

‘Dead Land Dead Water’

1

Nowhere Left to Go

2

Jeltje Gordon-Lennox

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Once upon a time, our planet had pristine air, fertile land, and pure water. Animals and humans moved about freely, leaving few traces in their wake. The earth is still 4
alive. But there is much to indicate that we live and love on borrowed time. Our 5
planet’s capacity to support us is increasingly compromised by what sociologist 6
Saskia Sassen identifies as ‘a global multisited array of dead patches of land and 7
water in the tissue of the biosphere’ (2014, p. 150). Despite general consensus about 8
the remedy for the earth’s condition—initiate creative changes with respect to 9
humans and nature—there is far less agreement on exactly what should be done, 10
and who should pay for it. In the face of this threatening diagnosis, the resulting 11
stalemate begs the question: What happens when it *is* too late? 12

This chapter explores the role of ritualising at what Sassen refers to as the 13
‘systemic edge’.¹ The cases presented concern crises that occurred suddenly or 14
unexpectedly with little leeway for defence or escape. They document, in bits and 15
pieces, an overarching dynamic that exposes new phases of global capitalisms. Left 16

The phrase ‘Dead Land Dead Water’ wittingly ties this chapter to Saskia Sassen’s landmark work *Expulsions: Brutality and Complexity in the Global Economy*. Expulsion, Sassen observes, is no longer intrinsically linked to poverty or inequality, or even to vaccination, but to global phenomena. Now, once expelled from their livelihoods, homes, or the biosphere that makes life possible, people may be prodded towards a systemic edge where they become invisible.

This is a personal article in the sense that I know many of the people in the cases presented. Some are composite characters; some of the names and circumstances have been changed. My family and I survived one of the disasters described.

¹ The ‘systemic edge’ is an organising assumption in Sassen’s book *Expulsions*. It is a place ‘where general conditions take extreme forms precisely because it is the site for expulsion or incorporation. Further, the extreme character of conditions at the edge makes visible larger trends that are less extreme and hence more difficult to capture’ (2014, p. 211).

J. Gordon-Lennox (✉)
Psychotherapist ASP, Geneva, Switzerland
e-mail: jeltje@gordon-lennox.ch

17 with a sense that the disaster could have been prevented, the central figure(s) feel
18 overwhelmed and isolated by the scale and the ongoing nature of the crisis. Sooner
19 or later they will face death or expulsion, with nowhere left to go.

20 **Threat, Fear, and Trauma**

21 Threat, fear, and traumatic events are part of everyday life for animals and human
22 beings alike. Even so, not all creatures are traumatised. When events, such as the
23 birth of a child, that first kiss, an achievement, or a disaster divide time into ‘before’
24 and ‘after’, we tend to remember the year, the day, and perhaps that split second
25 when our life changed. The images and sensations of the experiences that touch our
26 lives in this way are fixed, first in our bodies and then in our memories. When trauma
27 occurs at a very young, pre-verbal age, the experience is stored in the body, with
28 little or no memory. French psychiatrist Pierre Janet (1859–1947) observed that
29 traumatic memories may become fixed ideas that not only alternate with our habitual
30 personality but also intrude upon it, particularly when we are confronted with salient
31 reminders of the trauma.

32 When threatened, wild animals fare best when they can react with fight or flight.
33 Humans and domesticated animals too experience less long-term trauma when they
34 can defend themselves or flee. Healthy responses to threat among wild animals are
35 increasingly thwarted as their wilderness habitats dwindle. The same applies to
36 humans and domesticated animals subjected to relentless dislocation and
37 overcrowding. These conditions create intense feelings of helplessness and contrib-
38 ute to making us a traumatised species.² In turn, the physiological and psychological
39 effects of not feeling safe—even in our own bodies—foster fragmentation in all our
40 relationships.

41 Feeling safe goes beyond the removal of threat. The fundamental human quest for
42 a sense of safety begins at birth ‘when the infant’s needs for soothing are dependent
43 on the mother. This quest for safety through co-regulation continues throughout the
44 lifespan’, compels us to search for creative ways to calm our neural defences, and
45 motivates us to create ‘trusting friendships and loving partnerships’ (Porges, 2015,
46 p. 122). Ritualising is one of the ways we have developed to sooth ourselves
47 individually and collectively (Malinowski, 1948 [1925]) (see Fig. 1).

² During the Leningrad Floods in the 1920s, a number of the caged dogs in Russian physiologist Ivan Pavlov’s (1849–1936) basement laboratory drowned. He found that, after experiencing the tremendous inescapable stress of near drowning, the surviving dogs’ behaviour changed, e.g. dogs that had been affectionate no longer trusted him. Most important for our understanding of human reactions to high stress is Pavlov’s discovery that he could wear a dog down by subjecting it to excessive work (on a treadmill), upsetting its stomach with bad food or irregular feedings, or inducing a fever (Time Magazine, 1957).

