

An Autoethnography of the 1980 Southern Italian Earthquake

by David Alexander*

Autoethnography involves the use of personal experience to explain and interpret events as they are lived. This chapter presents excerpts from a personal diary of the 1980 Campania-Basilicata earthquake in southern Italy and subjects them to interpretation in the light of what is now known about the social aspects of seismic disaster. The narrative covers the moment of the earthquake, the immediate aftermath and the short term until three months after the event. Interpretations cover self-protective behaviour, panic, risk perception, post-traumatic stress, culture and the means of rationalising the disaster. The experience of living through the 1980 earthquake is placed in the context of the growth and development of disaster studies in the subsequent four decades.

Key words: earthquake disaster, autoethnography, disaster studies, culture, social analysis

L'autoetnografia permette di utilizzare l'esperienza personale per spiegare ed interpretare gli eventi così come vengono vissuti. Questo capitolo presenta alcuni estratti da un diario personale del terremoto del 1980 in Campania e Basilicata. Le osservazioni vengono interpretate nell'ottica di ciò che si è appreso negli anni successivi sulla natura dei disastri sismici. La narrazione riguarda il momento del terremoto, i giorni immediatamente successivi, i tre mesi dopo il sisma. L'interpretazione evidenzia il comportamento autoprotettivo, il panico, la percezione del rischio, lo stress post traumatico, la cultura e le varie modalità utilizzate per razionalizzare il disastro. L'esperienza personale de terremoto del 1980 viene esaminata in rapporto allo sviluppo degli studi dei disastri nei successivi quarant'anni.

Parole chiave: terremoto, autoetnografia, disastrologia, cultura, analisi sociale

1. Introduction

The 1980 earthquake in Campania and Basilicata, central southern Italy was a remarkable event in many different ways. It revealed ancient and long-standing forms of seismic vulnerability as well as hidden enclaves of suffering, poverty and marginalisation. It brought to light the ineptitude of government but it also heralded the dawn of a new age of civil protection. Alone, it did not change the course of European affairs, but coupled with the effect of other disasters it made a major contribution to the dynamics of change, at least concerning response to disasters if not also with regard to the mitigation of impact. In any event, it was certainly a milestone in history and a moment of profound national reflection. The following

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chapter offers a personal account of the event as it was experienced and some reflections on the deeper meaning of the kaleidoscope of events during those unforgettable days. The approach I adopt is one of participatory ethnography, also known as autoethnography.

Autoethnography is a form of written or performed research that seeks to describe and analyse personal experience as a means of understanding the cultural aspects of society¹. Ellis and Bochner further defined it as «an autobiographical genre of writing that displays multiple layers of consciousness, connecting the personal to the cultural»². According to McIlveen, the essence of autoethnography is that its practitioner conducts a narrative analysis of himself or herself in intimate relationship with a particular phenomenon³.

Méndez distinguished between analytical autoethnography, in which attention focuses on a particular group, and evocative autoethnography, which uses the researcher's introspection to share experiences and feelings with the reader⁴. According to Ellis et al., the researcher is a participant observer who, however temporarily, is immersed in a particular culture⁵. The method can involve interviews and interweaving data into the narrative. In any case, the personal account provides the stem of the method and is always paramount in it.

Reed-Danahay described three qualifications to the concept of autoethnography: whether the researcher is an insider or an outsider to the matter under analysis, whether the narrative concentrates on the researcher's voice or that of other people, and whether the situation being described involves culture in situ or cultural displacement⁶. In all instances, there is an element of personal narrative and examination of the self in relation to unusual social contexts⁷. There is also an element of critical observation from within events.

According to Goodall, good autoethnography endeavours to create meaningful dialogue between the author and the reader⁸. The latter can then identify with the experiences, thoughts and emotions of the former and the author takes account of differences between his or her own perception and that of the reader. One means of ensuring that the narrative is highly communicable is to write about “epiphanies”, events that force the autoethnographer to analyse

¹ Spry 2001.

² Ellis and Bochner 2000, 734.

