

## Introduction

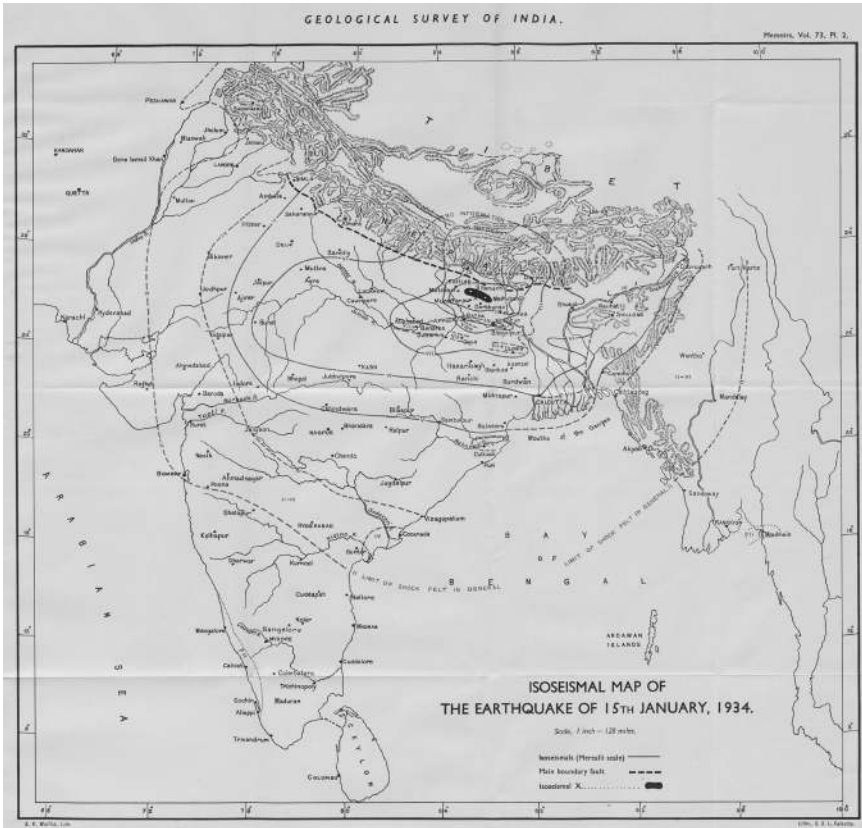
### Experiencing the Extraordinary and the Ordinary

#### Continuities and Breaks

On 15 January 1934, at around 2.13 p.m. an earthquake struck north India and Nepal.<sup>1</sup> In the chronicles of states, popular writers and scientists, the earthquake would be known as ‘the Indian earthquake’,<sup>2</sup> ‘the great Indian earthquake’,<sup>3</sup> ‘the Bihar–Nepal earthquake’,<sup>4</sup> ‘the Bihar earthquake’<sup>5</sup> and in Nepal as ‘the Great Earthquake’.<sup>6</sup> As some of these titles reveal, Bihar, which the present study focuses on, was the worst-affected region in India: the districts Muzaffarpur, Darbhanga and Champaran in north Bihar, and Monghyr, south of the Ganges, suffered the most extensive human losses and damages. In India somewhere between 7,253<sup>7</sup> and 20,000<sup>8</sup> people succumbed and approximately 8,500 died in Nepal<sup>9</sup> in the upheaval measuring Mw 8.1<sup>10</sup> to 8.4<sup>11</sup> according to re-evaluated historical data. The epicentre located about 10 kilometres south of Mt Everest<sup>12</sup> caused severe damage to infrastructure, agricultural land and a large number of houses in an area extending from the foothills of the Himalayas in Nepal to the southern bank of the Ganges (Map 1.1).<sup>13</sup>

The 1934 earthquake was in many ways a revolutionary event in terms of magnitude and effect: it was a large-scale disaster with an unexpected and sudden onset. Almost exactly one hundred years had elapsed since the last major earthquake occurred in the region in 1833, an event of far less impact in terms of death and destruction, with no deaths reported in India despite damages to houses.<sup>14</sup> After the 1934 earthquake, the 1988 Udaypur (Udaipur) earthquake<sup>15</sup> served as a mild precursor to the recent 25 April 2015 Gorkha earthquake that not only caused extreme destruction and about 8,700 deaths in Nepal, but also severely jolted northern India from Delhi to Kolkata.<sup>16</sup> In combination with findings of historical seismology, these contemporary reminders of Bihar being

2 • Acts of Aid



**Map 1.1** Isoseismal map of the impact of the 1934 earthquake in South Asia. This detailed map was published by the GSI in 1939, while an earlier preliminary map was published by the Geological Survey of India officers J. B. Auden and A. M. N. Ghosh in 1934.

