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Recovering the status quo: tipping points and earthquake aftermaths in colonial India

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Scholars of disaster politics debate how far natural hazards cause or catalyse political change. This paper builds on recent scholarship on tipping points and social contracts to argue that two case studies of historical earthquakes in 1930s British-colonised India invite a focus on the dynamics of cooperation and conflict between state and non-state actors. Officials of the colonial state and its nationalist rivals cooperated after one earthquake even though they otherwise bitterly opposed each other. Cooperation broke down after the second event, just one year later. Yet, in both cases, officials and nationalist leaders shared a broad vision for Indian society, which pushed both sides actively to seek to recover the social and economic status quo ante, preventing potential tipping points from crystallising. These case studies reveal how and why highly fraught social contracts can survive major disasters. The colonial state's transient and reactive approach to disaster governance continued to impact on post-independence India.

Keywords: colonialism, critical juncture, disaster politics, earthquakes, India, Pakistan, South Asia, tipping points

Introduction

Scholars of disaster politics debate how far natural hazards cause or catalyse political change. Analysis of 'focusing events' has shown that crises and catastrophes can prompt national-level policy debates (Birkland, 1997, 1998), policy change (Birkland, 2006), and local-level resilience-building (Crow and Albright, 2021). Pelling and Dill (2006) have highlighted ways that major hazard events have shaped the political fortunes of both incumbents and potentially oppositional social activists in several contexts. They have argued that the scholarship posits two idealised models of the political outcomes of major hazard-driven disasters (Pelling and Dill, 2010). One model conceives of critical junctures, moments which alter political trajectories during post-disaster scenarios at scales that can include national regime change (Olson and Gawronski, 2003; Gawronski and Olson, 2013). Building on Klein (2007), Pelling and Dill (2010) identify a second type of process, an 'accelerated status quo': those who held power before the hazard event use it as an opportunity to increase that power, and to intensify pre-existing trends of economic, social, and political change.

This model, positing critical junctures and accelerated status quos as alternatives, remains widely cited in analyses of post-hazard politics (Birkmann et al., 2010; Carlin,

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Love and Zechmeister, 2014; Cho, 2014; Chand, 2017; Octavianti and Charles, 2018; Stark, 2018; Biswas and Daly, 2021). Other scholars have critiqued it. Hutt (2020) has used the example of the sudden promulgation of Nepal's long-awaited new constitution after the 2015 Gorkha earthquake to contend that the disaster inflected rather than transformed the country's political trajectory. Raj (2017) more broadly rejects the generalisability of Pelling and Dill's argument, criticising its apparent non-applicability to Western countries, although Pelling (2011) has applied the model to post-Katrina New Orleans in the United States.

In fact, Pelling and Dill's analysis of disaster politics offers a nuanced framework for understanding disaster politics which moves beyond the debate on critical junctures. They clarified the post-hazard processes that produce or foreclose possibilities for change, or 'tipping points' that can potentially lead to the renegotiation of the social contract, which embodies 'the values and structures of society' (Pelling and Dill, 2010, p. 27). In their case study of the 1999 Marmara earthquake response, they report that the Turkish state foreclosed a tipping point in state–society relations that activists tried to generate in the short term, but yielded to pressure from international actors to liberalise civil society space in the longer term. They stress that political change is not a necessary condition of tipping points. Instead, the latter present windows of opportunity for change, when pressures could force a renegotiation of the social contract; however, they might also be closed by the repression of political organisation.

Blackburn and Pelling (2018) have substantially refined the concept of social contracts which underlay Pelling and Dill's earlier work, calling for scholars to emphasise the diversity of social groups and among governing institutions (including those outside of the formal state, like non-governmental organisations that undertake public service delivery). They set out three distinct but intersecting types of social contract. Legal-institutional social contracts define the formal distribution of rights and responsibilities. Citizens' expectations of the state in upholding a just order form imagined social contracts, whether or not those are met. The practiced social contract is what actually occurs.

I build on these works to assert that we can better understand the way that potential tipping points emerge, or not, by focusing more attention on the dynamic relationship between an incumbent regime and its political opponents. The interactions of competing projections of imagined social contracts, and the ways that political rivals come together (or not) in the practiced social contract, can shape disaster politics. Disasters can form important windows of opportunity for heightened collaboration, as well as conflict.

To explain those dynamics, we need to look more closely at the wider social and political contexts in which disaster politics play out. I follow scholarship which has examined the importance of narrative, framing, and individual agency in disaster politics (Simpson, 2013; Siddiqi, 2014; Hossain, 2018; Desportes and Hilhorst, 2020). I also follow Liechty (2022) in emphasising the contingent nature of individuals' and institutions' decisions rather than teleological framings in which pre-hazard social conditions largely determine political outcomes in the aftermath of an event. But I differ from his emphasis on 'regularity of response', or the similarity of political outcomes across different events that occurred in changing contexts. As my case studies show, two earthquakes that occurred close together in time and space can have significantly different political outcomes.

Two major earthquakes took place in colonial India in the mid-1930s. After the first earthquake, in the northern province of Bihar in 1934, the British colonial state collaborated closely with the Indian National Congress, a well-organised mass movement that sought to dissolve colonial rule and bring about independence. One year later, after the Quetta earthquake of 1935 (in present-day western Pakistan), the colonial state banned Congress volunteers from entering the damage zone, and used repressive legislation to suppress nationalist newspapers that criticised the official emergency response. One puzzle is that Congress chose to cooperate in Bihar, when scholarship posits crises as windows of opportunity for 'non-dominant interests' like anti-colonial movements to trigger a critical juncture and generate change (Marshall and Alexandra, 2016, p. 684). A second puzzle is that the Quetta earthquake had only a limited impact on Congress's wider political agenda, even though it offered an opportunity to undermine the state's legitimacy by actively shaping a crisis narrative in terms of a critical juncture (Novalia and Malekpour, 2020). While the earthquakes contributed to the colonial state's institutional learning processes (Roy, 2008, 2012), arguably constituting focusing events which contributed to change in narrow policy domains (Birkland, 2006), neither formed a tipping point in the broader adaptation of a sociopolitical regime. In both cases, context and the contingent choices of political actors worked in favour of the status quo ante, undermining the potential of tipping points to produce change.