³ McIlveen 2008, 3.

⁴ Méndez 2013.

⁵ Ellis et al. 2011.

⁶ Reed-Danahay 1997, 3-4.

⁷ Le Roux 2017.

⁸ Goodall 2001, 90-91.

his or her own experiences⁹. The result can sometimes be therapeutic or cathartic for the researcher, if not for the reader as well.

Critics have dismissed the method as lacking in rigour and a deprived of a firm theoretical, analytical basis. They have suggested that it involves too much self-absorption¹⁰. Nevertheless, autoethnography is a methodology of considerable flexibility that is by nature interdisciplinary¹¹. As it accommodates subjectivity, emotions and the researcher's influence on research, autoethnography is «closer to literature than to physics»¹². Perhaps it demonstrates that art and science are not necessarily opposed to one another. It could thus be a means of creating a more holistic approach to broad, all-embracing phenomena.

The present article makes full use of the narrative scope of autoethnography. It has two objectives. The first is to convey as sense of what it was like to live through the earthquake and its early aftermath. The pioneer at this was William James, psychologist and brother of the novelist Henry James, who described his experiences at Stanford University during the 1906 San Francisco earthquake¹³. The process involves an attempt to interpret the experience as a learning process. The second is to derive lessons that are worthy of being recorded and shared. The narrative is taken from my unpublished autobiography, which covers my life in the highlands of the south of Italy over the years 1974-1982.

2. The night of the earthquake

My record of the earthquake was written soon afterwards. The following extract describes the critical moment.

In Naples, the afternoon of Sunday 23 November 1980 was warm, sunny and relaxing. At 7 p.m. I caught the evening train home to Tricarico in Basilicata. I sat in the last compartment of the last coach, together with a family from Potenza and several other travellers.

As we drew near to Pompei the train began to sway and shudder sideways. It slowed, but continued swaying and trembling, seeming to hang poised above the rails. A few seconds later it came crashing down again and again in a series of bone-jarring oscillations. Without speaking, we clung to the luggage racks. From the darkness outside came the sound of tens of thousands of voices screaming, shouting and crying. The noise emanated from all sides: Pompei,

⁹ Ellis et al. 2011.

¹⁰ Ellis et al. 2011.

¹¹ Reed-Danahay 1997.

¹² Ellis et al. 2011, 2.

¹³ James 1968.

Castellammare, Torre del Greco and Torre Annunziata. It was the equivalent in sound of the aurora of light hanging over a city at night when it is hidden from the nearby countryside. Meanwhile, the train drifted to a stop at Pompei station, which was in total darkness.

Outside, there was a furious commotion. Car headlights swept the sky, horns blared, tyres squealed; there were more shouts and screams. Groups of people came running across the railway tracks, seeking refuge away from the shadow of tall buildings. We sat in the carriage, bewildered and alarmed. After twenty minutes, when the noise had begun to die away, I clambered down from the train. On the platform of Pompei station, a dense crowd of people stood in the moonlight around the signal cabin, where the station master was vainly struggling to establish contact with the rest of the railway system. He tried number after number on the telephone and pulled lever after lever on the signal frame, but the equipment was dead or unresponsive. The crowd murmured apprehensively. Suddenly, the station lights came on; but after a few seconds they flickered and went out again. As the light ebbed, the crowd gave in to panic. People rushed to the nearest open spaces, or threw themselves to the ground. A man slipped and rolled under the train. I began to start running, but checked myself, realizing that there was nowhere to run to, and flight was pointless.

Eventually, the station master succeeded in connecting an emergency supply of electricity, and the station buildings were bathed in a weak, yellow light. We were still isolated from the rest of the railway system and, outside, the streets were pitch dark. The last vestiges of the commotion subsided. A new crowd had formed around the telephone in the station bar. A man was dialling a number over and over again; the jerky movement of his hand and the sweat on his brow testified to his anxiety. The crowd was tightly packed around him as everyone wanted to be the next in line to use the telephone. In another corner of the bar a television set beamed an evening variety show, blithe but unheeded.