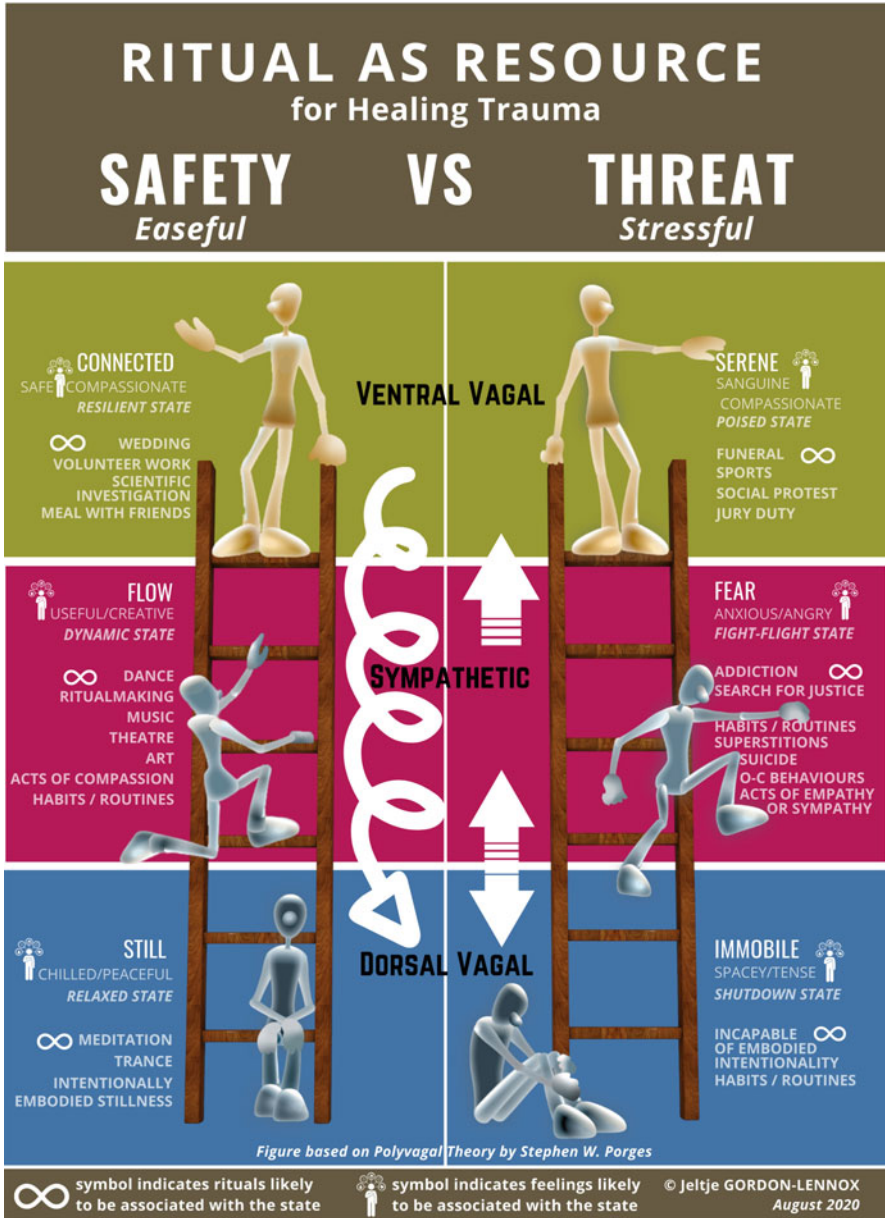


Fig. 1 Ritual as resource for healing trauma. Ritual practice is an adaptive mechanism for coping with ongoing threat of disaster and a resource for healing trauma. Ritual is not therapy, but it can indeed be therapeutic. ‘A careful investigation of many rituals results in the discovery that the rituals are functional exercises of vagal pathways’ (cf. Porges’ chapter, Part I). Like neural exercise, ritualising impacts *how* we are. This suggests that enacting specific religious, secular, or routine elements is less important than what I call embodied intentionality. This term refers to a subjective experience that involves ‘gut-up’ simultaneous dual awareness of the ritual experience and of one’s own bodily sensations. Such intentionality may well be what distinguishes ritual activity from non-ritual practices such as ordinary habits, routines, obsessive-compulsive behaviours, and addiction (see also Introduction). | © J. Gordon-Lennox

48 **Ritual: An Adaptive Coping Mechanism**

49 From the beginning of time, humankind appears to have countered the fear and
 50 anxiety of illness, transience, and mortality by making and practising ritual. Creative
 51 practices around burial represent some of the earliest rituals known to us. After the
 52 attacks of 11 September 2001 in New York, many people spontaneously gathered
 53 near ‘ground zero’ or in other public places to engage in artistic expressions of their
 54 grief and fear. Similar public ritualising occurred after attacks in European cities.
 55 Ethologist Ellen Dissanayake, who refers to ritualising as ‘making special’ and
 56 ‘making the ordinary extraordinary’, qualifies this profound emotional and visceral
 57 drive to act an adaptive coping mechanism:

58 Art-filled ritual practices address and satisfy evolved needs of human psychology. They
 59 create and reinforce emotionally reassuring and psychologically necessary feelings of close
 60 relationship with others and of belonging to a group. Further, they provide to individuals a
 61 sense of meaningfulness or cognitive order and individual competence insofar as they give
 62 emotional force to explanations of how the world came to be as it is and what is required to
 63 maintain it. They are adaptive not only because they join people together in common cause
 64 but because they also relieve anxiety. It is better to have something to do, with others, in
 65 times of uncertainty rather than try to cope by oneself or do nothing at all. (Dissanayake,
 66 personal communication, 2016)

67 Embodied art-filled ritual, whether traditional or emerging, can initiate healing
 68 processes and mitigate the negative impact of a traumatic event by soothing our fears
 69 and drawing us together.³ The three cases below explore how people use ritual to
 70 cope with extreme ongoing threat.

