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## Notes from Underground: Lisbon after the Earthquake

I arrived at Lisbon just in time to hear the house crack over my head in an earthquake. This is the seventh shock that has been felt since the first of November. They had a smart shock on the 17th of this month, but the Connoisseurs in earthquakes say, that this last, though of shorter duration, was the most dangerous, for this was the perpendicular shake, whereas the other was the undulatory motion.

Robert Southey, *Letters Written during a short Residence in Spain and Portugal* (2 vols, Bristol, 1797), i. 260

The earthquake and tsunami which devastated the city of Lisbon on 1 November 1755 have come to occupy a canonical place in Enlightenment historiography, the transformative nature of the episode's wide-ranging religious, philosophical and scientific repercussions having served to define it as the first great test of emerging Enlightenment values. 'Perhaps the demon of terror had never so speedily and powerfully diffused his terrors over the earth', as Goethe recalled in the opening pages of *Dichtung und Wahrheit* (1811), and he credited the universal shock of the earthquake with the unprecedented outbreak of scholarly attention that was soon being paid to the neighbouring, if quarrelsome, discourses of theodicy and natural philosophy.<sup>1</sup> Within a year of the event, Immanuel Kant had published a trio of natural-philosophical essays on the earthquake's seismic significance, in

which he argued that the occasional tremor was the price that mankind was obliged to pay for the otherwise beneficial subterranean forces that generated hot springs and mineral ores, while for Voltaire, notoriously, the episode proved 'the sad and ancient truth, recognised by all men, that evil walks the earth', a reflection that prompted Adorno's comment (in the course of his essay 'After Auschwitz') that 'the earthquake of Lisbon sufficed to cure Voltaire of the theodicy of Leibniz.'<sup>2</sup> As Susan Neiman observed, in her introduction to *Evil in Modern Thought* (2002), 'the eighteenth century used the word *Lisbon* much as we use the word *Auschwitz* today . . . it takes no more than the name of a place to mean: the collapse of the most basic trust in the world, the grounds that make civilization possible.'<sup>3</sup>

But in spite of the centrality of the destruction of Lisbon to the history of the development of European thought, surprisingly little attention has been paid to the complex history of the city's physical reconstitution in the decades following the earthquake, and even less to the series of contested meanings, memories and reflections that the radical redesign of Lisbon provoked, both among its surviving citizens and its stream of foreign visitors.<sup>4</sup> Southey, for example (as will shortly be seen), was not alone in feeling that the once golden city had suffered a secondary disaster in the form of its austere rectilinear reconstruction, while Henry Matthews, the

travelling invalid, was also not alone in viewing the rebuilt city as seismically doomed: 'repeated shocks have been felt of late years', he reported, 'and to an earthquake it may look, as its natural death.'<sup>5</sup> This was, in fact, a widely-held view of a city that, though it had been rebuilt to a novel antiseismic design, continued to be shaken by powerful aftershocks for decades after the event.

This paper sets out to explore the competing imaginative geographies of Lisbon that emerged in the wake of the city's reconstruction, spanning the technological optimism of the planners and surveyors, the theological objections of certain sections of the clergy, and the aesthetic reactions of later foreign travellers, for whom Lisbon remained an enduring symbol of violent subterranean transformation, both physical and philosophical.

#### THE POMBALINE RECONSTRUCTION

At around 9:40 a.m. on All Saints Day, 1755, a powerful offshore earthquake with a likely epicentre some 200 km southwest of the city, suddenly and noisily reduced much of Lisbon's elegant fabric to rubble. As a series of fires broke out among the ruins, caused mainly by the large number of votive candles that had been lit to mark the religious holiday, hundreds of survivors made their way down to the Terreiro do Paço ('Palace Terrace'), Lisbon's spacious ceremonial square, on the north shore of the Tagus estuary. Some forty minutes later, however, a series of powerful tsunami waves (precipitated by the submarine earthquake) funneled through the neck of the estuary and surged into downtown Lisbon, drowning many of the refugees who had sought sanctuary in the riverside square. The fires, meanwhile, had coalesced into a powerful crescent of flame that burned for a week, consuming most of what was left of the ruined city centre. Estimates of casualties range from between 15,000 and

90,000 dead, from a population of just over a quarter of a million.<sup>6</sup> 'It is not to be express'd by human tongue how dreadful and how awful it was', as a letter from an eyewitness described the scene: 'Terror in beholding frightful pyramids of ruined fronts, some inclining one way, some another; then horror in beholding dead bodies by six or seven in a heap, crush'd to death, half buried and half burnt; and if one went through the broad places or squares, nothing to be met with but people bewailing their misfortunes, wringing their hands, and crying: the world is at an end.'<sup>7</sup>

