, to a greater or lesser degree, each of the organisation's members, from its leaders to its one-off volunteers, committed to setting aside their own post-disaster troubles to focus on aiding others. Out of this collective desire to assist emerged the mission of the SVA: to help people deal with physical destruction and fear.

In addition to forging an organisational mission derived from a common commitment to help, the SVA also established a unique identity, supporting the maxim that disasters become something with which people can identify (O'Brien and Mileti, 1992). The SVA's identity is apparent in its tripartite name: Student Volunteer Army. The first element relates to its focus on youth: the SVA was set up as a student-led organisation catering primarily for other students (although the group's spokespeople have always reiterated that anyone can volunteer, regardless of age or status). The second component is its foundation, as the act of volunteering allows people not only to contribute to the betterment of their local community, but also to 'help create themselves' (Harré, 2007, p. 711; see also Gardner, 2013). The third element—the reference to 'army'—is evident only in the names of the various levels of its organisational structure.

That the SVA was created and driven by young people makes it fairly unique. Typically, although young people can be variably engaged in community activities,

their participation rarely encompasses decision-making; instead, they are often positioned as consumers of decisions made by older people, including politicians (Evans and Prilleltensky, 2007). Furthermore, young people may choose not to volunteer if the space is considered closed to them or if their actions are not adequately recognised (Harré, 2007). The fundamental dislocation of the social fabric after a disaster frequently can spur people into action (Harré, 2007), and the Canterbury earthquakes followed this trend. The earthquake in September 2010 provided the impetus for Johnson and his team to establish a youth volunteering group and actively initiate their own patterns of response. The subsequent disasters allowed them to build on these developments, such that the SVA was eventually partnering with other organisations and assuming a lead role in many aspects of clean-up. The SVA contested the traditional model of young people as passive consumers of decisions.

In October 2010, Johnson, at 22 years of age, successfully stood for election on the Riccarton-Wigram Community Board. His main platform was to change the perceptions of Christchurch residents of students as hardened party-goers interested only in having fun and causing havoc. He wanted to show that they could also be responsible, civic-minded people who wanted to contribute to their community. In an interview with the Museum of New Zealand Te Papa Tongarewa, Johnson succinctly underscored the dichotomy between what he was trying to achieve (alter public perceptions of students) and the way in which many students typically reacted to the earthquakes:

> *One of the big things we've talked about a lot in terms of creating the leadership around this [SVA]: it was just creating the alternative to a party on Facebook, which is actually how the idea for the page came about – I was invited to three or four earthquake afterparties* (Grant, 2012).

Apropos of the parties, Johnson was cited in the media as saying: 'I thought we could do better than that' (Sachdeva, 2010). In addition to highlighting the different reactions of Christchurch's student body, this quote also points to the potential use of social media for purposes other than socialising, which the SVA succeeded in tapping into and harnessing for its own benefit.

Inherent to the SVA's organisational identity and mission were two critical constituents: (i) its symbols; and (ii) its 'grand narrative' (Dey and Steyaert, 2010). These symbols include: Johnson and other key SVA leaders, who acted as the public face of the organisation; the SVA logo; and the spades, gumboots, wheelbarrows, and other tools used in the clean-up operations. The iconic green T-shirts that identified volunteers as part of the SVA effort, and constituted a vital safety measure given that volunteers were entering people's homes (Grant, 2012), became a 'souvenir' that volunteers could wear later with pride. These symbols were constantly present in media coverage of SVA engagement, which both fuelled and was fuelled by the process of narrative-making around the organisation.