After an hour and a half I joined a large group of passengers who had begun to cluster around one of the train doors. A man standing on the steps of the carriage was holding a portable radio and listening intently to a broadcast message. The crowd was silent and tense. I listened, too. On Radio Potenza an announcer was giving details of the earthquake and his voice was barely restrained against the emotion that threatened to overwhelm it. The hill villages of Basilicata were stricken and isolated: nobody knew how much they were suffering. A hysterical Carabinieri from Balvano had managed to contact his headquarters at Potenza to say that his village lay in ruins; there were many dead, injured survivors, clouds of dust, heaps of rubble, infernal darkness and, worst of all, crying of the victims trapped beneath the rubble. The line had gone dead, and subsequent attempts to re-establish contact with Balvano were fruitless. It was rumoured that Bella, Muro and Pescopagano had been all but destroyed, but no one could tell in the darkness that enveloped those places. In Naples there had been some spectacular building collapses: new buildings as well as old ones, but details were sketchy. The streets of Potenza were filled with rubble. Here, the first victims were claimed when, at the start of the tremors, an enormous piece of cornice fell from the top of the town hall, crushing four people standing underneath. There were victims amid the debris, but nobody could tell how many. This

news was greeted with shrill cries of alarm by some of the many Potentini among the crowd. We were all of us scared and felt helpless as we stood, each of us alone with our fears, marooned among the crowd. We stood in the small enclave of light surrounded by the wide and fearful night.

I made my way down the street into the centre of Pompei. There was no moon and the darkness was almost complete. Until my eyes became accustomed to it, I had to feel my way along the walls of the buildings that lined the street. The roadway was deserted and as soon as I could see well enough in the dark I moved away from the pavement, as I was acutely fearful that masonry would fall on me. In the main square, people had lit bonfires and were sitting patiently around them wrapped in blankets. I saw a whole wardrobe and some chairs burning and crackling. Flames cast a bright orange light on the dense, watery clouds of fog that blew overhead. The mist parted momentarily to reveal a black bronze angel, trumpet in hand and wings outspread, perched on the marble tower of the Sanctuary of the Madonna.

Disaster, when it occurs, is a very profound marker in people's lives. Unforgettable events punctuate the tenor of life, interrupt its continuity and destroy for ever any pre-existing equilibrium. To hear the sound of 150,000 people, the populations of Torre del Greco, Pompei, Scafati and Torre Annunziata, crying and screaming was – thankfully – a never-to-be-repeated experience. Other impressions also graphically illustrated the situation, such as entire families, hand-in-hand, running away from the shadow of tall buildings. Still others from among these fleeting images were bizarre: the wardrobe burning on a bonfire, the bronze angel illuminated by the flames, trumpet in hand amidst parcels of fog that resembled the puffy clouds of a Baroque tableau¹⁴.

Together, these strong visual and audible impressions form both a sequence and a single experience, the earthquake disaster from within. Each element can be considered either as part of this experience or as a phenomenon or sign in its own right. One of the first and most natural reactions is to try to rationalise the experience and its various parts. This requires one to strive to give it meaning. At the time of the 1980 earthquake I knew very little about disasters. The event set me off on a lifetime journey of learning and discovery, but initially it left me in the same position as the vast majority of the survivors, struggling to understand the enormity of this experience. In the thick of the emergency, neither the time nor means exist to reconcile the torrent of thoughts that pass through one's mind. Many studies have shown that in such

¹⁴ Alexander 2013.

circumstances people adopt familiar reactions, such as what they have been trained to do¹⁵. Where that is not possible, they are left stranded, with no behavioural referents to guide them.

3. The immediate aftermath

Hindsight analysis often loses sight of the fact that in a disaster it takes time and effort to understand exactly what is happening, and what is its significance. With the Internet, social media and citizen journalism we have become accustomed to a form of almost instantaneous situational awareness. In 1980 conditions were very different. It took two weeks before the full scope of the earthquake was recognised. Comprehending the disaster was made more difficult by one's tendency to feel overwhelmed by it. This was something that increased rather than abated as the days went by.