71 ***Case Study 1: Flash Flood in Nepal***

72 On 5 May 2012 at around nine o’clock in the morning in north-central Nepal, the
 73 collapse of a ridge—probably initially glacier ice—near Annapurna IV (7526 m)
 74 dropped thousands of tonnes of ice and rock almost vertically onto unstable debris
 75 composed of glacial moraines, ancient glacial lake silts, and gravels that rested in the
 76 deep bowl of the Sabche Cirque some 3000 m below (see Fig. 2). The powerful
 77 avalanche caused earth tremors measuring from 3.8 to 4 on the Richter Scale

³ Despite Pierre Janet’s pioneer work (1859–1947), trauma is still too often reduced to a mental condition for which sufferers commonly receive talk, cognitive-behavioural, re-exposure, and drug therapies. Recent research in neurophysiology offers alternative theories that open the way for body-based treatments. The efficacy of ritual in healing trauma involves all of the various strata of the brain, and more specifically the ventral vagal social engagement theory (Porges, 2011), which addresses the functions of the brain stem, the mid-brain, and the left orbito-frontal cortex – virtually all of the layers of the brain, and the right more than the left cortex (Scaer, personal communication, 2016).

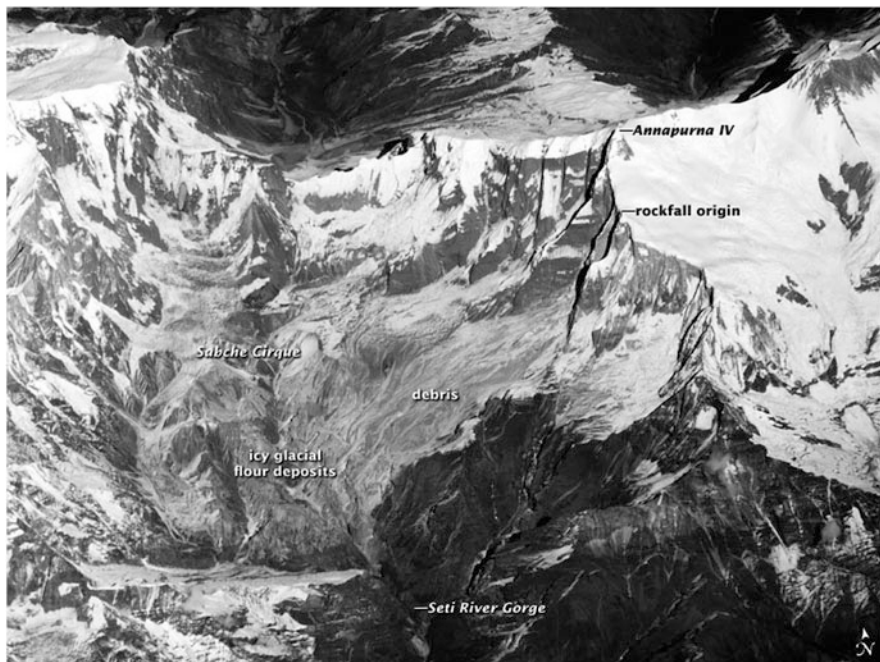


Fig. 2 A chain of events caused the Seti Khola disaster. It took experts and local residents nearly two years to lift the mystery on what had caused the flash flood. The total drop from the ridgeline (rockfall origin) above Sabche Cirque to the river bed of the Seti Khola below the city of Pokhara is about 6100 m spread over a distance of only 40 km. The event caused enormous erosion, depositing debris all along the river basin and channelling it into the Pokhara Valley, Nepal’s second largest concentration of population. | © Earth Observatory NASA Public Domain

(SANDRP, 2014). It gathered up some of the loose debris and propelled the mass 78
 another 1500 m lower into the gorge of the Seti Khola (White River). 79

The grey hyperconcentrated slurry released on that fateful Saturday morning came in 80
 27 waves contained huge ice blocks that raced at more than 30 m per second through the 81
 narrow Seti Khola basin. At half past nine, a flash flood hit Khara Pani, a small riverside 82
 settlement in the Kaski District of the Annapurna region, sweeping up picnickers, bathers at 83
 the thermal springs, and people working in the riverbed, as well as livestock and homes. 84
 Some 72 people including 3 tourists were killed. 85

At the three-year commemoration of the Seti Khola disaster, Sumila Darji recounts: 86

When the flood hit, my husband’s mother, his brother and his nephew were in the 87
 riverbed. Sarila [sister-in-law] and I watched helplessly as that ‘grey snake’ overtook them 88
 and many goats. 89

Everyone who has electricity listens for the radio warnings about avalanches, floods— 90
 and climate change. Landslides are common in Nepal, especially where new roads and 91
 bridges are built. Before, the winters were colder and the rains would come only after the 92
 monsoon rituals at the *gompa* [monastery]. Now the rains come whenever they wish. Some 93
 of the smaller streams are disappearing but our river swells. That Saturday was different. No 94
 clouds, no rain; the flood came out of nowhere. . . . How were we to know? 95

96 Before the flood, my husband, his mother and I lived with our two children near Khara
 97 Pani at a big curve in the river, not far from the footbridge. Now, Sarila and her baby live
 98 with us. We are tailors, musicians and day-labourers. Once, my husband went foreign
 99 [abroad] but a big metal beam fell on his leg. When it is cold and rainy his leg hurts.
 100 Since the flood he drinks more.

101 Sarila's eyes are empty, sometimes wild. She often cries out in her sleep but still does not
 102 speak. She constantly splashes her face with cold water. When we massage our babies,
 103 Sarila's breathing changes; sometimes she hums and smiles at the baby.

104 We protect our goats now with more red ribbons from Muktinah [the local sanctuary] and
 105 more bells. We listen for the bells and chase the goats up the hill when they go too near the
 106 river. We also paint special signs on the riverside door [see Fig. 3] and make offerings
 107 [flowers, rice, oil candles] at all the temples. Even so, maybe, one day the river will take our
 108 hut, and us too.

109 Residents recalled that the Seti's normally turbid white rapids or 'glacial milk' had
 110 momentarily turned yellow; at the time, they put this down to bridgework upstream. Then
 111 the river slowed to a mere trickle of abnormally clear blue water. These were the only signs
 112 of impending danger.