Source: Dunn et al., 'The Bihar–Nepal Earthquake of 1934', pl. 2. The earlier version was published in J. B. Auden and A. M. N. Ghosh, 'Preliminary Account of the Earthquake of the 15th January, 1934, in Bihar and Nepal', 177–239, in *Records of the Geological Survey of India* 68, pt. 2 (1934), pl. 19.

at risk in the event of regional Himalayan earthquakes have spurred research into engineering and modes of coping. Contemporary earthquake risk reduction in the Kathmandu valley aims at improving building structures and creating awareness.<sup>17</sup> Vital in recommending building techniques and planning dam projects and power plants is research into historical seismology, which serves to

estimate location and magnitude of historical earthquakes.<sup>18</sup> A seismic record of the region extends back to the thirteenth century, as documented by geologists and historical seismologists of great historical and twentieth-century South Asian earthquakes.<sup>19</sup>

In modern South Asian history, the 1934 earthquake is foremost remembered for M. K. Gandhi's interpretation of the event as divine intervention, followed by an exchange of opinions with Rabindranath Tagore. Gandhi made the famous and disputed claim that the earthquake was a 'divine chastisement' of Bihar for the 'sin of untouchability', and Tagore contributed with a refutation of the statement as unscientific.<sup>20</sup> The brief discussion on whether the earthquake was caused by the treatment of Harijans, the name Gandhi used for the then untouchable castes, or whether it was a natural phenomenon detached from human actions has come to be interpreted as the manifestation of a schism between traditional beliefs and science. Scholarly works have in passing mentioned Gandhi's and Tagore's public exchange of opinions on the cause of the earthquake in order to illustrate their disparate outlooks on science and technology, most pronouncedly to prove the former's overall rejection of modern science versus the latter in its defence as a man of reason.<sup>21</sup> Gandhi's view of the earthquake as a divine punishment for the practice of untouchability has been taken as a case in point for proving his 'readiness to resort to harness faith'.<sup>22</sup> In one article his explanation of the earthquake as a punishment for sin has been described as moralistic.<sup>23</sup> Yet another analysis of the debate discerns an inherent theodicy in the statement by Gandhi as contrary to Tagore's rejection of divine intervention in physical phenomena.<sup>24</sup> Makarand R. Paranjape's article focuses entirely on their conflicting views after the earthquake, arguing that they represented 'two kinds of rationality, two ideas of science, and two approaches to modernity'.<sup>25</sup> Notably, the attention Gandhi's statement and Tagore's rejoinder attracted in the press then as well as later can partly be ascribed to the amount of publicity the exchange received, and partly to the historical importance of the two persons.

From a disaster studies' point of view, Gandhi's metaphysical interpretation offers an opportunity to understand how people's explanations and perceptions of human agency in disasters can affect responses.<sup>26</sup> Not unlike how the earthquake became incorporated into contemporary political discourse, histories of catastrophism outside the realms of 'scientific modernity' enabled people to explain, account for and rationalise loss, according to Sumathi Ramaswamy's book on the imaginary submerged Indian Ocean continent Lemuria.<sup>27</sup> Similarly, local knowledge in disaster myths, Urte Frömming points out in her comparative study of volcanoes in Iceland and Indonesia, is in 'modern' Western discourse

#### 4 • Acts of Aid

regarded as magic rather than keys for understanding real-life strategies in dealing with disasters as well as perceptions of society and nature.<sup>28</sup> The practical usefulness of disaster interpretations is thereby lost as even anticipated and imagined disasters carry an important social potential for probation and development, cultural historians argue.<sup>29</sup>