The experiences of the SVA have provided inspiration for a future Canterbury in which youths have a stronger voice. Johnson, speaking at the 2012 Emerging Leaders

Conference at Christ's College in Canterbury, encouraged his high-school student audience to 'get stuck in and make Christchurch awesome' (The Press, 2012), effectively giving them permission to take innovation into their own hands. After interviewing young people about the factors that made them believe that there was a sense of community, Evans (2007) determined that invitations to participate were critical. He found too that being given the chance to contribute to projects—and thus have a voice in them—encouraged young people to seek out more such opportunities. Reflecting on the drive and achievements of its youth volunteers in a time of disaster, the SVA has deliberately worked towards the creation of a space for youth engagement in Christchurch in times of normalcy. This legacy is even being institutionalised through service learning at the University of Canterbury (Cairns, 2011; O'Steen and Perry, 2012).

Leadership

Despite the recognition that clear leadership is a fundamental driver of effective emergency response (Bhandari, Owen, and Brooks, 2014), these structures can be difficult to ascertain in a disaster, especially among emergent emergency response organisations (Majchrzak, Jarvenpaa, and Hollingshead, 2007; Gardner, 2013). In part, the lack of discernible leadership stems from the chaos, improvisation, and poor coordination surrounding response efforts. It is also true, however, that when a disaster strikes, 'leadership appears as everybody's right and obligation' (Johannisson and Olaison, 2007, p. 72), such that people take action for themselves and for others. Although a sense of commitment to place is a key motivating factor in this response (Johannisson and Olaison, 2007), the need to take control undoubtedly also constitutes an automatic reaction to the fear and loss that people feel and the destruction that they witness.

The total or relative absence of leadership structures in emergent emergency response organisations opens up the space for individuals to experiment, potentially developing interactions that will result in the formulation of novel responses and that will underlie future interactions (Gardner, 2013). Removed from obvious, immediate access to leaders and operating under difficult circumstances that often demand quick decisions, volunteers need to rely on their experiences and common sense. People react differently to the lack of apparent organisational norms and resultant high levels of improvisation, with responses varying from utmost appreciation to dismay and disgruntlement (Gardner, 2013).

As the founder and principal driver of the SVA, Johnson has emerged as its figurehead. His efforts have been recognised by numerous citizenship awards, including the 2011 Sir Peter Blake Special Leadership Award, the 2011 Art of Living Foundation's Humanitarian Award, and the 2012 Young New Zealander of the Year Award. When questioned about the Humanitarian Award, Johnson reportedly said, 'I'm a wee bit embarrassed if anything. [. . .] I get way too much recognition for the team's efforts' (Sam Johnson, cited in The Press, 2011).

Johnson's comment is apt; while he was undeniably critical to the organisation's success (and indeed, was responsible for its creation), the SVA developed organically

from his 200-friend invitation initially posted on Facebook. Furthermore, the organisation operated through a deliberately non-hierarchical system in which many volunteers were given large amounts of responsibility. In September 2010, such people included the six original team leaders of the response. These volunteers all returned as key players in the February efforts (and hence embodied a high level of experiential knowledge on which they were able to build), working alongside other core team members and an administrative group of dozens of volunteers who assumed tasks such as monitoring social media.

In terms of structure, the SVA was divided into three groups: 'battalions' were deployed en masse to the hardest-hit areas to help in whatever capacity was required; 'squadrons' were composed of smaller groups that responded to individual requests; and 'street teams' worked alongside authorities to assist with volunteer engagement. (This military terminology has persisted into the SVA's post-disaster life: the organisation has created four 'platoons' catering for students' volunteering interests.) Each of the disaster response groups in the SVA's three-tiered system assumed responsibility for their actions and team leaders were afforded autonomy to play to their strengths and knowledge. Given the difficult physical and psychological circumstances under which the volunteers were operating, this team mentality was in part supposed to work against the potential isolation, and resulting possible (re)traumatisation, of any individual (Lewis, 2013).