113 In the end, it was concluded that a chain of events triggered the disaster. An earlier series
 114 of small rockfalls had obstructed the outlet to a previously unknown and unimaginably vast
 115 natural reservoir hidden deep in the Seti Khola gorge (Kargel, 2014). The forceful avalanche,
 116 which had shaken the earth and flattened entire forests, unblocked the mouth of the gorge,
 117 sending the deadly slurry racing down the chute created by the narrow valley towards
 118 Pokhara.

119 **From Villagers to Displaced People**

120 About ten thousand years ago, Pokhara Valley was covered by a natural hazard
 121 caused by melting ice, avalanches, and hidden reservoirs. What happened in 2012
 122 was no 'natural disaster'. There's actually 'no such thing as a natural disaster',
 123 affirms Kendra Pierre-Louis. 'Hazards are natural; disasters are manmade' (2017).
 124 Disasters happen when there is risk and loss of life. If Sumila should move—or be
 125 relocated—with her family to higher ground, they would cease being in danger. At
 126 least statistically. In reality, the Darji family would just go from one systemic edge to
 127 another on an increasingly unstable mountainside.

128 Rapid changes in temperature, population growth, and frenetic road building is a
 129 dangerous combination for environmental stability and human safety. 'Something
 130 like this will happen again', says Kargel, 'it's inevitable' (2014). A new catastrophe
 131 on this or any of the other rivers flowing down from the Himalayan Mountains could
 132 have an apocalyptic impact on the area. Today, about a half a million people live in
 133 the Pokhara Valley.

134 **Ritualising in Fearful Times: Natural Hazards**

135 In analysing responses to two major earthquakes in Nepal—one in 1934 and another
 136 in 2015—disaster prevention researcher Roshan Bhakta Bhandari affirms that ritual
 137 practices in the Kathmandu Valley enabled people to reorganise their normal lives



Fig. 3 Signs of protection. This door bears four signs of protection: ochre paint, two prints of a right hand on each side of the opening, a motif above the entrance, and a padlock. | © John Pavelka CC BY

and cope with the social uncertainties caused by these disasters.⁴ In 1934, the residents' involvement (organisation and participation) in traditional ritual events definitely enhanced their community's capacity to cope with the risk of disaster, and perhaps even the disaster itself (Bhandari et al., 2010, 2011; Bhandari, 2014).

In the interval between the two earthquakes, Nepalese society changed significantly. The most remarkable difference is the growth and urbanisation of the population. Second, people now have access to outside sources of information (radio, internet), as well as different needs, expectations, and resources. Despite these changes, in 2015 as in 1934, traditional and ritualised practices contributed to survival by meeting people's physical, emotional, and spiritual needs to feel safe in proximity to others (self-regulation), and to engage with others (co-regulation), thus strengthening social bonds (see Fig. 1). Bhandari observes:

People got together with their neighbours in open spaces and spent several nights in temporary shelters. As they shared their food and their feelings, they transformed some of the trauma of the tragedy. Those who lost family members were able to communicate their grief to their close neighbours who took the time to console them. The socio-psychological significance of these communal practices was invaluable in coping with the immediate and

⁴ In the case of the 1934 earthquake in Lalitpur, near Kathmandu, Bhandari's research involved an official study and interviews of survivors (2010, 2011, 2014). His perspective on the 2015 earthquake is based on first-hand accounts of family and friends near Kathmandu who survived the disaster (personal communication, 2019).

155 long-term stress of losing loved ones and property. (Bhandari, personal
156 communication, 2019)

157 Gender and age influences how people cope with threat and disaster: the most
158 vulnerable⁵ are most likely to seek out and practise ritual activities. In rural Khara
159 Pani, official commemorations represent the most obvious occasions for
160 co-regulation among the survivors of the Seti Khola flash flood. The villagers also
161 practise family rituals to mark their losses, such as maintaining altars with photos
162 and objects that belonged to the dead.

163 Sumila makes ordinary objects and behaviours extraordinary through intentional
164 private rituals (ribbons and bells on the goats, protective symbols on children and
165 doorways) that are designed to help her and her family feel safe (probably performed
166 in a ventral vagal or sympathetic state). Sumila's husband's addictive behaviour may
167 be an adaptive mechanism (sympathetic state) for dealing with the disaster and his
168 earlier injury. Sarila's mutism is a sign of her limited sense of safety (dorsal vagal
169 state) (see Fig. 1). Her responsiveness to physical touch (cold water, massage) could
170 be a first step towards her reincorporation in the family and larger community.
171 Whether or not these behaviours are rituals depends on the embodied intentionality
172 of those who perform them.

173 *Case Study 2: Hazardous Agrochemicals in Brazil*

174 The famous Iguaçu Falls, located on the border of Argentina and Brazil, used to be
175 surrounded by forest and grasslands with small hardy trees, thick brush, and smaller
176 wild animals like jaguars, capybara, and howler monkeys. Now, this wildlife is
177 rarely found outside of local zoos.

178 As far as the eye can see, the southern Brazilian state of Paraná is covered with fields of soya
179 or maize bearing signboards with the names of international agrochemical companies.

180 'I've been working for 10 years at the Fazenda Perfeita,' observes Vagner, a 32-year-old
181 agricultural worker at a foreign-owned industrial farm located near Cascavel in Paraná. His
182 24-year-old common-law wife Marilea cleans and cooks for the family of one of the local
183 administrators of the fazenda. 'We met two years earlier at a Christmas dance in a small town
184 nearby,' recounts Marilea. 'Our son Diego, born at term on 28 February 2020 in the local
185 hospital, was pronounced healthy. Three weeks later he stopped nursing and turned blue. We
186 rushed him to hospital where we learned that he had multiple heart malformations.'