At half past eight a train from Calabria arrived and I was finally able to make my way back to the city. The journey took several times longer than normal and was agonizingly slow. Whistle shrieking, our train slid along the line as it traverses a jumble of narrow alleys. The streets were full of people: family groups, crowds, gangs of children, meetings of workers. Rubble and rubbish lay in piles everywhere. At the intersections braziers full of wood were burning and people wrapped in blankets were sitting around them staring into the flames. More than ever, the city looked like a rotting carcass over which insects were swarming and congregating. We slid interminably on, past street after street in which the same scene was repeated.

At Campi Flegrei I left the train and made my way to an apartment in Piazzale Tecchio. All doors were locked and the building was deserted. The side of the next building had collapsed, forming a dusty mound of green tiles in the roadway beneath. I made my way across the square, which was filled with people and garbage.

Life in Naples was being lived out of doors. Shelters had been improvised out of plastic sheeting and sticks, and people sat on kitchen chairs outside them, eating bread and listening to the radio broadcast tragedy. Families were preparing to live in their cars, which stood in rows and were full of bedding and provisions. Several of the orange city buses and trams were drawn up at the side of the road and people were eating a rudimentary breakfast in them.

I knocked at the door of a dilapidated old building and was admitted. High in this grimy but genteel apartment block an elderly disabled lady had been led to safety as the earthquake struck. The lift cage groaned, the stairs outside heaved and the counterweights of the lift banged backwards and forwards as the old lady was brought down to the ground floor.

¹⁵ Arnold et al. 1982; Drabek 1986.

Filled with relief I greeted those whom I knew and hastily sorted out some warm clothes and a loaf of bread, before going out into the open air. Everyone talked of aftershocks and no one had any desire to go back and settle in the rooms above ground level. Neither had we any desire to walk up the road and look at the horrors to be seen in the rest of the city. Instead, we settled down on a park bench, where we remained, apathetic, until nightfall.

We spent the second night after the earthquake around an open fire. The night was cool and damp, but peaceful. Shortly after 8 a.m. the next morning an aftershock occurred which, the news told me, caused much damage in the mountain communities of Basilicata and Irpinia. Tremors continued to occur during the day, but to us most of them were indistinguishable from the rumble and vibration of city traffic. The second day passed much like the first, except that we discovered in ourselves an increasing tendency towards aggravation, to argue at the slightest provocation. We bought newspapers and read with absorption. The news worsened progressively with each new edition, giving us a sense of mental vertigo and engendering a feeling of leaden horror in the pits of our stomachs.

As the full story emerged in press reports and on the radio and television, the tension in Naples increased. Under the weak glare of the street lights that evening men were fighting, hands at each other's throats and murder in their eyes. Weary and disgusted, we took our bedding indoors and moved to rooms on the third floor. Few other people in the Rione Flegreo followed our example and the camp fires continued to burn outside. We looked closely at the walls of the apartment, discussing any cracks that we found. None of us was sure of the chances of our surviving a full-scale aftershock or another main shock (the value of experience and learning is that I would now be much more confident in such a situation), but we were too tired to care. Our bones were sore from a night spent on the damp ground outside, and our nerves ached and tingled. We slept fully clothed, with our shoes on and a torch close at hand.

Next morning we made our way to the Central Station. On the metro they were discussing a young woman who had died of a heart attack in a train that stopped in the tunnel under Montesanto during the earthquake. At the railway station we found chaos and total lack of information. The train service to Basilicata and eastern Campania had ceased altogether. By strenuously questioning every official or worker who would listen to us we eventually discovered that buses were leaving for Potenza. We purchased tickets and climbed aboard one. Several passengers were arguing with the driver. The problem was a fairly trivial one—where to stop on the way to Eboli – but the argument was vociferous. More and more people joined in, their faces reddened with shock and anger. Clearly, the tension provoked by events had become overbearing (soon after we left a bus was set on fire when Molotov cocktails were ignited underneath it: such is the value of public services in a full-scale emergency, that the city bus can be used as transport, shelter or refuge, or become an instrument of protest).