Efficient specialisation and coordination of expertise are integral to the effective operation of any organisation, including emergent emergency response organisations (Majchrzak, Jarvenpaa, and Hollingshead, 2007). One challenge that the members of emergent emergency response organisations may face, therefore, concerns their lack of knowledge of, and their potential lack of trust in, the expertise of others (Majchrzak, Jarvenpaa, and Hollingshead, 2007). The SVA's reliance on a team operation required people to improvise and to use common sense, as well as a high level of trust between members, especially between the leadership and the volunteers (Sam Johnson, cited in Grant, 2012). As one observer noted, this trust stemmed partly from necessity given the impossibility of monitoring or supervising efforts, but predominantly from a belief in the collective vision around which the volunteers mobilised (Lewis, 2013).

The issue of trust became critical to the organisation. After a disaster, people are more likely to respond to information coming from a trusted source (Longstaff and Yong, 2008); despite not having established relationships or a reputation, the SVA came to represent the antithesis of the negativity unleashed by the earthquakes and became the trusted face of disaster response. Members of the public, whether affected by the earthquakes or not, contacted the group for advice and instructions on how they could and should operate in the post-disaster environment. Such queries were especially prevalent after the February 2011 earthquake, when comments such as 'Should we plan to come down from Auckland to help? Help or hindrance?' (Pennie O'Connor, 23 February 2011) and 'Give us something to do!' (Lazar Sumar, 23 February 2011) encouraged the SVA to produce and post on its Facebook page clear plans

of action for its members. Not only the public, however, but also the established disaster response organisations came to trust the group.

Relations between the SVA and established emergency response organisations were slow to develop: initial dealings following the September 2010 earthquake were problematic. Although Johnson remained silent on the matter during the disaster phase, such that media reports suggested that '[t]he group was coordinating with Civil Defence' (NZPA, 2011a), he revealed at the 2011 Emergency Management Conference in Wellington that authorities, including Civil Defence, the Christchurch City Council, and the New Zealand Army, had hindered the SVA through their unwillingness to cooperate and share information, their lack of belief in the potential of volunteers, and their risk management-focused policies (Johnson, 2011; see also Cowlishaw and Mathewson, 2012). The difficulties that the SVA encountered in dealing with Civil Defence and the New Zealand Army are typical of the issues sometimes faced by response personnel in disaster situations (Gardner, 2007), and reflect the findings of Bhandari, Owen, and Brooks (2014) that established emergency response organisations generally display a preference for pre-disaster strategies rather than innovation. Following Johnson's public criticism of such reactions, he met with representatives of these organisations and was able to talk through some of the frustrations, such that lessons were shared, relationships built, and possible future disaster operations considered (Sachdeva, 2012).

The SVA experience shows how the development of relationships between established and emergent emergency response organisations can benefit all parties involved. In this case, established groups were able to benefit from the direct or indirect assistance provided by SVA volunteers. An example of direct assistance was when the SVA was approached in mid-March 2011 with requests to fill and position sandbags around parts of Christchurch that could be vulnerable to flooding in the spring tides (Small, 2011). Indirect assistance included the SVA call centre, lauded by the SVA as 'taking the pressure of [*sic*] frontline Civil Defence (and other agencies) services so they can deal with the massive destruction of CBD and the human cost' (Student Volunteer Army Facebook page, 2 March 2011).

The SVA also benefitted from its relationships with other response agencies. The clearest example of how these relationships came into play is to be seen in its considered approach to mobilising volunteers following the earthquake on 22 February 2011. Aware of the enthusiasm among its membership to get to work immediately, the SVA leadership, however, called for caution initially:

> *We know you're keen to help but please stay put for the time being. Please continue to check in with your neighbours, family and friends. The situation is very different this time around so we need to be extra careful. We'll keep you updated but please be patient.*

More information was provided later in the day: 'I've been at a meeting with Civil Defence. Currently working out to have 1000 volunteers in action tomorrow morning' (Student Volunteer Army Facebook page, 23 February 2011). Such posts

not only highlight the SVA's relationship with Civil Defence, the established emergency response organisation, but also its realisation of the large number of people keen to take part in relief efforts and the importance of safety and good planning—all lessons learned from the earthquake response in September 2010.