187 'After many tests,' adds Vagner, 'the doctors told us that Diego might not live long
188 enough to learn to crawl or walk. He needs a heart operation that can only be done in Curitiba
189 [the capital of Paraná, a seven-hour bus ride away] or in São Paulo [14 hours away by bus].'
190 Marilea stopped working to care for him at home. 'A nurse we know admits she sees more

⁵ Women, girls, the aged, and young children (Evetts, 2017) are particularly vulnerable. In rural areas of Nepal, women are responsible for collecting firewood and water. Shortages increase their workload and walking distance, which impacts their health, food security, personal hygiene, and mortality (e.g. drowning during a flood) is higher among women and girls (Dhimal, 2015).

and more babies like Diego from families living on or near the big farms where pesticide use is part of daily life.' Marilea angrily adds: 'Why do they let this happen?'

The couple do not have the means to bring their child for treatment at a major hospital. Marilea practises cures learned from her mother, a high priestess in her *candomblé* community in Salvador, Bahia. Vagner's parents are Catholic; they pray to Mother Mary and light candles for their grandson. Vagner, who now wears a Saint Benedict medal⁶ sent by his mother, says he 'tries to enjoy every day with Diego, as it may well be his last.'

Brazilian researchers analysed the association between pesticide use and congenital malformations between 1994 and 2014 in Cascavel and Francisco Beltrão, two cities close to the Falls with the highest pesticide use in Paraná. Results reveal that the incidence of congenital heart malformation was five times higher between 2004 and 2014 than in the preceding decade. The authors conclude that specific types of birth defects correlate with the increase in pesticide use (Dutra & Ferreira, 2017). Although male agricultural workers are most affected (Hendges et al., 2019), a study in the nearby state of Mato Grosso concludes that often both parents are exposed to pesticides; their children have a fourfold risk of birth defects such as *spina bifida*, leukaemia, and other forms of cancer (Ueker et al., 2016).⁷

From Small Farmer to Slum Dweller 207

Brazil possesses 12 per cent of the world's reserve of available freshwater. Chemical cartels mercilessly hush up news about human suffering from pesticide-contaminated ground water; there is ever so much (money/power) at stake. Research recently published by Public Eye⁸ affirms that the most dangerous pesticides are used heavily in low- and middle-income countries (LMICs), despite being—for the most part—banned in Switzerland and the European Union (EU).

Public Eye's in-depth probe into the opaque world of highly hazardous pesticides also reveals that the Swiss agrochemical giant, Syngenta, is one of those mainly responsible for the flood of such products into LMICs. This conclusion is based on our analysis of exclusive industry data. . . . Brazil, the world's largest user, [exposes] millions to pesticides that present significant hazards to human health—including through [contaminated] drinking water. Scientists fear this could trigger an epidemic of chronic diseases. The time has come to put an end to this dirty business. (Gaberell & Hoinkes, 2019, p. 3)

The damage caused by agroindustrial practices goes far beyond illness from agrochemicals. The excessive use of pesticides also contributes to deforestation and land degradation. Inequality of land distribution accelerates the trend in land grabs for industrial agriculture, provokes the expulsion of small farmers, rural workers and their families, and their forced migration to crime-ridden slums and

⁶ According to Catholic tradition, the Saint Benedict medal is a symbolic protection against poisoning.

⁷ Research elsewhere cites a clear correlation between pesticide exposure and poor neurodevelopment among children (van Wendel de Joode et al., 2016).

⁸ Public Eye (formerly Berne Declaration) is a non-profit, independent Swiss watchdog organisation with around 25,000 members. Public Eye has been campaigning for more equitable relations between Switzerland and underprivileged countries for fifty years. Among its most important concerns are the global safeguarding of human rights, the socially and ecologically responsible conduct of business enterprises, and the promotion of fair economic relations.

226 shantytowns in urban areas. And, finally, this damage creates even larger patches of
 227 dead land and water pushing more and more people to a systemic edge. Out of a total
 228 population of 208 million, almost nine million Brazilians are displaced (Forum for
 229 the Future, 2019).

230 **Ritualising in Fearful Times: Harmful Pesticides**

231 Ritualising concern over pesticide-induced illness, death, and injustice takes many
 232 forms in Brazil. The personal rituals performed by Marilea, Vagner, and their
 233 families help them feel like they are *doing something* to protect themselves and
 234 those they love (see Sympathetic state, Fig. 1). Public protest rituals use various art
 235 forms to effectively expose the truth about the misuse of dangerous pesticides. In
 236 2017, a Brazilian samba school took on a political dimension with their performance
 237 alongside the lyrics of ‘Xingu: A Cry from the Jungle’: ‘I am the forgotten son of the
 238 world. My heart is red in pain. I am the last immortal fighter—the true owner of this
 239 land. . .’ This song defends the rights of indigenous people and decries the dangers of
 240 industrial farming, including abuse of pesticides (Prange, 2017).

241 Creative ritual protest may also take place in the nude (see Fig. 4). Brazilian
 242 artists use their naked bodies to warn not only of President Jair Bolsonaro’s
 243 intolerance of feminism, homosexuality, and popular carnival songs like ‘Xingu’
 244 but also of the environmental catastrophe ahead: ‘In a polarised world, it feels like
 245 the naked truth. This resistance manifests itself in the naked body. In show after
 246 show, nudity takes on a political role’ (Fisher, 2019). These art-filled rituals protest
 247 against the making of expulsions.