When the argument was resolved, as it eventually had to be, we set out for Potenza. The motorway was deserted. The much talked-about columns of relief supply trucks were nowhere to be seen: eventually we came upon one, near Potenza, a straggle of small vehicles travelling at a snail's pace along the open road—while, of course, people were dying unrescued under the

rubble of the villages. Near Salerno we found a huge boulder weighing several tons resting on the elevated carriageway that clings to the side of the mountain. At Battipaglia the alleyways were blocked by heaps of rubble and many streets had makeshift barricades across their entrances as a result of the danger caused by falling masonry. At Eboli we passed a modern apartment block that had been reduced to a huge mound of dusty rubble. Behind it the wreckage of a second block had left several furnished rooms gaping open like a doll's house without façade. One was a black-painted bathroom with full-length mirrors and a deep blue bath, a curiously brutal fantasy under the current circumstances.

At Balvano a quiet-spoken man asked to be set down from the bus. On being questioned, he told us that Balvano was his home, his wife and children were there and he did not know whether they were still living and his house was still standing. He wished us a courteous good afternoon and walked off resolutely towards Balvano. Most of the passengers on the bus were weeping with sympathy as we watched him go.

We crossed the Sele Valley in the late afternoon as the fiery sun was illuminating with deep orange rays the turbulent sea of mist beneath the great sloping viaduct on which the motorway is suspended. Picerno stood clearly visible on a spur above the fog-laden ravine. We could discern a gaping fissure in the apse of the church, as well as heaps of rubble flanking the ruins of the nearby castle. Helicopters hovered overhead, as we drew up in the station forecourt beneath Potenza City. On the platform groups of peasants sat with bundles of their belongings—evidently salvaged from the wreckage of their homes—and waited for transport to Naples, from where they would go on to stay with family in the North or abroad. A few were injured and several were freely crying or raising their thin, harsh voices in some antique lament. We caught a local train to Grassano.

Each survivor had a dramatic story to tell about the moment the earthquake struck. Each predicament had to do with who a person was, what they were doing at the time and how they reacted to the tremors. Together they constitute Torsten Hägerstrand's «bundles of paths that help to create pockets of local order»¹⁶. The variety of reactions and outcomes is striking. For instance, a month after the earthquake I interviewed a man who had rushed outside with his wife and two daughters. The building in front of their house collapsed. The man was crippled and the wife and one daughter were crushed to death. The second daughter emerged physically unscathed. Yet there are strong regularities in behaviour, even in perception of danger and flight. An earthquake inverts a person's sense of security so that wide-open spaces represent safety and *domus mea*, home, represents danger thanks to fear of structural collapse. There is a

¹⁶ Hägerstrand 1970, 14-15.

long-standing debate about the relative merits or drawbacks of dashing outside or remaining indoors during the shaking¹⁷. Given the fragility of staircases, the latter option is probably safer.

After a major earthquake there will be an epidemic of post-traumatic stress¹⁸. It is engendered, not only by what has been experienced, but also by increasing knowledge of the enormity of the event. In the 1950s the Canadian psychologist Anthony Wallace characterised a disaster which causes sudden and widespread major damage as a symbolic end of the world, and those who live through it have to struggle to adjust to the new reality¹⁹. The days after the impact are critical to that process and involve some of the greatest challenges of adaptation²⁰.

4. *The months afterwards*

The 1980 earthquake took place on a pleasant Autumn day, but it was inevitable that the harshness of winter would intrude upon the scene sooner or later. For all the stern beauty of the landscape effects, among the survivors those were days of epidemic bronchitis and pneumonia, of intense cold and privation.