The SVA continued to work with Civil Defence in the immediate response period of February–March 2011. As a result, Civil Defence featured sporadically in the group's Facebook posts, often positioned as a 'gatekeeper' of volunteer response efforts. For instance, having cited the meeting with Civil Defence on 23 February on the mobilisation of an intended 1,000 volunteers, the SVA revised this number in another post: 'Please note that 300 [volunteers] has been upgraded to 500. We cannot take any more than this as this is the maximum amount the safe areas of the city can cope with. We are in contact with Civil Defence and need to get their ok on everything we do' (Student Volunteer Army Facebook page, 23 February 2011). There was further mention of Civil Defence on the following day: 'Tomorrow's plan will be updated around 8pm tonight – that is the earliest time possible sorry as we need clearance from civil defence [*sic*] etc.' (Student Volunteer Army Facebook page, 24 February 2011). Both of these comments suggest that Civil Defence was imposing restrictions on and limiting the aspirations of SVA volunteers, and potentially hint at the group's frustration with the protocols of the established response organisation.

Communication

Members of the public seek information during a disaster about the situation and about their expected response, such as whether or not they should head to a shelter. Television remains the most accessed source of news, but there are compelling arguments for the provision of online information as well, especially the ability to update frequently and to involve multiple actors (Tanner et al., 2009).

Social media is one means by which people can engage quickly and responsively in a disaster response to connect with their community and feel a sense of purposefulness. Participating actively or passively in these networks empowers people who often feel that they have been rendered powerless by an emergency (Howell and Taylor, 2011). Accessibility is one of the greatest strengths of social media, especially in a time of disaster. Limitless numbers of people can easily (and remotely, given the increased use of smartphones) access information, which can be updated swiftly and by multiple users. This technology also is beneficial in connecting people, both loved ones and strangers, after a disaster, and thus assisting with their psychological recovery (Taylor et al., 2012).

Communication was an undeniable strength of the SVA; one of the organisation's main successes was its innovative and powerful employment of mainstream, widely-used communication technology. It mobilised and adapted social media and other technologies to respond to and meet its needs and those of Canterbury residents in efficient and effective ways. In recognition of the excellent communication displayed by the SVA, and expressly by its leadership team, Johnson was named 2012 Communicator of the Year by the Public Relations Institute of New Zealand (PRINZ, 2014).

Johnson, whose call-to-arms on Facebook created the group that would develop into the SVA, claimed that he simply made use of existing technology to suit the disaster scenario:

> *Younger generations are sometimes criticised for lack of practical skills but it's not true, it's just that their skills are less physical, more technological. It's just using the different tools that we have in our pockets* (Sam Johnson, cited in Grant, 2012).

Within hours of the particularly damaging earthquake on 22 February 2011, the SVA had posted its first 'earthquake clean-up update' on Facebook. This post provided advice and instructions to would-be volunteers even before the SVA had managed to mobilise on an operational level: 'In the meantime, if you want to help out, check on your neighbours, especially if they're elderly or live alone and see if you can help them with anything. Check on the rest of your street/area too' (Student Volunteer Army Facebook page, 00:48, 22 February 2011).

Other technologies were also adapted to service SVA communication. One innovative example was the organisation's appropriation of text messaging to record the details of its volunteers and to keep them updated on their tasks and areas (Porteous, 2011). These systems were established shortly after the September 2010 earthquake in large part as a response to the inefficient sign in and out practices of Civil Defence; rather than using a paper system that required long queues and a need to return to central base to sign out, SVA volunteers entered their mobile numbers into the computer and then signed out via text (Johnson, 2011). Other instances of efficient technological innovation by the SVA were its call centre and online programme via which residents could request information or ask for assistance (NZPA, 2011a), with volunteers cataloguing and prioritising each job.