248 Revealing the truth about sensitive subjects is perilous. Investigative journalism,
 249 like that done by Public Eye, is dangerous for journalists, but it also puts at risk the
 250 lives of those they interview. Protestors took such risks as they marched against the
 251 excessive use of agrochemicals in Brasilia (see Fig. 5) and in front of Syngenta
 252 headquarters in Basel, Switzerland.

253 Today, when people are expelled from their professional livelihoods, living
 254 spaces, and the very biosphere that makes life possible, the situation cannot be
 255 fully understood in the usual terms of poverty and injustice, affirms Saskia Sassen.
 256 This is about ‘new specialized geographies that cut across the old divides of North
 257 and South, East and West’ (2015, p. 178).

258 [The spaces of the expelled] are marked by increasingly diverse groups, places, projects, and
 259 histories. In the past, the British Empire wanted the whole of Africa, and Spain wanted the
 260 whole of Latin America, and so on. Today’s powers want only specific components, and
 261 once done, they exit. These are mobile geographies that leave behind land and sites
 262 destroyed by their use, which then, in their extreme condition, are in fact expelled from
 263 these geographies of privilege: expelled to the zone of dead land and dead water. (Sassen,
 264 2015, p. 178)



Fig. 4 Nudity takes on a political role. This photo reflects the spirit of the nude protests performed by Brazilian artists. | © Sasha Kargaltsev CC BY



Fig. 5 Protest march against excessive use of agrochemicals. Social movements and environmental organisations march in Brasilia to protest against changes in national laws that would permit an increase in the use of agrochemicals. | © Marcello Casal Jr/ABr CC BY

A look at how these expulsions are generated reveals the extent to which the sheer 265
complexity of the global economy effectively scrambles the lines of responsibility 266
for the displacements, evictions, and eradications it produces. This same 267
convolutedness makes it equally hard for anyone who benefits from a global system 268
to feel any personal or corporate responsibility for the depredations. 269

270 *Case Study 3: Lead Contamination in Switzerland*

271 Geneva has the dubious honour of being the third most expensive city in the world. It caters
 272 to people who can pay more for rent than most locals earn in a month. Our building was a
 273 squat that we helped upgrade in 1995 to low-income housing status thanks to a utopian
 274 project. With like-minded people, we banded together as a cooperative with a social
 275 conscience to promote participative, sustainable, and ecological low-rent housing.

276 On 16 August 2017 at seven o'clock in the evening, my family and I returned from
 277 holiday to find an explosion of dust⁹ in our apartment. Our floors, walls, windows, ceilings,
 278 and all of our belongings were thickly coated with a heavy whitish powder that burned our
 279 bare hands and feet. This cloying powder hung in the air, irritating our sinuses and disrupting
 280 our digestive tracts. The source was a poorly confined worksite in the flat below; masons had
 281 removed ceilings and applied grinders, sanders, and sandblasting equipment to lead-laden
 282 plaster and old paint on woodwork and radiators.

283 In the immediate aftermath of the accident, our faces turned white, our fingers and toes
 284 tingled with numbness, our blood pressures rose and our muscles twitched (like a mobile
 285 phone vibrating in a jeans pocket); our vision, memory, and concentration were also
 286 affected. The worst was yet to come.

287 As is too often the case in toxic accidents, human suffering was aggravated by a cascade
 288 of poor decisions regarding renovation in an inhabited building, ignorance about human
 289 exposure, undetected contamination, and slow reactions by the authorities. It took six weeks
 290 for official confirmation that the ubiquitous powder was heavily laced with lead (Pb).¹⁰ The
 291 Sisyphean task of ridding the deadly contaminant from the air and every surface and object
 292 in our home was aggravated by handicapping fatigue, persistent refusal of the owner and the
 293 masonry company to accept any responsibility for the accident, and acquiescent authorities.

294 **From Utopia to Dystopia**¹¹

295 Over the years, the leadership of this flagship cooperative, known for promoting
 296 quality social, participative and ecological housing, imperceptibly adopted a corpora-
 297 rate style of governance. Once the workday culture and rituals of the organisation
 298 became established, taken for granted, and finally applauded by local authorities, a
 299 series of unilateral, calamitous decisions revealed the widening distance of the

⁹ Under certain conditions, lead (Pb) may form combustible dust concentrations in the air (Atomized Products Group, 2013).

¹⁰ After exposure to lead, the body rapidly tucks this dangerous element in the bone where it is, at least temporarily, immobilised and can do the least harm to vital organs (brain, kidneys, liver, heart). Lead levels in red blood cells (erythrocytes, not blood serum) should be measured within ten days of an acute exposure (within three days for children under three years of age). After that, minute traces may be found in the hair. Accurate and relatively safe methods for measuring bone lead exist today, but few countries have approved them for use *in vivo*.

¹¹ Dystopia [dystɒpi] (pl. dystopias) 1. a political or social concept referring to a utopia that turns into a disaster; a counter-utopia or anti-utopia. 2. A failed utopian achievement that causes intense suffering among the inhabitants who are subjected to the dysfunctional system. Synonym: disillusionment, disenchantment.

leadership from its base and foundational ideals.¹² ‘Risk management’ effectively replaced the cooperative solutions that might have been born out of apology and sitting together around a table to determine how to prevent further contamination and suffering. When we asked about reimbursement for our cleaning and medical testing expenses, the response was immediate: ‘Sue us’.

What happened to us is not an isolated event (see Fig. 6).¹³ Lead paint was sold in Switzerland until 2005. Most buildings constructed or renovated before then have lead-painted surfaces. Impunity prevails over accountability. Our friends and family are concerned we’ll face expulsion for speaking out. There is ever so much at stake. If Swiss authorities required owners to use the same precautions for work on lead-laden surfaces as it does, finally, for those contaminated with asbestos, renovation costs would soar. Yet, if we cannot find safety in our homes, where might we feel safe?