If Gandhi's interpretation of the earthquake gained considerable attention in contemporary media as well as in the scholarship of today, the social psychologist Jamuna Prasad's study on the proliferation of rumours in the aftermath would come to leave a long-lasting mark on his discipline's scholarship, albeit in a different manner than intended.<sup>30</sup> In what appears to have been the first academic research project on the earthquake, he conducted interviews and listed observations and accounts in newspapers with the intention to understand the psychological factors underlying rumours after a disaster.<sup>31</sup> Prasad's contribution to the research field was in support of a 'social' approach towards rumours and challenging an analysis of the individual as independent of the 'crowd', like his contemporary Bernard Hart argued in the influential article 'The Psychology of Rumour' in 1916.<sup>32</sup> In 1950, Prasad published one more article based on comparisons of earthquake reports and rumours, introducing more material collected from the 1934 earthquake and later earthquakes.<sup>33</sup> The second article came partly in reaction to the influential study of rumour by Gordon Allport and Joseph Postman in *Psychology of Rumour* (1947), which viewed rumours as individual experiences and did not take cognizance of Prasad's article and his contrary claims on the role of the group.<sup>34</sup> Even though Prasad's research received limited acknowledgement by international colleagues in social psychology,<sup>35</sup> his study earned far wider recognition after the psychologist Leon Festinger (1919–89) used it as a key example for developing his theory of cognitive dissonance.<sup>36</sup> From this moment, Prasad's study would take a remarkably different academic trajectory. To prove his theory, Festinger argued that the rumours studied by Prasad had occurred outside the worst disaster area 'among people living in the area which received the shock of the earthquake but which did not suffer any damage'.<sup>37</sup> The 'fear-justifying rumours' served to overcome cognitive dissonance among people who felt fear but did not experience damage or death consonant with the frightening event, according to Festinger.<sup>38</sup> Patna, where Prasad started collecting rumours,<sup>39</sup> was indeed less damaged in comparison with north Bihar and Monghyr, but the district as a whole nevertheless suffered almost 150 officially recorded deaths, and Patna city saw a great number of private houses and large old buildings in ruins.<sup>40</sup> Both Prasad and eye-witness accounts contradicted Festinger's understanding of the earthquake rumours as detached from the worst-affected area. In this way,

Prasad's study gained fame, although not for his contribution to the role of collectives in social psychology, as the research had intended.

Perhaps less famous to a wider audience than Festinger's theory, but a classic contribution in the field of history, Ranajit Guha's *Elementary Aspects of Peasant Insurgency in Colonial India*, agrees with Prasad's social approach towards rumours in the sense that rumours are seen as a source for discerning popular mentalities and flows of information,<sup>41</sup> capable of triggering far-travelling panic within a very short period.<sup>42</sup> The seminal study on subaltern modes of communication and informal networks ascribes rumour a fundamental role.<sup>43</sup> By analysing rumours as an efficient communicative mode, particularly in subaltern communication,<sup>44</sup> Guha builds upon Prasad's argument that rumours functioned as a social medium.

Despite these significant socially embedded interpretations of a disaster and far-reaching records of earthquakes in the region, historians of South Asia have taken a sporadic interest in how society responded to earthquakes, or to natural disasters in general for that matter. Historical studies on disasters in Bihar have addressed floods,<sup>45</sup> and recurring floods and cyclones in Orissa,<sup>46</sup> the south-eastern part of the province<sup>47</sup> and not to forget, famines. Floods are still considered a normal and a recurrent disaster in north Bihar, one of the most flood-prone areas of the region where the Ganges and the large rivers Kosi and Gandak with tributaries criss-cross the landscape and cause regular inundations as well as major floods of varying intensity on a yearly basis.<sup>48</sup> Famines, the most salient and fatal of disasters from the beginning of the British East India Company Rule around 1770, are generally considered a man-made or hybrid disaster with elements of causation based on environmental conditions, weather and governance.<sup>49</sup> Why earthquakes have so far caught marginal attention in South Asian history may partly be explained by an inclination in historical narratives to focus on phenomena that are recurrent and lend themselves for generalisation and the gradual development traced in environmental disasters rather than singular disasters. Another reason may be a perception of catastrophes of nature as outside the scope of political history, and particularly the history of states, which would explain why historical research tends to study the role of governance in hybrid or man-made disasters rather than governance in natural hazards.<sup>50</sup> The lack of interest in natural disasters can, according to the pioneering work of Arno Borst, be traced to notions of modernity where a focus on societal progress led to a repression of singular events considered as abnormal interruptions in historical research.<sup>51</sup> Global environmental history, too, tends to focus on governance in disasters unfolding over a longer time-span, for example, famines, droughts, floods and climate change, but less so on natural disasters with a sudden onset