Below, I show how the colonial state and the Indian National Congress reacted after the earthquakes, explaining why we see such differences in the ways that they interacted. I then show how the important areas of agreement between officials and Congress leaders—the prioritisation of middle-class survivors through the distribution of charitable relief funds, and worldviews which blamed nature for disasters—acted as a common centre of gravity and limited the scope for political contestation. I finish by drawing out some of the implications of colonial disaster governance for postcolonial India. First, though, I will explain my methodology.

Methodology

I use sources from official archives in India, Pakistan, and the United Kingdom, alongside published historical material. The use of historical research to engage debates in disaster risk reduction studies is increasingly well-established (Bankoff, 2003, 2007, 2009; Schenk, 2017; Courtney, 2018; Webber, 2018). Like other historians, I make intensive use of archival sources, compiling a detailed picture of selected case studies to unearth the complex political dynamics of post-hazard situations. Unlike some scholarship on hazard-induced critical junctures, which often uses single case studies, I take a comparative approach to highlight the importance of historical contingency, as well as broader social, political, and institutional contexts, in the outcomes of each case. Both earthquakes spawned large volumes of confidential correspondence and record-keeping by government officials and Congress leaders. Other major earthquakes damaged British India (including present-day Myanmar) in 1897, 1905, and 1930, but I have omitted them due

to the relative lack of accessible source material, and to allow for fuller analysis of the two earthquakes under consideration. I reviewed as many relevant files on Bihar and Quetta as I could obtain from archives, as well as publications which attempted to shape public narratives.

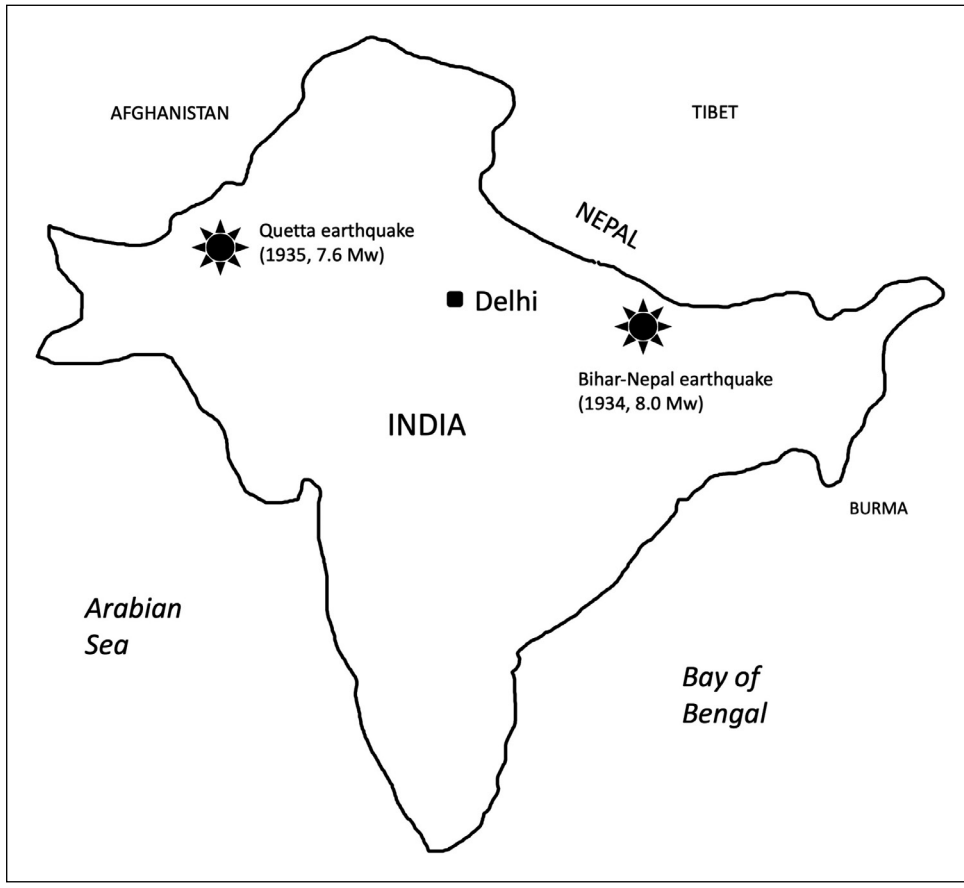
Archival holdings only represent a fraction of the total paperwork that the colonial state and the Indian National Congress movement generated, and access to the files listed in indices can vary according to conditions in each archive at the time of research. I searched for Hindi and Urdu sources, but the vast majority of colonial-era records I could access were in English—while Bihar was a Hindi-speaking area, most Indian inhabitants of Quetta spoke Pashto, Punjabi, or Sindhi. Moreover, the sources reveal little about local-level community organisation, which either escaped officials' attention or was not recorded in archives that are available. This paper cannot pretend to be the holistic analysis of disaster governance for which Hilhorst, Boersma, and Raju (2020) call. Nevertheless, archival sources, alongside publications from both sides that attempted to shape public narratives, offer strong insights into the thinking and action of officials and their nationalist counterparts. I read the sources qualitatively, paying attention to textual features such as language, register, and tone, which shaped the content of the texts, as well as contextual factors.