Within a matter of days, however, the survivors' mood had apparently changed, and though Lisbon remained 'one continued heap of rubbish and ruins', as a letter written on 20 November described it, 'notwithstanding that, they talk of nothing but rebuilding it.'<sup>8</sup> In fact the clearance process had already begun, under the energetic direction of Portugal's reforming first minister, Sebastião José de Carvalho e Mello (the future Marquis of Pombal), and by the end of the following summer most of the ruins of central Lisbon had been removed, leaving a flat, evacuated central area of some 200,000 square metres: Lisbon's ground zero. Since the alluvial soil beneath this low-lying area had been churned into unstable mud by the combined effects of the earthquake and tsunami, a consignment of 20,000 timber pylons was shipped down from Hamburg and hammered into the sodden ground as upright antiseismic stabilisers. The new streets and buildings of the *Baixa Pombalina* (as the new city centre would soon be known) would then be constructed, Venice-like, on a series of mortar boards fixed to the summits of this sunken northern pine forest.

But as the clearance continued into the 1760s, doubts began to be raised concerning the scale and cost of the planned reconstruction, as well as the scheme's wider moral foundations. In September 1760, for example, the Italian writer Guiseppe Baretti, on his way home to

Genoa after ten years in London, spent a week in Lisbon ('a city not to be rebuilt in haste', as he described it), at the end of which he sadly concluded that 'if half the people that have escaped the earthquake, were to be employed in nothing else but in the removal of that immense rubbish, it is not very clear that they would be able to remove it in ten years.'<sup>9</sup> He worried, too, where the materials for rebuilding the shattered city would be found: 'It is true, that the country round abounds with marble enough to build twenty Lisbons. But still, that marble must be cut out of the quarry, must be shaped, must be carried to town. And is all this to be done in a little time? and by people who have lost in the conflagration whatever tools they had?' And even were the city to be rebuilt in brick rather than marble, Baretti pointed out that 'the making millions of millions of bricks (even supposing the proper clay quite at hand) is not the work of a day. And kilns must be erected, and wood must be got to burn them. But where is that wood, in which I am told the country is far from abounding? And where are the thousands of brick-makers to make those numberless millions of bricks? Yet give them brick-makers, clay, and wood as much will suffice, where is the lime, the iron, and the other materials?' (Baretti, i. 102). As Baretti saw it, the destructive effects of the earthquake's seismic waves had radiated out across the whole of Portugal, supplementing the initial physical damage to the nation's capital with a comprehensive loss of manpower and organisation, while also extending underground to threaten the very raw materials, whether marble, brick, lime or iron that were necessary for the rebuilding. In fact the tirelessly repeated claim that the city 'is soon to be built over again, quite regular, quite fine, finer than ever it was', became for Baretti as much a symptom of the earthquake's violent assault on the collective reason of Lisbon's inhabitants as was the sight of the ruins themselves: 'indeed they [the survivors] give me no very high notion of

their common sense when they abandon themselves so much to their fiery imaginations' (Baretti, i. 101). The earthquake not only destroyed the city while disabling the nation's infrastructure, it also undermined the morale of the survivors themselves, leaving them in a state of helpless excitation.

As it turned out, however, Baretti need not have worried about the availability of marble or brick, since neither would be widely used in the rebuilding. The choice of materials, as well as of the design for the replacement city, were made by Pombal and his team of military engineers, following a lengthy consultation period, during which – according to the detailed minutes kept by General Manuel de Maia (Pombal's chief military surveyor) – a variety of historical precedents were discussed. These included the reconstruction of London after the fire of 1666; the rebuilding of Noto (Sicily) on a nearby area of safer ground, following its destruction by an earthquake in 1693; and the creation of Turin's rectilinear new town as an adjunct to the old city during the early 18th century (see Maxwell, 29–30). All these competing urban precedents were eventually rejected in favour of the more radical raze and rebuild approach, of the kind that Christopher Wren had proposed for London in the wake of the fire, but which had been overruled in favour of preserving existing street and property lines.<sup>10</sup> Pombal had been greatly impressed by Wren's vision of a resolutely mercantile city, with wide streets radiating from a large commercial piazza, with the new stock exchange at the centre, and Lisbon's rectilinear street plan, which began to be laid out in the early 1760s, owed much of its spatial grammar to the century-old London blueprint, featuring as it did a central commercial plaza (the Praça do Comércio, home to both the customs house and the newly-built stock exchange), as well as a sizeable grid of purpose-built, low-rise shophouses, ranged along a series of parallel streets with names that reflected the hierarchy of trades: Gold street,

Silver Street, Leather Street, and so on. In contrast to Wren, whose vision for London had been democratically overruled, Pombal was able to impose his radical redesign on Lisbon by virtue of having taken over the reigns of state from the traumatised Portuguese King, José I. Thus, among the consequences of the Lisbon earthquake was the advent of Europe's first modern dictator.