## 6 • Acts of Aid

such as earthquakes, tsunamis, typhoons, hailstorms and hurricanes.<sup>52</sup> The contemporary wider acceptance of human beings' agency in relation to their environs can be traced to the experience of living in the ecological epoch of the Anthropocene, defined by human geological agency and a scientific consensus on climate change being human-induced.<sup>53</sup> This late shift in perceptions of human agency in relation to climate change has occurred in parallel with the increasingly human toll of environmental disasters such as the dumping of toxic waste, deforestation and industrial pollution. Yet environmental disasters are largely rendered invisible, evolving during a long period and unequally distributed across the globe, termed by Rob Nixon as a form of 'slow violence' against the poor and the developing world.<sup>54</sup>

After a turn in geographical, anthropological and sociological research towards an understanding of natural disasters as social processes rather than natural events, cultural and historical studies have intervened to further our understanding of how people have experienced historical natural disasters and at the same time how disasters structure social life.<sup>55</sup> The most extreme among the constructionist approaches on disasters argues that nature and hence 'natural' disasters exist as sociocultural constructs where the natural is not purely physical or biological occurrences but depends on social and cultural understanding of nature. At the other end of the spectrum, the realist approach maintains that risk is a hazard that exists and can be measured independently of social and cultural processes, consequently not taking people's vulnerability into account. A weak constructionist approach regards risk as a hazard that usually is mediated through social and cultural processes. A strong constructionist approach, on the other hand, treats nothing as a risk in itself but as a product dependent on historical, social and political perceptions.<sup>56</sup> With this shift, natural disasters are the outcome of cultural and historical contexts, where social parameters, a person's socio-economic position, knowledge of resources and local environment, age, gender and social networks determine vulnerability and exposure to disaster. Thereby, a person's vulnerability is defined by the 'capacity to anticipate, cope with, resist and recover from the impact of natural hazard'.<sup>57</sup> Vulnerability is thereby directly related to resilience, the ability of a system, community or society to resist, absorb, accommodate to and recover from the effects of a hazard.<sup>58</sup> In the form of a geological event, an earthquake is a natural *hazard*; as a social experience, sociocultural constructs and human agency make it a natural or a man-made *disaster*.<sup>59</sup>

In line with Wisner and colleagues, who emphasise the contribution of so-called normal historical processes in producing disasters,<sup>60</sup> this book examines

the extent to which contemporary perceptions of disasters, political agendas and governance shaped responses in the relief and reconstruction phase in Bihar in the aftermath of the 1934 earthquake. Building upon cultural and historical research into the social aspects of natural disasters, the larger aim of this book is to examine how the aftermath of a disaster demonstrates previous experiences with disasters, or a lack thereof, and the ways responses shape resilience. By studying relief and rehabilitation in the aftermath of the earthquake, the book aims to contribute to a historical understanding of 'natural' disasters as social processes, which it argues is necessary to arrive at a contextualised understanding of resilience and what it means in relation to vulnerability in future disasters. The aftermath of an earthquake is similar and yet different from other natural disasters in terms of human experience, suddenness and physical impact on built environments. Susanna M. Hoffman underlines the use of researching responses to catastrophes in order to understand the fundamental constructs that underpin the social world.<sup>61</sup> The ability of earthquakes to reorder society, as noted by historians, may further help us to understand how societies have adopted practices and in some instances learnt to cope with disasters. The specific scenario of an earthquake has been referred to as a form of creative destruction, a groundbreaker and an 'opportunity' for 'improvements' in the rebuilding process,<sup>62</sup> or cyclical renewal by reconstruction.<sup>63</sup> Case studies of disaster responses show how large-scale disasters have functioned as so-called focusing events on societies in terms of their ability to respond or change approaches.<sup>64</sup> Disaster as an opportunity to reorder society, both in the moment of crisis and in a longer aftermath, creates spaces where political legitimacy is contested or reinforced.