The dangers of lead contamination—identified already in Roman times—represent the tip of the iceberg. Very little is known about the chronic toxicity of the new, and mostly untested, building materials. The political, economic, scientific, and social implications of the environmental toxins produced today may well haunt our grandchildren and their children.

What if, together with our cooperative, our story was told to the press to encourage caution and build awareness of how easy it is to pollute living spaces? What if we devised creative solutions for such renovations? What if Switzerland made, and enforced, laws that treat toxic contaminants with the seriousness they merit? What if the Geneva toxicology department and hospital became leaders in innovative prevention and clean-up of the environmental toxins that contaminate our households? What if toxic contamination could be quickly measured and cleaned up? What if victims were rapidly tested, correctly diagnosed, and nursed back to physical and psychological health?

Ritualising in Fearful Times: Our Homes Under Threat

At first, my family and I used dark humour to relieve our fears and our tears of frustration. Endless cleaning, unsatisfying legal procedures with loaded die, and consultations with doctors no experience in treating Saturnism did little to restore our sense of safety, or to (re)incorporate us in the cooperative. Although we had no

¹² See Knottnerus et al.’s analysis of the organisational process that led to the demise of Enron (2006). In this case, the issue is also mismanagement—not of finances per se but of the cooperative’s foundational legacy of social ideals.

¹³ The struggle for justice regarding toxic contamination of our homes may well be long. Nearly 50 years ago, asbestos was declared an undisputed cause of cancer. In 1989, the mineral was finally banned in Switzerland; the Swiss Schmidheiny family’s Eternit Group commercialised asbestos products until 1994. Yet it still falls to Swiss people with asbestosis to prove they were contaminated. According to a European Union study, asbestos will have caused around half a million deaths in Europe by 2030 (Mariani, 2012).



Fig. 6 There is no safe level of lead exposure. The manufacture and sale of lead paint is still permitted in over 60% of the countries across the world. Inhalation of the dust generated by the preparation of lead-painted surfaces for repainting contaminates inhabitants, workers, and their children. The focus of the 2020 World Health Organization's week of action is a global phase-out of lead paint through regulatory and legal measures. | © World Health Organisation (WHO) Public Domain

332 ready-made rituals at our disposal, we felt a compelling need to *do something more*
 333 to push back our fears, recurring nightmares, and anxiety, to reclaim our space, our
 334 physical and emotional health, and to restore broken connections with our
 335 neighbours.

336 The ordinary spaces in our home began to feel extraordinary as the thick dusty air
 337 was treated with humidifiers (to bring down the particles of lead powder), then
 338 cleansed by industrial-strength air filters—and perfumed with essential oils. Floor-
 339 boards, a main vector for the lead powder, were covered over with plastic—and
 340 sprinkled with purified water and salt, symbols of our tears. Another vector of

contamination, the light shaft at the end of our hallway, needed our attention too. In
 counterpoise to the invasive plague, words of life and hope now emanate from the
 windows: serenity, joy, purity, light, being heard, harmony, beauty, respect, life,
 justice, and reparation. Firefly lights chase the deadly shadow of death; each week
 the space is beautified with fresh flowers (see Fig. 7).

~~Ever since our home was contaminated with high levels of lead, fresh flowers
 beautify a light shaft, one of the vectors of infiltration. The words pasted on these
 windows bear witness to our desire for serenity, joy, harmony, light, purity, and
 respect, as well as for reparation and justice. Above all, we want to feel safe in our
 own home.~~

My husband joined the committee that manages our building. Once we feel
 stronger, we intend to invite our friends and neighbours for a Sunday-in-pyjamas
 brunch and are planning a creative public protest for the International Lead Poison-
 ing Prevention Week. A story-strip of our misadventure will be distributed widely at
 the brunch and the protest.

A colleague pointed out that this chapter too is a form of ritualising our fear and
 helplessness: ‘By publishing this text you are completing a defensive response that
 was interrupted by illness, general indifference to the contamination, and
 unsatisfying legal proceedings.’ This response does indeed contribute to restoring
 my sense of dignity and safety.¹⁴

Regrettably, we are not the only ones who feel unsafe in our home.

No Place Left to Go

Some time ago, Anne, a friend who lives near Amsterdam in a beautiful house with a
 lovely garden, began coughing; her condition slowly worsened. The source of her
 cough has been tied to airport pollution; their home is under the flight paths of
 aircraft flying into Schiphol, one of the busiest airports in Europe.¹⁵ Reluctantly,
 Anne searched for a house in another area, only to find that a new extension of the
 airport would put them in the same situation. Conscientiously, Anne restricts her
 travel to ground transport. Her need to *do something more* has led her to curate art
 exhibitions on subjects related to the dilemma she faces (consumerism, death).
 Singing in a choir composed of asthmatics is yet another way Anne meets her
 needs for self- and co-regulation.

In the wake of the destructive fires that skirted her home in Sonoma, California,
 Carrie Kramlich contacted me for advice on creating rituals to cope with post-
 disaster trauma. Later, she wrote:

¹⁴ Unlike the other situations described here, I can explain the effect on wellbeing of rituals
 practised with embodied intentionality because I have felt it myself. It took more than two years
 to write this chapter. With the finishing touches, I did indeed feel a physical release or discharge.

¹⁵ Nine out of ten people worldwide breathe polluted air (World Health Organization, 2018).