Immediate state responses

The two earthquakes struck nearly opposite sides of the Indian empire (see Figure 1). The earthquake of 15 January 1934 devastated the northern half of Bihar province, an agricultural region with no major cities and few towns but a large agrarian population. It killed around 14,500 people in India (and the same again in neighbouring Nepal, where the epicentre lay). The shockwaves severely damaged towns and villages but could have killed even more people had they arrived at night. Fortunately, they came at mid-afternoon. Most people were awake, agricultural workers were largely outside, and many of those who were inside were able to escape before buildings collapsed. Nobody counted how many private dwellings were destroyed, but most of the major towns north of the River Ganga (Ganges) were severely damaged. So too were the numerous villages in the province's countryside. Cracks in the earth vented sand and mud into the air, and eyewitnesses reported that the Ganga's water 'subsided as if by magic', leaving the riverbed dry for a full five minutes before suddenly roaring back (*Times of India*, 1934b, p. 7).

The earthquake severed the communications infrastructure, damaging, for example, 900 miles of railway track. District officials, improvising without instructions from their seniors, took ad hoc actions, such as imposing price controls on essential retail goods, organising the distribution of locally available medical supplies, and overseeing digging for survivors. The provincial government of Bihar and Orissa, headquartered in lightly damaged Patna, sent police reinforcements to towns to prevent outbreaks of disorder and 'looting', which they feared. In one town, Munger, local officials even secured prisoners at a damaged jail before beginning work to rescue survivors. The Indian Army lent military engineers to pull down damaged buildings and repair bridges on main roads (Brett, 1935,

Figure 1. Map of the Bihar and Quetta earthquakes indicating approximate locations of the most intense damage in British India



Source: author.

pp. 10–21). A lack of coordination and information, due to damage to communications infrastructure, meant that the authorities were slow to send relief to some of the most severely damaged areas in the first few days. In response, the local government quickly set up an Earthquake Branch and Reconstruction Department to coordinate relief and reconstruction work (Marcussen, 2022, pp. 49–71, 304).

Just over one year later, the tremor that rocked the densely populated garrison city of Quetta in the early hours of 31 May 1935 was to be colonial India's last major earthquake. Quetta nestled in a mountain valley amidst the high desert region of India's northwestern frontier (now in Balochistan Province, Pakistan). Owing to its position on the strategic and trade route to Kandahar in Afghanistan, Quetta hosted Indian and British troops and their families, Indian civilians (largely immigrants from the neighbouring plains areas of northwest India) who sold goods and services to the garrison, local Pashtuns, and cross-border merchants. Although less powerful than the Bihar earthquake, the Quetta shock killed at least 30,000 people.

Here, unlike in Bihar, the government's response was military-led. The Quetta garrison was home to about 12,000 British and Indian soldiers. A combination of better building standards and local geology meant that most troops in the military Cantonment survived, while much of the civil administration, including many administrative officials and nearly the entire police force, was lost or incapacitated. The military therefore took charge of the emergency response. On the first day, troops dug for survivors, beginning in the Cantonment and the British-dominated Civil Lines, before moving on to the Indian-populated and badly damaged *bazaar*. On the same day, the military organised a 'refugee camp' on the city's racecourse, which eventually housed 10,000 people, and set up field hospitals (Pinhey, 1938). The authorities then began an evacuation programme, using an unbroken rail link back to the plains. Within two weeks they transported 31,500 people to Punjab and Sindh (Anonymous, 1935).

Taking action in the face of major earthquakes was a test of the colonial state's legitimacy in the context of changing ideas about government responsibility for acute natural hazards. The Indian state had previously been barely prepared to admit any responsibility for disasters triggered by natural hazards, as the Bengal government's lethargy after an 1876 cyclone showed (Kingsbury, 2018, especially ch. 3). By contrast, when a huge earthquake struck a sub-Himalayan hill area in northwest India in 1905, killing around 20,000 people, the provincial administration organised temporary shelters for the newly homeless and food supplies for the hungry (Government of Punjab, 1905, p. 1). This change in practice indicates the developing sense that the colonial state had a responsibility for the material condition, and indeed lives, of its subjects. The growth of that idea owed much to the intensive criticism that the government had received over its handling of the devastating, recurrent, and lengthy famines of the second half of the nineteenth century. By the 1910s, the prevalence of acute hunger in India had become part of Indian nationalists' critiques of colonial rule, and a public outcry in Britain over famines in both India and Ireland put pressure on the imperial government in London (Vernon, 2007, pp. 41–54).

Earthquake response owed something, too, to the established pattern of flood response in rural and urban settings (D'Souza, 2006a; Weil, 2006; Misra, 2017; Bhattacharyya, 2018; Saikia, 2020). The administration in Lower Burma, for example, routinely used the institutional and financial architecture of famine relief works to employ villagers to rebuild embankments that rising rivers had washed away, providing employment to help compensate for crop losses (Commissioner Irrawaddy, 1897; Deputy Commissioner Moben, 1905; Deputy Commissioner Pyapon, 1939; Deputy Commissioner Maubin, 1940). By the mid-twentieth century, then, responding to hazard-induced disasters was a matter of routine for the colonial state—part of the social contract, in Pelling and Dill's terms—even if major earthquakes were anything but commonplace.

Nationalists in Bihar

How did the nationalist movement, spearheaded by the Indian National Congress, respond? We know from other contexts that political actors seek to exploit crises to further their own aims (either protecting or contesting the status quo in a political system) partly by

framing contesting crisis narratives (Boin, 't Hart, and McConnell, 2009). The state was certainly worried. The Viceroy, the British head of the Government of India, issued instructions to Bihar's provincial government to ensure that 'supporters of subversive movements' did not gain a footing there 'on the pretext of undertaking relief measures in connection with the earthquake' (Home Department, 1934). One important Congress leader, Jawaharlal Nehru, did repeatedly and publicly criticise the government's earthquake response (Government of Bihar and Orissa, 1934a; Nehru, 1972, pp. 187–189, statement to press at Allahabad, 24 January 1934). But Nehru was soon imprisoned by the colonial authorities for other reasons. That left Rajendra Prasad, a senior Congress leader and major North Bihar landowner, to head the nationalist response. The historian Marcussen (2022, pp. 130–131) assesses the Congress-coordinated relief response as more effective than the government's in some areas.