As well as virtual communication, the SVA leadership placed strong emphasis on face-to-face interaction. In addition to the three-tiered team structure, the organisation also held regular debrief sessions at which volunteers were welcome to share their experiences and thoughts. These occasions served not only to enhance people's operational knowledge but also proved essential for the team's emotional well-being (Lewis, 2013). Other emergent response groups have engaged in similar activities: for instance, volunteers met every evening at a relief centre established after Hurricane Katrina to run through the day's events. These deliberately non-hierarchical, non-exclusionary sessions formed a core part of the collective leadership processes of this centre (Gardner, 2013). For the SVA, this daily debrief became an integral part of its intra-organisational communication.

As Bhandari, Owen, and Brooks (2014) noted, emergency response often involves numerous agencies. Successful disaster response depends on effective and timely communication and the exchange of quality information between these different actors, particularly given the tension and rapid pace of developments (Majchrzak, Jarvenpaa, and Hollingshead, 2007). The SVA was required to work alongside numerous other organisations, including established emergency response organisations and other official groups such as Christchurch City Council.

The SVA's external communication did not include only other response agencies, but also other key players in the post-disaster space, notably donors. With the increasing prevalence of the internet, people far from disaster zones are now able to 'experience' such events through the media. One consequence of this augmented 'virtual proximity' is that with more people exposed to the event, there are more people willing to help and there are more ways available to them to offer this support (Seo et al., 2012). Technologically competent groups such as the SVA are able, therefore, to maximise the power of the internet to tap into a large pool of potential resources. One example of such support came from students at the University of Otago located five hours south of Christchurch, who packed 1,000 lunches for volunteers responding to the February 2011 earthquake and transported them north (McNeilly, 2011).

The SVA was also able to use its reputation to harness traditional media and the internet to its advantage. Johnson (2011) recalled that '[o]ur relationship with the media became the key to the project's success', demonstrating a keen awareness of the role of the media in promoting the organisation, enabling the dispersal of its messages, and facilitating its calls for donations. Examples include his appeal through the media for donations of wheelbarrows shortly after the February 2011 earthquake (NZPA, 2011b), and the multidimensional promotion of the SVA's acceptance of NZD 10,000 in June 2011 (part of a post-earthquake regeneration fund offered by The Palms Mall), which was broadcast over radio, promoted on Facebook (23 June 2011), and posted on YouTube as a short film clip (Palms2011, 2011). In fact, donors constituted just one group of external stakeholders with which the SVA enjoyed an extremely positive relationship. The organisation's increasing legitimacy and popularity boosted the SVA 'brand', and that of Johnson, as leader, and was critical to the acquisition of resources.

The advantage of using social media as a disaster response tool is public accessibility—in terms of its proliferation, its physical availability via mobile technology, and its public nature—and speed. Also vital is its ability to promote dialogue rather than merely present information from one direction, restoring a sense of control to people. The comments posted on social media allow individuals not only to acquire information, but also to learn about issues facing others (Nicholls, 2012). With the advent of social media, the internet has become a space for the presentation and exchange of information (Howell and Taylor, 2011).

This accessibility simultaneously opens up pages to abuse, though, in that negative, misleading, or false information can be uploaded. While the potential for any observer to post negative commentary can prove problematic for reputation management personnel (Howell and Taylor, 2011), research into the Facebook pages of disaster response groups shows that page coordinators need to be active in deleting such information quickly to avoid harm (Taylor et al., 2012) and that users 'self-regulate', continually updating and correcting information (Bird, Ling, and Haynes, 2012).

Among the countless expressions of support for the SVA and its work on its Facebook page were occasional criticisms. These were most notably posted in September 2010 by volunteers complaining about the lack of organisation immediately after the earthquake, when SVA volunteers, required to adhere to the practices of Civil Defence,

signed in and then waited for up to two hours for instructions (Grant, 2012). With mobile technology, volunteers were able to record their disgruntlement instantaneously and from the field.