In order to analyse the transformative aspects of disaster, socially and historically contextualised studies are vital. These studies help us understand the trajectories of political instrumentalisation of aid,<sup>65</sup> individual and collective memorialisation,<sup>66</sup> the importance of cultural modes of coping<sup>67</sup> and the force of outside interventions.<sup>68</sup> The 2001 Bhuj earthquake and the 2004 Indian Ocean tsunami were large events. Small disasters recurring with a certain regularity, such as annual inundations or seasonal storms, may elicit responses and adaptive processes that shape institutional and organisational learning. Sociological research shows that responses to small disasters tend to result in learning which produces mitigative and preventive measures at local levels, while the policies developed for responses to large-scale disasters focus on clearing up in the aftermath.<sup>69</sup> Governance institutions and social science research consciously and/or purposefully make use of past experiences with disasters to improve or change responses. The development of systemic learning in responses to disasters



## 8 • Acts of Aid

has been differentiated into two categories that can be useful to have in mind: learning from established patterns based on previous experiences, so-called accumulative learning, or by introducing a fundamental and often innovative change.<sup>70</sup>

At the same time, the idea that societies and researchers can learn from history and historical disasters remains contested. Christian Pfister argues that historical disaster research can make it possible for a human to conceive risks, to make the seemingly unthinkable thinkable [*‘Undenkbares denkbar’*].<sup>71</sup> When the implementation of knowledge repeatedly fails, as in the recent mega-disasters Hurricane Katarina and the Indian Ocean tsunami, Stewart Williams argues that large-scale disasters expose the limits of what we can know. Instead of a social constructionist approach to natural disasters, where human agency and technocratic solutions dominate, he suggests a post-social understanding of disaster as helpful in order to grasp the complexities of material realities of what he sees as non-human nature.<sup>72</sup> Learning from disasters is also questioned by James K. Mitchell who argues that the element of surprise in disasters such as the 2004 Indian Ocean tsunami and the 9/11 terrorist attack shows a need to plan for contingencies rather than relying on past experiences.<sup>73</sup> Misplaced faith in the capabilities of institutionalised scientific knowledge and technical expertise may exacerbate vulnerability, Williams writes, inspired by Ulrich Beck’s influential risk thesis that modernisation by way of technological change and reflexivity has changed the notions of risk and thereby also how societies deal with hazards.<sup>74</sup> In his book on the long aftermath of the 2001 Bhuj earthquake, Edward Simpson suggests that instead of remembering and thereby learning from the disaster, amnesia occurs as the earthquakes are too big and too terrible to take in. Since the earthquakes are beyond the capacity of what our minds can comprehend, the enormity of the events are scaled down and in the process ‘the true earthquake (...) is lost from view’.<sup>75</sup> As these examples show, scholars to various degrees emphasise that learning, remembering or/and forgetting at an institutional or collective level play a role in how societies respond to disaster. Historical disaster research, however, generally finds learning from the experience of disaster to be a fundamental part in explaining how societies deal with disasters differently. Jared Diamond delineates some of the most extreme ways in which societies have collapsed or survived human and environmentally induced disasters—partially choosing to learn or not to learn from past experiences.<sup>76</sup> Accordingly, studies of experiences with disasters can help in understanding social and environmental patterns and circumstances leading up to societal responses.<sup>77</sup> Gregory Clancey illustrates how in Japan, the normative machinery of governance and the