Often it snowed as I travelled. Three months after the earthquake I made the journey during the night and the coach took me across a land transformed, where crystalline drifts, white as the purest Carrara marble, settled thickly on every surface and sparkled in the moonlight. News bulletins said that the work of retrieving bodies from the rubble of the stricken villages was to cease until the thaw set in. Every flake that fell helped transform the hideous wreckage into a brilliant sepulchre, the only one worthy of those who had paid with their lives. It is indeed a grim irony that no one among the living could appreciate the architecture of Nature at that moment, in its grand and utterly heartless impartiality. They were known as *paesi presepi*, the Christmas-crib villages; for their limited resources allowed them comparatively little scope to adjust to the great, formless modern world, and thus they maintained their innocence, nestling among the rocks at the southern end of the Apennine chain, looking like a Neapolitan Christmas crib. Now they are the stage for the masque of death, not birth. Snow has withered the remaining branches on the tree of life, and it stands richly silvered but inanimate in the pale moonlight, by the roadside, the road that leads only away, to abandonment.

¹⁷ Bernadini et al. 2019.

¹⁸ Dell'Osso et al. 2013.

¹⁹ Wallace 1956.

²⁰ D'Souza 1982.

In the hills and mountains of the Mezzogiorno, a thin veil of new plant growth in an improbably bright green characterises Spring; yellows and browns mark a summer of intense heat and dried up streams; russet colours and mists denote Autumn. They all accentuate the stark and angular contours of the landscape. Only the snow obscures the visual truth. It could hardly be described as a benign covering.

Exactly one month after the earthquake, and two days before Christmas, I made a reconnaissance trip into the highlands of western Basilicata.

At Bella a bulldozer was demolishing a row of houses and the townsfolk were in the process of transferring their belongings to a double line of buff-coloured container dwellings, long oblong box-houses grouped inside a tall perimeter fence that gave the impression of encircling a concentration camp. At Muro Lucano the tall campanile of the church had scaffolding up to its apex, high in the leaden grey sky. The streets were deserted.

I set off up the small road that leads across the mountains to San Fele. There were landslides everywhere. Sections of the road had cracked, sagged and slipped away and boulders had tumbled down from above. Crevices and runnels curved away across the fields and tongues of debris stretched down into the ravine beneath.

Snowflakes began to fall from the leaden grey sky. Behind a farm gate was a remarkable scene. The farm buildings were reduced to a knee-high pile of rubble. Beside them an olive-green army tent was pitched. Next to that was an enormous bonfire made of salvaged pieces of household furniture. The farmer and his family sat in a ring around it gazing intently into the flames. Next to them, silent and immobile, were the farm animals, cows, goats, hens and geese. They too were gazing into the fire.

One of the great characteristics of Irpinia at the time of the earthquake was its apparent remoteness. In reality, the transportation infrastructure of the Campania-Basilicata hinterland was not as deficient as it seemed. The remoteness was more in the mind than in reality, and it stemmed from long periods of marginalisation in which the only safety valve was emigration. Using an age-old mechanism, this was much stimulated by the 1980 earthquake. The Italian Government provided one-way tickets on Alitalia to places all over the globe. I particularly recall the poignancy of seeing peasants, dressed as peasants, clutching their few belongings and looking lost at Heathrow Airport in London. It is not usual for natural hazard impacts to be associated with the concept and phenomenon of forced migration. However, when options are severely restricted, there may be little choice but to comply with a policy dictated by the higher

levels of government. Scholars have identified forced migration in both Hurricane Katrina (2005) and the Japanese earthquake and tsunami of 2011²¹.

5. Aftershocks and their consequences

Self-protective behaviour is instinctive to most people, although as it relies on perception, what they think is self-protective may instead be fraught with risk. Whether one suffers from the “syndrome of personal invulnerability” (an inability adequately to perceive direct threats to one's person) or a sense of acute vulnerability, the reaction to a direct threat is usually instinctive and thus automatic. Social scientists have studied it by reconstructing events, perceptions and actions in post-hoc analyses²². However, this approach does not tell the whole story, as there are elements of the response to events that defy rational explanation. For this reason, certain aspects are bound to remain controversial.