Rather than mobilise anti-state agitation against the state's shortcomings, however, Prasad chose to further Congress's political aims by using earthquake relief to demonstrate its credibility as a government-in-waiting (Marcussen, 2022, p. 97). To this end, Prasad, and Congress's spiritual figurehead Mohandas K. 'Mahatma' Gandhi, set the tone for a cordial relationship with the government. After establishing a Bihar Central Relief Committee, the two men encouraged volunteers to engage officials through 'respectful co-operation' rather than making political capital of the disaster (Government of Bihar and Orissa, 1934g). This built on precedent. In 1927, for example, after floods left thousands destitute in western India, Congress had created an emergency relief organisation with 2,000 volunteers. According to its own narrative, Congress cooperated with government officials without 'politics [or] preferences' to distribute relief (Sitaramayya, 1935, p. lxx, Appendix VII). Cooperation with officials was in keeping with its leaders' emphasis on the organisation's role in addressing economic and cultural inequalities, as well as anti-colonial politics. Relief work after natural hazards was part of Congress's social programme.

The party line evidently quelled any potential large-scale anti-government activism in Bihar. Not everything was rosy: there was mutual suspicion and friction between officials and nationalist relief organisations in Bihar (Marcussen, 2022, pp. 101–118). Provincial officials reported two months after the earthquake that some Congress workers were spreading 'alarmist' reports about the possibility of famine and epidemics, and one Congress activist later remembered tension between volunteers and officials (Government of Bihar and Orissa, 1934c; Ali, 1970, pp. 24–6). However, officials more commonly reported that nationalists had suspended political work (Government of Bihar and Orissa, 1934b, 1934e). By May, political attention in Bihar had moved on to other matters, such as inter-community violence and labour unrest. Further references to earthquake relief work made no mention of any political ramifications (Government of Bihar and Orissa, 1934d, 1934f). If there had been a real window for a political focus on the earthquake, it closed quickly. The relationship between the government and nationalists in this instance demonstrated the possibilities for collaboration, or at least mutual non-interference, that a major hazard event could produce. Collaboration prevented a potential tipping point from crystallising in the short term, even if the Indian National Congress might have gained longer-term political benefits from its image as a constructive player in disaster relief.

Repression after Quetta

By contrast, the colonial state's response to the Quetta earthquake prompted open dissent from nationalists and, in turn, repressive state action. Uniquely among late-colonial earthquakes, the Quetta response was based on a suspension of the normal legal framework. On 1 June 1935, within 48 hours of the earthquake, the head of the civil administration in British Balochistan informed the central government that he had authorised General Henry Karslake, the local army commander, to declare martial law owing to reports of looting. The central government agreed that martial law should continue until the civil authorities were able to resume charge again (Cater, 1935; Political Branch, 1935c). Quetta was the only sudden-onset natural hazard in twentieth-century India, as far as we know, which prompted the colonial government to invoke a state of exception to meet an apparent crisis of governance. The form of the exception, military rule, was usually associated with a political crisis rather than a hazard-driven disaster. The most notorious proximate example was the brutal suppression of dissent in Punjab in 1919 (Wagner, 2016). Quetta, therefore, saw the state shift into a mode of governance that was usually employed to suppress freedoms rather than save lives.

The Quetta earthquake response became controversial among nationalists. One source of anger was a cordon around the city, enforced by fences and troop patrols, which prevented anybody from entering without official sanction. The authorities claimed that they had imposed the cordon for public health reasons (Situation Report #10, 12 June 1935, in Bureau of Public Information, 1935b, p. 6). Most of the available official confidential evidence partly supports this claim, although it is patchy and retrospective (Anonymous, 1935; Karslake, 1935; Willingdon, 1935a). But correspondence between the Viceroy and London implied that Gandhi, at least, was kept out of Quetta for political reasons (Willingdon, 1935b; Zetland, 1935). Whatever the reason, one result was that volunteer relief parties and concerned relatives who attempted to travel up from the plains were turned back at railway stations. The authorities also evacuated most civilians back to their districts of origin within two weeks of the earthquake. Officials claimed that the evacuations were intended to prevent a bigger crisis, which could follow supplies of food, water, and medicines running out in an isolated outpost like Quetta (Bureau of Public Information, 1935a).

Nationalists and some newspapers argued instead that the cordon was designed to keep Quetta under military control. Prasad had again formed a Central Relief Committee, but neither he nor other nationalist leaders were permitted entry to Quetta (Public Branch, 1935a, 1935b, 1935c). At the end of June, Prasad criticised the military at a public meeting in Punjab, the homeland of many former Quetta residents. He contended that it had refused volunteers' offers of assistance for no good reason. The army, he said, had switched from digging for survivors to salvaging property much too early, leaving numerous people to die under the rubble when experience in Bihar had shown that they could have been saved even days after the main shock (Political Branch, 1935b). Later anti-government statements pressed similar themes (Political Branch, 1935a).

The authorities responded by suppressing adverse press comment, facilitated by coercive legislation. The Indian Press (Emergency Powers) Act of 1931 enabled provincial governments to demand security deposits from newspapers. Newspapers could forfeit

the deposits if the authorities judged them to have brought the government into disrepute. By 13 September 1935, according to official figures, 17 publications had faced demands for security deposits totalling INR 22,500. Six newspapers actually forfeited them (Legislative Assembly of India, 2–16 September 1935, pp. 978–9), incurring financial losses which were designed to discourage free expression.