Fig. 7 Ritualising hopes and fears. Ever since our home was contaminated with high levels of lead, fresh flowers beautify a light shaft, one of the vectors of infiltration. The words pasted on these windows bear witness to our desire for serenity, joy, harmony, light, purity, and respect, as well as for reparation and justice. Above all, we want to feel safe in our own home. | © J. Gordon-Lennox CC BY-NC-ND

Northern California is like a resurrected Pompeii, right now. The fires turned us all to stone. 376
 The heat and scourge of the lava cooled and as it did, people started moving slowly... then 377
 waking up. And what's coming out of it is spectacular. My mother passed away last spring. 378
 We had a house full of furniture and tons of things to give away. When the fires came in early 379
 October we were still grieving. Just days after the fires stopped burning my sister and I let all 380
 of my mom's things fly out of her house to dozens of wildfire survivors. We were like 381
 tornados in reverse motion. You should come see. (Carrie Kramlich, personal 382
 communication, 2017) 383

Carrie is convinced that only truly secular rituals can offer diverse populations of 384
 survivors a sense of relief and safety. 'That's not possible with religious rituals 385
 because they tend to stir up irrelevant questions like: Did we deserve this? Why is 386
 god punishing me?' (Carrie Kramlich, personal communication, 2019). 387

Ritualising at the Systemic Edge 388

The situation of people pushed to a systemic edge signals subterranean trends that 389
 are related not only to politics and economics but also to the spiritual dimensions of 390
 contemporary human experience. The challenges of ritualising in fearful times, 391
 particularly during ongoing threat, are not the same for those who belong to 392
 mainstream spiritual systems, for the socially excluded, and for the expelled. 393

Small cash-crop farmers in India, pushed to the limit by an unsustainable agri- 394
 cultural model, who die by suicide before declaring bankruptcy, are completely 395
 invisible to the system (Sassen, 2011). Such deaths represent sharp edges that point 396
 to a huge but subtle trend: the hazards with which farmers are forced to live represent 397
 a global disaster that crosses all cultures.¹⁶ Tracing responsibility for these farmers' 398
 circumstances, as well as for the situations in the cases described above, is difficult, 399
 if not impossible. Those who benefit rarely feel answerable to the victims; seldom is 400
 anyone held accountable. 401

Even people firmly anchored in mainstream systems may find traditional rituals 402
 ineffectual as their situation deteriorates, or when several systemic edges converge. 403
 While the Seti Khola disaster did not fundamentally change Sumila and her family's 404
 situation, it pushed Sarila into the precarious state of widowhood and social exclusion. 405
 Diego's condition does not seriously affect his father's or grandparents' daily routines, 406
 but it isolates his mother socially and excludes her from the workforce. On the spiritual 407
 level, most of these people still count on some mainstream or parallel spiritual system. 408
 Yet the closer people move to a systemic edge, the higher the likelihood this spiritual 409
 support will also fail them. As the expelled become invisible statistically, geograph- 410
 ically, politically, and economically, they disappear from their spiritual systems too. 411

¹⁶ Suicide born of the despair brought about by the farmer's individual, or even collective, expulsion must be differentiated from ritual suicide. Suicide attacks or self-immolation are performed as radical political or religious protest, martyrdom, or sacrifice 'on behalf of a collective cause' (Biggs, 2006, p. 173).

412 Global changes in spatial, temporal, environmental, climatic, and spiritual con-
413 texts affect our resources for coping with threat and ongoing danger. The amazing
414 capacity of the human imagination to produce and embody abstract signs is crucial
415 both to the creative processes of ritualmaking and to healing trauma. Porges’
416 research on polyvagal theory (2011) gives us new insights into the *how* and *why*
417 of ritual practice. As we ‘make special’ we respond to our human physical, psycho-
418 logical, and spiritual need to overcome our ambivalence about closeness and to
419 establish trusting social relationships that ensure our survival.

420 Conclusion

421 Our world is increasingly unpredictable. Human-made disasters occur regularly on
422 large and small scales around the world. Opportunities to feel safe and secure are
423 fundamental to human wellbeing. Being safe and feeling safe are not the same thing.
424 We are at risk for psychosocial trauma when our sense of control over our own
425 physical environment (home, workplace, body) is compromised by people or events
426 that threaten to seriously harm or even kill us or those we love.

427 The cases presented in this chapter demonstrate how a disaster can push ordinary
428 people out of the common to a systemic edge. Before the disaster, the central figure
429 (s) may not have enjoyed full incorporation in their respective communities, yet any
430 exclusion they experienced took place within a micro or macro system. Their role as
431 victim in a disaster they did not create and cannot control may incorporate and
432 anchor them more firmly in their community. Too often disaster moves them to an
433 extreme condition at a systemic edge where they are in even greater danger—that of
434 being expelled from the system completely and, even worse, of feeling less than
435 human, of becoming invisible.

436 Human beings have always used ritual to face the transience of life. Today, the
437 ephemerality of life is too often due to human-made disasters. Yet individuals,
438 collective groups, and even global systems still construct and do ritual to create
439 islands of safety within and among us. Ritualising is an underexplored resource for
440 coping with chronic illness and ongoing disasters, for healing the ensuing trauma
441 and for restoring broken connections.

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- 515

516 **Jeltje Gordon-Lennox**, MDiv, is a psychotherapist trained in body-based approaches and world

517 religions. Her research and practice are influenced by her life experiences in conflict zone on several

518 continents, in particular her work with the International Committee of the Red Cross. She has

519 written five practical guides on secular ritualising, two in French and three in English. This

520 collection continues the conversation on ritual and trauma begun in *Emerging Ritual in Secular*

521 *Societies. A Transdisciplinary Conversation* (2017, Jessica Kingsley Publishers). Jeltje lives with

522 her husband and their two children in Switzerland. website: gordon-lennox.ch email:

523 jeltje@gordon-lennox.ch