On St Valentine, 83 days after the earthquake, I was in a hotel in a side-street off Piazza Garibaldi, Naples. At 6:30 p.m. I was walking downstairs when I lost my balance and fell over. I assumed it was a question of a sudden fall in my blood pressure, but when I recovered and reached the lobby I was confronted with an apocalyptic scene. It was the largest aftershock in the post-earthquake sequence. Outside the hotel a woman was having hysterics. Someone had thrown a blanket around her head and was holding her tightly. I staggered out into the street and was immediately caught up in a group of about 200 people who were panicking and running. The façade of one of the buildings in the square had collapsed. After a few steps I stopped and started to reason. There was nowhere to run to.

Two months previously I had been doing fieldwork in the narrow streets of Salvitelle, Province of Salerno, an interdicted area of severely damaged housing. At midday there was a peremptory gust of wind and the tall houses swayed. Under our feet the ground vibrated as if a train had passed close by. I had been interviewing an elderly lady who was sitting on the steps of her abandoned house sorting olives into a bowl. When I looked there was nobody to be seen. The bowl lay upside down in the middle of the street and olives were scattered everywhere. She had run for her life quicker than I could register her departure. I glanced around me apprehensively and then bolted for the nearest open space. After a few minutes I decided to return to the caravan park. There was no special need, as aftershocks seemed to have stopped occurring in rapid succession, but my nerves were upset. On the way down the hill I met several people, all leaving

²¹ Gemenne 2010; Thiri 2017.

²² E.g. Lindell et al. 2016.

the citadel, all nervously talking, discussing and lamenting. A house had collapsed into the road, partially blocking the way.

The aftershock connected up places that had been cut off from one another and were now united in fear, damage and casualties. At a time when communications remained obstinately poor, there was a sense of shared experience, albeit in a very negative form.

One of the most contentious issues in disaster studies concerns panic. Sociologists have tended to argue that it is so uncommon as to be practically a myth²³. In contrast, I not only observed panic but involuntarily participated in it. This led me to speculate that panic has a cultural context, or in other words that it is more common in certain cultures than in others²⁴. I also suggested that it is more common in urban settings where population density is high. Where a certain lack of faith in the stability of everyday life exists, I hypothesised, panic is an easily anticipated reaction to sudden, unexpected shocks. I discussed the matter with the eminent sociologist of disasters Professor Henry Quarantelli, who was dismissive of the idea of cultural determinants of panic. He had to admit, however, that many analyses of the phenomenon are based on post hoc investigation and are notoriously unreliable²⁵. Far from finding panic a myth, on several occasions during the 1980 earthquake and its aftermath I not only witnessed panic, *I inadvertently participated in it*. As a result, I would say that as a latent phenomenon in certain places it is invariably close to the surface. Sociologically, panic is a spontaneous withdrawal of social contact in favour of individual self-protective behaviour. However, the most common reaction, flight, can easily be considered – and sensible – reaction to a direct threat²⁶. The sociological literature on the topic has not adequately recognised the social, cultural and psychological preconditions that can precipitate panic.

Culture is not an easy phenomenon to characterise in social-scientific terms. It is subtle, multifaceted and inimical to quantification. Nevertheless, one of the most useful tools is Kenneth Pike's concept of "etic" (universal) and "emic" (culturally specific) traits²⁷. The great mistake of disaster sociology has been to assume that social regularities are etic. Only recently have social scientists (other than anthropologists) begun to consider emic variations in the way people perceive and respond to disasters²⁸.

²³ Johnson 1987; Clarke 2002.

²⁴ Alexander 1995,

²⁵ Quarantelli 1977.

²⁶ Johnson et al. 1994.

²⁷ Headland 2001, 507.

²⁸ Krüger et al. 2015.

There is a strong cultural imprint upon earthquake disasters in southern Italy, but it is one that is extremely difficult to characterise. Feudalism, religiosity, mysticism, familism, marginalisation, corruption, domination and organised crime all have a role in it²⁹. Perhaps the linking themes and underlying keys to interpretation are, on the negative side, lack of control and on the positive, sense of belonging³⁰. The issue of *genius loci*, or spirit of place, is beyond the scope of the present work, but it is an important aspect of culture, and also *cultural survival*. It has been dealt with *in extenso* in various other works³¹.