The use of repression in response to nationalist criticisms of colonial earthquake management was not surprising. Wood and Wright (2016) have shown that authoritarian regimes, a descriptor which fits colonial India, tend towards stepping up repression following disasters. Across the empire, British colonial authorities routinely suppressed dissent through coercive laws and direct force (Dwyer and Nettelbeck, 2018). In India, particularly the northwest regions, which included Quetta, the intensive use of summary violence in response to civil disturbances—even those that existed largely in officials' imaginations—was routine (Marsden and Hopkins, 2011; Leake, 2016; Condos, 2017).

The more surprising thing is that Quetta was the only example of the colonial state's use of repression in an attempt to control earthquake politics. We have seen that colonial officials in Bihar chose to work with the Indian National Congress rather than against it. Nineteen years earlier, in April 1905, officials had also worked closely with volunteer organisations (Dev Samaj, 1905). To help explain the propensity for cooperation rather than political conflict after major hazards, we now return to Bihar in 1934 to examine some deep-rooted areas of agreement between colonial officials and nationalists.

Relief funds and the politics of rehabilitation

In the medium term, the provision of 'humanitarian' relief proved central to the preservation of political stability and the foreclosure of tipping points. It complemented the state's shorter-term strategies of alternating cooperation and repression. After both earthquakes, the Government of India set up Viceroy's Relief Funds, which took donations from private individuals, businesses, and governments in India and abroad. The funds followed the tradition of transnational humanitarian fundraising in the British Empire, which had begun with the 1840s Irish Potato Famine, developed throughout the later nineteenth century, and intensified after the First World War of 1914–18 (Baughan, 2012; Götz, Brewis, and Werther, 2020). Relief funds were not part of government budgets, but officials had key decision-making powers and used them to help restore the socioeconomic, and therefore political, pre-earthquake status quo ante. As the most substantial form of relief assistance for survivors, the funds materially shaped recovery, and their priorities reflected those of the state and key collaborators.

The chief principle of the relief funds was to protect the established socioeconomic order. They did so by prioritising the recovery and reconstruction of private property, which formed the basis of economic and social transactions. While colonial law did not fully enshrine liberal individualism, prioritising the collective rights of joint families over those of individuals, for example, it did attempt to establish property rights and foster markets (Roy and Swamy, 2016, chs. 4, 7–8). Relief fund policy reinforced the state's privileging of private property by attempting to restore some of the property that people

had lost. This was intended to have both material and symbolic effects, addressing the state's managerial functions while directing post-earthquake recovery in ways that supported the preservation of state power.

In January 1934, soon after the earthquake, the Viceroy appealed to the public in India and Britain for donations to the Bihar fund. By the time the fund stopped taking donations in October of that year, it had raised a little more than INR 6 million (Brett, 1935, p. 80). The fund made some provision for the poor, such as through grants to people who lacked the security to take out emergency loans. But its managers targeted middle-class earthquake survivors for special assistance. The fund committee offered, for instance, free assistance to people who could not afford to employ labourers but whose social status would be endangered if they undertook manual labour themselves (which was associated with lower classes and castes in India). The poor, by contrast, were expected to construct their own dwellings. This help was therefore explicitly geared towards the recovery of the social status quo ante, not just the survival needs of recipients. Marcussen (2022, pp. 192–231) has highlighted the middle classes' centrality to both official and non-official relief strategies. Agreement on the importance of middle-class survivors, and the socio-economic order of which they were part, helps to explain the lack of political agitation concerning relief policy.

In proportionate terms, the amount that the Bihar fund allocated to middle-class survivors was small: only INR 230,000 for middle-class housing, for example, out of a total of INR 2.7 million for house reconstruction, and a further INR 160,000 for miscellaneous middle-class relief (Brett, 1935, pp. 62–5, 101). But the middle-class population was itself small, and the allocations to it were partly symbolic due to its importance to colonial governance. Merchants formed an essential intermediary layer between primary producers and external markets, and 'men of property' were central to the colonial state's plans for an expansion of representative government: a commission on constitutional reform in India recommended that because of the damage the earthquake had done, the minimum level of wealth for an individual from Bihar to qualify as a voter in future elections should be lower than in other provinces (Joint Select Committee on Indian Constitutional Reform, 1934, p. 73).

Concern for the middle classes had currency beyond the administration. Newspapers assumed that property owners had suffered more than poor people because they had had more to lose before the earthquake (*Times of India*, 1934d). One member of the partly elected Bihar Legislative Council, Birendra Nath Chakravarti, went so far as to contrast the condition of the poor who (he claimed) had found post-earthquake employment at high wage rates, with the 'simply hopeless and pitiable' position of the middle classes (Bihar and Orissa Legislative Council, 1934, p. 172). Other council members, such as Chandreshvar Prashad Narayan Sinha and Lalita Prashad Chaudhuri, made similar points.

The fortunes of middle-class survivors also preoccupied the Congress leadership, who had set up their own fund under the Bihar Central Relief Committee. Administered by Rajendra Prasad and intended to rival the Viceroy's Relief Fund, the Congress fund raised a little more than INR 3 million by November 1934 (Brett, 1935, p. 82). This was around half of the official fund's value, but was gathered without the help of government apparatus.

Prasad and Gandhi emphasised the acute suffering of the poor. But Gandhi also said, after visiting Bihar, that 'middle class men' had been hardest hit (*Times of India*, 1934c). By February, once the rescue phase was over, the fund's managers turned their attention to medium-term recovery. They paid for the reconditioning of agricultural land, clearing of wells, and preparations to guard against possible famine and flood. By the following August, they were also preparing special lists of middle-class families that needed recovery assistance (*Times of India*, 1935b). Like the Viceroy's Relief Fund, the Congress fund prioritised wealthier survivors, supported the existing property order, and aimed to recover the status quo ante rather than induce change.