These posts, available for everyone to read, could have been damaging, yet the leadership monitored them and reacted positively (Johnson, 2011). It was determined that delays and overly complicated bureaucratic processes demotivated volunteers, as did feelings of being 'used' by authorities (Johnson, 2011). In recognition of this learning, the team developed its own sign in and out system using text messaging. Consequently, the interactive nature of social media actually worked in the favour of the SVA by allowing it to recognise and respond to concerns within its volunteering body and to adjust its protocols as necessary. Its systems were refined and improved, which benefited the organisation when it mobilised for the next earthquake in February 2011.

Conclusion

The SVA, which displayed strengths in the four categories of critical organisational features (adaptability, direction, leadership, and communication), constitutes a disaster response success story. It worked to innovate and improve its systems, relationships, and image during the action-oriented immediate post-disaster phases as well as in periods of reflection following each mobilisation. What is particularly significant and sets the SVA apart from other emergency response organisations is that, as a result of the unique context of repeated disasters, the SVA exhibited features common to emergent *and* established emergency response organisations, and was able to operate in ways that were consistent with both types of entity depending on the circumstances. Features and factors that were integral to this success included the following:

Adaptability

- The flexibility to respond to any situation, including uncertain volunteer numbers.
- The ability to function on-the-go during the disaster response phase but also to reflect on, analyse, and strive to improve these operations.
- The proficiency to shift from a short- to a long-term organisation (both the university student club and the parent body, VAF).

Direction

- A common desire to help and/or take action, motivating volunteers initially.
- The identity that developed around the SVA, especially pertaining to students and volunteering.
- The desire to demonstrate that students can be positive members of the community.
- The development and promotion of distinct SVA symbols that became synonymous with the volunteers and their mission.

Leadership

- The direction provided by Johnson and others, especially the core team of repeat leaders across the different disaster response periods.
- The non-hierarchical style of operating, allowing volunteers to use their own judgement and initiative, and to play to their strengths.
- The support and trust fostered within the SVA, contributing to the high levels of public trust in the organisation.

Communication

- The innovative use of everyday technology to streamline response efforts.
- The utilisation of face-to-face and virtual communication, especially in debriefing volunteers and encouraging them to share burdens and experiences.
- Clever communication with the public, other response agencies, and donors.
- Addressing volunteer concerns raised through social media.

This case study strongly suggests that the success of the SVA is linked to its continual reformulation during periods of reaction and reflection. The popular 'grand narrative' of the SVA as it was portrayed in the media—a story of a group that managed to appeal to and harness the energy and community spirit of Canterbury's youths—fails to acknowledge the processes that allowed it to be achieved. No space has been given to the organisational adaptations that the SVA underwent during each immediate post-disaster response and the subsequent between-disaster reflective phases, which were as critical to its success as its volunteers' spirit and its celebrated contributions to disaster response.

This paper addresses this gap and in so doing provides an important contribution to the literature on organisational development and disaster response. It highlights the process of emergence and queries whether or not the ability to balance the most effective features of both emergent and established organisations is important for an emergency response organisation during disaster response, and, if so, whether this balance can be replicated in contexts without constant repetition of a disaster. The case study offers this question as a line for further enquiry by researchers interested in emergent emergency response organisations and the promotion of community resilience in a time of natural disaster.

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Endnotes

[1] In total, 4,558 aftershocks of greater than 3.0-magnitude were recorded between 4 September 2010 and 3 September 2014. See http://info.geonet.org.nz/display/home/Canterbury+Aftershocks (last accessed on 7 December 2016).

[2] These occurred in Christchurch, Canterbury, New Zealand, on 22 February 2011 (6.3-magnitude), 13 June 2011 (6.4-magnitude), and 23 December 2011 (6.0-magnitude).

[3] At https://www.facebook.com/StudentVolunteerArmy/ (last accessed on 9 December 2016).

[4] See https://www.facebook.com/StudentVolunteerArmy/ (last accessed on 7 December 2016).

[5] See http://www.sva.org.nz/about-us/ (last accessed on 9 December 2016).

[6] See https://volunteerarmy.squarespace.com/history/ (last accessed on 9 December 2016).

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