6. *The Legacy of the Earthquake*

The first systematic study of a major calamity in social science terms dates from the 1917 Halifax, Nova Scotia, ship explosion³². Hence, in 1980 the field of disaster studies was 60 years old. It was still very poorly developed. There was one dedicated academic journal, *Disasters*, founded in 1976 by the London Technical Group, a loose association of humanitarian scholars and practitioners. The Disaster Research Centre had been in existence at Ohio State University for 17 years, but it was still five years away from finding its current home at the University of Delaware. Gilbert F. White was the director of the Natural Hazards Centre, founded at the University of Colorado at Boulder four years previously. In Washington, D.C., the National Academy of Sciences continued to promote the occasional study of a disaster, as did the National Opinion Research Centre, founded in 1941 at the University of Chicago. Few other centres for the study of disasters as socio-physical phenomena existed in the world.

Since 1980 the field has grown enormously. In 2021 at least 85 journals are dedicated to the combined field of disasters, hazards, safety, security, risk and resilience. A further 500 regularly or occasionally publish papers on these topics. Disaster studies has developed sub-fields in humanitarian response, economics, psychology, business continuity, civil protection, civil defence and community resilience. One consequence of this is that many more articles are published about a major disaster now than was the case in the early 1980s³³. In fact three years after the 2011 Japanese earthquake, tsunami and nuclear release 6,000 papers had been published in the scientific press. This was dwarfed by the 75,000 papers on Covid-19 that had

²⁹ Banfield 1958; De Martino 2015; Dickie 2012.

³⁰ Marincioni et al. 2012.

³¹ E.g. Alexander 1989, Moscaritolo 2020.

³² Prince 1920.

³³ Alexander et al. 2020.

appeared by November 2020. In contrast, the body of literature on the 1980 Italian earthquake is modest in size and is largely restricted to seismological and geomorphological papers, with some excursions into urban planning and architecture. Hence, the impact of this event on learning has been modest, despite the substantial potential to learn from such a large and variegated disaster.

Thirty-four years after the Campania-Basilicata seismic disaster I was in Japan when an earthquake of identical magnitude and similar physical characteristics occurred. In Irpinia 2,915 people died, 8,841 were injured, 280,000 were left homeless and 637 municipalities suffered damage. In Japan, forty houses were destroyed, 22 people were trapped in the rubble but quickly rescued, and no one died. The reasons for such a stark difference are complex: organisation, legislation, regulation, compliance, responsibility and observance, but also entirely different building traditions and geographies. The paradox is that Japanese culture embodies a greater sense of the fragility of life, but the end product is greater resiliency.

7. Conclusion

During the days after the earthquake I was given an advance copy in manuscript of the Pan American Health Organisation's guide to health management in disasters, which was published some months later³⁴. This was my epiphany moment when I suddenly realised that there are regularities in disasters that merit study. I dedicated the next forty years to discovering, exploring and elucidating those regularities. The intellectual journey has been constantly interesting, as disasters open a window on society and expose its inner workings to scrutiny.

The world is now more complex, more polarised and no less vulnerable to disasters than it was in 1980. Thanks in part to a huge increase in research, hazards, threats, major risks and catastrophes are much better understood than they were all those years ago. The challenge is now clearer as we seek to bring meaning to disaster just as we struggle to mitigate its effects. In disaster, we are all protagonists. To a greater or lesser extent, good disaster risk reduction involves participatory democracy and the assumption of collective responsibility. Experience is a good teacher and it takes many forms. My training as a student induced me to believe that science is the search for a single, objective reality that can explain the phenomena we observe. Perhaps, but the experience of disaster, and of four decades of studying it has changed that

³⁴ PAHO 1981.

perception. I now believe that there are many realities, and mine is only one of them. Of this the story of disaster is made.

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