The Congress leadership's support for the property order was not a given. Nehru, a powerful leader associated with the organisation's socialist wing, toured parts of Bihar after the earthquake. He called middle-class complaints about relief 'wholly unjustifiable' in comparison with the acute needs of the poor, who risked starvation (Nehru, 1972, pp. 193–194, interview to press, 6 February 1934). He might have pressed Congress to a more radical line had he not been imprisoned soon afterwards. But during this period the Congress's conservative wing was ascendant. Prasad, who was that year's president, was himself a major landowner. While the colonial government pushed Congress to allocate more relief to middle-class survivors in September 1934 (Marcussen, 2022, p. 134), the organisation demonstrated broader sympathy with preserving unequal socioeconomic relations. The party's Working Committee even resolved, in another context, not to promote 'class war' or confiscate private property (Indian National Congress, 1934, pp. 183–184).

The Viceroy's Relief Fund for Quetta in 1935 further revealed shared socioeconomic priorities among colonial officials and nationalists despite nationalist criticisms of the military's post-earthquake actions. Because most of the civilian population was evacuated soon after the earthquake, there was little question of re-establishing civil society in Quetta within the time frame of the fund's operation. Yet the fund again aimed broadly to restore the pre-earthquake social and economic status quo. Here there was no widely-held assumption that the middle classes had suffered worst, since the badly damaged *bazaar* was mainly home to poorer Indians. Instead, in the words of the government's public-facing report on the earthquake, the calamity 'was a great leveller: wealth and position tumbled to the dust' (Pinhey, 1938, p. 49).

Such rhetoric presented the earthquake as the terminal point in the material life of the old Quetta. The city needed to be imagined anew, in the kind of *tabula rasa* scenario that Klein (2007) identifies as characteristic of post-disaster situations. Unlike in Klein's example of globalised neoliberal capitalism, there was no insurgent ideology in Quetta that captured the relief and reconstruction process. Instead, the fund's managers decided to help survivors re-establish, but not improve, their economic position. Thus, as Pinhey (1938, p. 49) put it, a tailor was given a sewing machine but the owner, not the driver, of a horse-drawn carriage would be given a carriage and a horse. The fund managers' concern for the restoration of pre-earthquake wealth reflected the state's role as defender of the property-based socioeconomic order.

Other uses of the Viceroy's Relief Fund more directly privileged groups that supported state authority. Indians who worked for government departments could request extra

monies in cases of 'acute hardship' (Finance Department, 1935b; Additional Political Agent, Quetta, 1936). But the most notable group to receive special help from the fund was White Britons. About 800 women, children, and injured men were given free passage by ship from Karachi back to Britain, where the fund continued to support them (Finance Department, 1935a). Support to Britons was necessary for the colonial government to retain the goodwill of its most important, but often overlooked, collaborators: the British themselves, in India and elsewhere. In the globalising communications context of the twentieth century, imperial projects in and beyond India depended on public opinion in the metropole as well as control over colonised populations (Reinkowski and Thum, 2012, p. 9). In particular, the imperial enterprise needed the support of the UK Parliament, and MPs (Members of Parliament) whose constituents had relatives in India were full of concern for Quetta's British survivors (House of Commons, 1936a, 1936b).

Nationalist critics drew some attention to the Quetta relief policy's favouring of Europeans over Indians (Legislative Assembly of India, 1935a). However, a more common, and more forcefully put, criticism was that the authorities had done too little to enable individuals to recover their own property, speaking to a sense that the state had contravened an important element in an imagined social contract based on the property order (Legislative Assembly of India, 1935b). Neither Congress nor vernacular newspapers appeared to question seriously the priority that the Quetta fund accorded to middle-class property owners, indicating—as in Bihar—a broader support for the property order among nationalists and perhaps beyond.

Narratives of exogenous shock

Another thing that leading nationalists and colonial officials agreed about was that nature was to blame for the earthquake disasters. This accord was politically salient because it formed the basis for a common narrative that cast earthquakes as exceptional, exogenous shocks. Narratives shape post-disaster politics by generating public beliefs about the cause, scale, and implications of a disaster and its meaning for the future (Boin, 't Hart, and McConnell, 2009; Venugopal and Yasir, 2017). The interwar state in colonial India had limited capacity or credibility to influence public opinion, and was reluctant to make full use of new communication technologies such as radio broadcasts (Zivin, 1994, 1995; Pinkerton, 2008; Mazzarella, 2009; Agathocleous, 2021). But in the case of earthquakes' natural origins, many official and nationalist narratives carried the same message.

A week after the Bihar earthquake in January 1934, provincial Governor Sir James Sifton gave a public speech at Patna about 'the terror and the havoc', which had occurred 'when the forces of nature appeared to break out of control' (Wilcock, 1935, p. xxxvi, Appendix IV). Sir Henry Craik, a government representative in the national Legislative Assembly, made a similar point when he mused to the chamber after the Quetta earthquake: 'How puny a creature is man when confronted with these terrible forces of nature' (Legislative Assembly of India, 1935b, p. 1,346). Each of these statements located causality in natural processes. In the longer term, the Geological Survey of India led the broad official discourse on earthquakes, publishing reports on each one (West, 1935; Officers of the Geological

Survey of India, 1939). These built on established practices of official scientific reporting (Oldham, 1899; Middlemiss, 1910). They emphasised cumulatively that the causes of disaster lay in natural processes that should be understood through science. Newspaper articles reported geologists' findings, disseminating scientific understanding of earthquakes to the public (Anonymous, 1897, pp. 322–333; *Times of India*, 1935a).

Among Indians there were diverse characterisations of earthquakes, some of which located their causes in the motion of heavenly bodies and reflected a longer-standing trend of astrological predictions (Marcussen, 2017). Gandhi attributed the Bihar earthquake to the 'sin' of extreme social and religious inequality known as untouchability (Paranjape, 2011; Lal, 2015). Prasad, however, used his platform as Congress President to articulate a naturalistic vision. During his presidential address to the Bombay Congress later in 1934, for instance, he described Bihar as having 'been particularly selected as the victim of Nature's wrath' (Prasad, 1934, p. 2). Other nationalist narratives stressed the apparently exogenous character of earthquakes through attention to their suddenness, which underscored the way that earthquakes apparently sat outside of normal life and social processes. An example was Bhogaraju Pattabhi Sitaramayya's (1935) history of Congress (published by the Working Committee following editorial input from Prasad), which associated the earthquake's suddenness with its natural origins. 'No cold figures', he wrote, 'can give a true picture of what Nature had miswrought in a few minutes in Bihar' (Sitaramayya, 1935, Appendix VIII).