unexpected natural disaster intertwined, 'creating not only states of emergency but disaster-oriented states'.<sup>78</sup> Cultural politics surrounding seismicity changed building techniques as well as methodology in scientific discourse.<sup>79</sup> As previous research on specifically cultural and religious disaster interpretations points out, disasters are not simply explained according to established narratives, but more often they make an impact on explanatory models, whether scientific, religious or governance-oriented.<sup>80</sup> Disasters add layers to narratives, embedded or normalised into the course of life, or featured as extraordinary events. The multiple narratives of a disaster such as the 1931 Yangtze River floods form a lens to understand how a 'disaster regime' developed in the history of modern China. The disaster regime explains how different strands of causality, both environmental and anthropogenic, intertwined to create hazards, famines and epidemics, which all translated into disaster for human beings.<sup>81</sup> Within this wide context of human–environmental relations, disaster learning becomes embedded within multiple practices used for interpreting and responding to emergencies. Such an analysis of disaster as a part of a larger systemic context allows for several narratives about the event and aftermath to coexist. Taking the learning experience one step further, Bas van Bavel and colleagues argue for using history, and specifically 'disaster history', as a laboratory to test and review variables and factors leading up to or preventing disasters.<sup>82</sup> In anthropology, disasters have long been framed as the closest thing to a natural laboratory that a student of society gets access to.<sup>83</sup> By analysing historical disasters, researchers argue that society can 'learn' about governance tools for responding to or preventing disasters. In contrast, historical research shows that though societies implementing changes in response to disasters frame it as a learning outcome, from the perspective of the historian, it becomes a covert instrumentalisation of the conditions a disaster creates. The literally ground-levelling effects an earthquake can have on soft and hard infrastructure feed into modernisation narratives, according to case studies from Japan and the United States. Improvements in urban reconstruction and town planning may safeguard residents in the event of a future earthquake or fire, but is primarily driven by financial interests.<sup>84</sup> Similarly, disasters can be used as a pretext to secure long-held political goals by installing moral values in children, Janet Borland argues in the case of the 1923 Kanto earthquake.<sup>85</sup>

The ability of societies to learn by adapting to disasters plays a central role in *Cultures of Disaster: Society and Natural Hazard in the Philippines* by Greg Bankoff. He suggests that societies can come to terms with hazards to the extent that disasters are not regarded as abnormal situations but rather a constant feature of life.<sup>86</sup> According to him, a 'culture of disaster develops and

## 10 • Acts of Aid

the threat is no longer a threat but becomes normalised into an extreme ecological process' if hazards recur frequently and shape responses so that mitigation and adaptation measures accommodate disaster.<sup>87</sup> Even in an earthquake, where the shaking ground is by most people regarded as the cause of the disaster, human agency in terms of infrastructural planning and building techniques reveal that previous experiences with disasters influence whether a natural hazard turns into a natural disaster or not.<sup>88</sup> And once the disaster is a fact, governance and organisation of relief work and reconstruction can prove vital to save lives and to build resilience and coping strategies, thus determining the magnitude of the disaster and the course of events in the long aftermath. The quote 'earthquakes don't kill people, buildings kill people'<sup>89</sup> is a pertinent example of reflection on the social dimension of an earthquake where risk can be mitigated. The present study rests upon ontological underpinnings that regard disaster as the outcome of human agency and negotiation of risks.

Accordingly, this book is about the aftermath of the earthquake. The earthquake in Bihar was a breaking point, an event, and its aftermath became a process embedded in a social context, which helps us in understanding how historical trajectories from previous disaster scenarios and contemporary social and political issues shaped responses. The disruption of *everyday routines* occurred suddenly with the earthquake in the form of casualties and physical devastation. As a process this involved coming to terms with and coping with the lasting disruptions of physical damages and sometimes mental instability, displayed as doubt in systems of belief or reliable state provisions.<sup>90</sup> Though the event and the aftermath of a disaster are seen as distinct entities, they are intimately linked in the disaster narrative where the event of physical destruction sets the scene for the processes of coping, relief and reconstruction in the aftermath. This book follows a sociological definition of disaster as 'the disruption of everyday routines to the extent that stability is threatened without remedial action'. The potential for disruption is contained within all social routines; each is vulnerable to breakdown.<sup>91</sup>

### 'Natural' Disasters in South Asian History

To date, there have been few studies in the field of South Asian history on the subject of natural disasters, in the sense of disasters originating from a natural hazard such as an earthquake or a cyclone. This book builds upon literature that can be classified into two categories. First, a broad group of studies that addresses