A naturalistic discourse on earthquakes was therefore an important area of agreement between Congress—or at least Prasad's ascendent school of thought—and colonial officials. By not differentiating between the hazard and the disaster, 1930s earthquake narratives ignored the social production of vulnerability to which both colonial policies and the accumulation of wealth by landlords like Prasad had contributed. This in turn limited the potential for earthquakes to generate serious debate on the embedded inequalities that left some Indians far more exposed to shocks and less ready to recover than others. Like special concern for middle-class recovery, nature narratives helped to drive the centre of gravity in earthquake politics towards the status quo ante and prevent tipping points in social contracts from emerging.

Contingency, cooperation, and postcolonial legacies

Historical and spatial contingency played a major role in producing the earthquakes' political outcomes. The Bihar earthquake's timing and location placed the conservative Prasad, with Gandhi's support, in prime position over colleagues in the Indian National Congress who had different priorities. Despite high levels of mutual mistrust between Congress and the government, they agreed on the natural origins of the earthquake disaster and on the aims and scope of earthquake relief. In Quetta, the local physical geography meant that the state could exercise strong authority in the isolated city while dispersing refugees across other regions. If more survivors had remained in and around Quetta, accessible to nationalist workers and potentially amenable to campaigning, it is possible that the earthquake could have begun a causal chain in which a hazard helped

bond survivors together through shared experience. This could then have acted as a trigger event that unleashed pent-up grievances against the state, as Apodaca (2017) has theorised in another context. This was not, however, the case. In both Bihar and Quetta, the contingencies of the aftermath combined with the pre-earthquake structure of society and economy to orient the major political forces towards an approximation of stasis rather than an acceleration of change.

Yet, despite the divergent political outcomes of the Bihar and Quetta earthquakes, they illustrated some broader areas of continuity throughout the late colonial period. First, the decision of Congress leaders not to make earthquake management central to their rhetorical attacks on the government was a reasonable strategy. The colonial state had already suffered declining legitimacy since at least the end of the First World War due to its use of violence in repressing political demonstrations, most notoriously by massacring hundreds of unarmed civilians at Amritsar in 1919 (Wagner, 2019). More broadly, the global recession of the early 1930s had reduced Indian per capita incomes by up to 15 per cent (Washbrook, 2012, p. 48) and increased the scope for Congress to position itself as a rival to the government's political authority. Historians have termed this scenario a 'crisis of the colonial order' (Metcalf and Metcalf, 2012, ch. 6). Nationalists had no shortage of examples of the state's moral and material failings to point to, and many of them had broader and longer-term relevance to Indians who lived far from the damage zones.

Second, the state's disaster policies were transient and reactive. They were not supposed to last, and India's colonial authorities never articulated disaster response as a coherent 'reason of state' (Nandy, 1988). The men appointed as special Relief Commissioners for Bihar and Quetta returned to other duties, and their offices were dissolved. The relief funds wound down. Congressmen in the National Assembly tabled a motion in September 1935 to hold an inquiry into the military's handling of the Quetta disaster, but pro-government members blocked it (Legislative Assembly of India, 1935b). This prevented earthquakes from having a large-scale or lasting effect on the policy agenda. Some figures, such as Karslake (1935) in Quetta, collected their thoughts on the lessons of their own earthquake experience for future preparedness, but I have not found evidence of formal mechanisms for embedding learning to produce policy change. At a provincial level, the Bihar and Orissa Legislative Council did pass legislation that provided for reconstruction loans (*Times of India*, 1934e) and enabled the provincial government to take over administration of affected municipalities (*Times of India*, 1934a). Beyond this, only government geologists continued focusing systematic attention on earthquakes, and their devastating potential impacts, returning them from politics to the domain of science and 'nature'.

This transience was not accidental. The goal of the disaster state was only to mount a holding action against cataclysmic change. Continuity was instead provided by the social milieu that the state sought to reinscribe, based on hierarchies that officials considered to be politically stable, the (limited) capitalism of the colonial economic system, and the discursive framing of disaster as a techno-natural problem. And yet, the idea that the state had at least some obligation to help the general population during disasters had become well-established, making it likely that the disaster state would re-emerge.

Its abysmal failure to do so during the Bengal famine of 1943–44 showed how far the context had shifted over the following decade, as the British and Indian wartime governments prioritised food exports to allied armed forces over Indians' survival. This disaster, unlike earthquakes, contributed clearly to the final destruction of the colonial state's claims to popular legitimacy (Mukherjee, 2015). After independence in 1947, the Indian state prioritised national food security (Siegel, 2018) and especially famine prevention with notable success. The leaders of independent India shed their colonial predecessors' ideological reluctance to intervene in food grain markets, and the democratisation of India's political system made leaders much more accountable for famine prevention (Drèze, 1995).

By contrast, the colonial state's approach to acute hazards continued to influence independent India's disaster management practices—Pakistan, Bangladesh, and Myanmar, British India's other successor states, fall outside the scope of this paper. Colonial legacies in other areas of post-independence environmental policy, particularly water and forest management, are easier to trace due to the continuity in the institutional actors who were permanently involved (Sivaramakrishnan, 1995; Guha, 2000; Mehta, 2000; D'Souza, 2006b; Rajan, 2006; Haines, 2013; Amrith, 2018). But Kapur (2010) has argued that the colonial framing of disasters as 'natural' continued to shape a technical and reactive approach. Up to her time of writing, this remained ad hoc, and focused on 'calamity relief' rather than integrating disaster resilience into development planning (Kapur, 2010, p. 124). Chhotray (2014) has shown that the Indian state accepts that citizens have a moral but not justiciable right to government aid during calamities: the authorities ought to help people, but there is no legal imperative to do so. This echoes the colonial discourse of the state as a saviour of nature's victims, which delivered aid out of concern for its subjects but not because of a government's obligations to citizens.

More specific aspects of independent India's disaster relief have echoed colonial approaches, too. The 1993 Latur earthquake in Maharashtra furnishes an example. A programme for housing provision, designed and implemented jointly by government, non-governmental organisations, and international agencies, allocated different sized houses to displaced families based on a household's pre-earthquake landholdings. Families who owned more land were allotted bigger houses (Jigyasu and Upadhyay, 2016). Like the colonial relief funds, this programme aimed to restore survivors' pre-disaster social and economic status relative to one another. In Ladakh, a militarised region which shares a contested border with China, the army still shapes local disaster governance according to security priorities, as the colonial army did in Quetta (Field and Kelman, 2018; Field, 2020).

India has recently, in principle, systematised acute disaster management through the creation in 2005 of a National Disaster Management Authority. The actual disaster governance landscape varies at state level. Gujarat, for example, set up a State Disaster Management Authority in response to the 2001 Kutch earthquake (Simpson, 2013). In Bihar, a centralised state government is the key actor, with relatively little room for international organisations, but it faces many challenges in implementing risk reduction policy, including variable levels of interest among the state's political leadership (Jones, Oven, and Wisner, 2016). Outside of the largely technocratic work of India's disaster management agencies and associated policy communities, earthquakes are not a focus of politics or indeed of

everyday life. Simpson (2020) found that even in the town of Anjar in Kutch, the same part of which was destroyed by earthquakes in 1819, 1956, and 2001, there is no strong community memory of earthquakes, and many individuals who survived in 2001 forgot much of their own experience of it over the subsequent decade (Simpson, 2020). India's disaster risk reduction activity today is not as transient as it was under colonial governance, and policymakers in many other countries also struggle to pay full attention to hazard-driven disaster risk in between focusing events. But the legacies of the colonial state's reluctance to prioritise disaster risk reduction do continue to be felt in India.

Conclusion

This study has highlighted the need for nuanced analysis to tease out the conditions under which tipping points do or do not emerge, and particularly the centrality of the balance between circumstance and structural tendencies. Each element of choice-making by colonial officials and the Indian National Congress leadership was highly contingent. The earthquakes could have readily produced different political outcomes had their timing or location been different. What they had in common, though, was the broader social and political context of 1930s India. The tendency of earthquake politics to revolve around recovery of the status quo ante highlighted a lack of appetite among key political actors to use the earthquakes as a platform for substantial change. Moreover, earthquakes' potential to act as focusing events that revealed underlying policy and development failures was limited because several decades of mass nationalism had already articulated strong and consistent arguments about the colonial state's practical and moral failings. The localised effects of earthquakes, which make them ideal candidates to be potential focusing events in policy studies scholarship, can actually reduce their national political salience when other issues have already seriously undermined a state's claim to popular legitimacy, and social contracts are in deep crisis. A broader lesson can be drawn here, even if the primacy of states as disaster risk managers or sponsors of resilience cannot be taken for granted in the neoliberal present (Jones et al., 2014). Rather than looking for instances of transformative change, it might be more productive to examine how and why governments and societies have frequently responded to major hazards by limiting social, political, and economic change.

This paper has implications for how we understand social contracts in a colonial context. The Indian colonial state was faced with major earthquakes that broke down most of the exchanges between state and society which constituted the practiced social contract. In response it tried to prevent the legal-institutional social contract from changing, while demonstrating that it was fulfilling elite projections of an imagined social contract. The different political outcomes of each earthquake were strongly influenced by the fact that Congress could participate in the practiced social contract after the Bihar earthquake. That in turn fed into its projection of an imagined social contract between nationalists and the people, in which Congress itself appeared as a legitimate governing authority. It did not challenge the legal-institutional social contract, precluding a

potential tipping point from emerging in the conflictual relations between state and non-state actors. Further research might however reveal more about the ways in which the Indian National Congress furthered construction of imagined and practiced social contracts in which it displaced the colonial state.

In Quetta, by contrast, the authorities' exclusion of nationalists from the practiced social contract caused the latter to challenge the legal-institutional social contract. Congress leaders tried to open space to press for policy change, by seeking to influence the military authorities' ongoing relief response and by seeking a formal review of the government's emergency management. Here a potential tipping point did emerge, but did not crystallise. At the disaster site itself, martial rule and the civilian government's subsequent use of emergency powers prevented volunteers from effectively organising. At the national scale, Congress efforts in the legislature did not succeed in institutionalising discussion of earthquake policy, and its own political agenda quickly moved on. The areas of disagreement between the Congress leadership and the government were perhaps too narrowly confined to the specifics of the situation in Quetta city, which rapidly changed, to constitute long-term terrain for political conflict.

The political dynamics of disasters in colonial settings shared common features with those sited in contemporary violent conflict regions, where social contracts encapsulate citizen–state tensions rather than implicit agreements (Siddiqi, 2018; Siddiqi and Canuday, 2018). This is particularly true in many formerly colonised countries, where conflicts are often direct results of the inter-group tensions and contested borders which colonialism fostered (Mbembe, 2001; Leake and Haines, 2017). Researching colonial disasters can advance broader disaster scholarship by shedding light on both the historical production of risk and vulnerability in specific regions, and on the dynamics of social contracts in fraught settings.

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Data availability statement

The data that support the findings of this study are available from the sources listed in the bibliography. Restrictions apply to the availability of these data, which were utilised according to copyright owners' terms of use, for this study.

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