Pombal's choice of grid-plan design was of a kind already familiar from Spanish-built cities in South America, as well as from European new towns such as Turin, but Lisbon's new layout had also been designed to cope with the observed effects of earthquakes on buildings, as described in the numerous eyewitness testimonies that circulated for years after the disaster. In contrast to the maze-like arrangement of Lisbon's narrow pre-quake streets, the new rows were unusually widely spaced, in order to grant survivors of future earthquakes safe passage in the event of structural collapse, while each building itself was constructed around a light wooden frame known as a *gaiola* ('bird cage'). The antiseismic effectiveness of the *gaiola's* design had been tested by Pombal's military engineers, who had had a column of soldiers jump up and down around a half-scale model in attempted simulation of an earthquake. The results of the experiment – the first of its kind – indicated that a flexible wooden frame could withstand prolonged vibration better than any of the stone-built structures that had collapsed during the earthquake's early stages. The frames were installed throughout the *Baixa Pombalina*, with high brick walls erected between each property as a precaution against the spread of fire. Each building was then reinforced with stone, and clad with tile and stucco exteriors, produced to a uniform neo-Palladian design (see Maxwell, 28–35). Almost everything used in the building process, whether ironwork, wood joints, tiles or ceramics, was prefabricated off site, partly to speed up the building process, partly to create a

continuous, uniform architectural space, and partly as a means of encouraging Portuguese national enterprise, which had declined in the face of mass emigration to the gold and diamond mines of Brazil, as well as from the century-old economic stranglehold of the dominant British merchant communities in Lisbon and Oporto.<sup>11</sup> The overall effect was one of striking uniformity: 'Whole streets and adjoining squares were planned in a single sweep: there was no place for individual variation', observed major William Dalrymple in 1774; 'in the New City there is great attention to uniformity; and the houses, being built of white stone, have a beautiful appearance, though they are certainly too lofty for a place where earthquakes are still frequent, being four or five stories.'<sup>12</sup>

But in spite of the rapid pace of reconstruction, not everyone was pleased by the civic implications of Pombal's new urban design, the emerging layout of which featured some telling omissions: the Inquisition headquarters on the Rossio, for example, was never rebuilt (it was rumoured to have been the first city centre building to collapse); and neither were many of the city's ruined churches, most notably those of the Jesuit order (which Pombal had expelled from Portugal in 1759 on charges of financial impropriety), while the few that were rebuilt were forbidden to feature conspicuous towers or domes. Pombal's resolutely secular vision for the future of this most clerical of nations was thus given concrete architectural expression in the ground plan of Lisbon's new commercial centre – a factor which led to further conflict with sections of the priesthood already resentful that their spiritual exhortations had been insufficiently attended to in the aftermath of the disaster. Now it appeared that their previously powerful architectural presence was to be shunted into the margins of Pombal's post-quake version of the city, while in the case of the Jesuit order – responsible for some of the loudest

objections to Pombal's antiseismic designs – it was to be physically erased altogether. Pombal's conflict with the Jesuits culminated in the public execution of the Italian-born Jesuit priest Gabriel Malagrida in September 1761, for the crime of preaching against the reconstruction in a sermon on 'the real cause of the earthquake', a printed copy of which he pointedly sent to Pombal. In common with the majority of sermons that were prompted by the Lisbon disaster, Malagrida's began by denouncing all natural philosophical speculations on the geophysical causes of the earthquake, but it ended with the unusual demand that the heretical reconstruction of a city destroyed 'not by comets, stars, vapours and exhalations, and similar natural phenomena', but by the vengeful agency of God, be immediately abandoned in favour of the mass repentance of the survivors (Kendrick, 89). As far as Malagrida was concerned, Pombal's use of antiseismic technology constituted an heretical attempt to subvert divine providence in the form of future tremors – an argument analogous to the clerical objections to lightning rods that were also voiced throughout Europe during the 1750s and 1760s.<sup>13</sup>

The clergy was not the only group to protest against the physical diminution of its pre-quake presence in the city. The most obvious absence from post-quake Lisbon was the vast royal palace that had once dominated the city centre, along with the handsome riverside houses and mansions of the nobility. King José I, who had survived the earthquake by the lucky accident of being away from home on an All Saints' Day coach-ride with his family, vowed never to set foot in the city again – he relocated to his other royal palace in nearby Belem, where he spent much of his time in a marquee in the garden, refusing to sleep indoors for the rest of his life – gifting the old ceremonial Terreiro do Paço to Pombal and his surveyors, who eventually reduced it in size, built the stock exchange and government buildings where the

ruined palace had once stood, and renamed the new square Praça do Comércio ('Commercial Plaza'), symbolically effecting the city's post-quake transformation from a royal to a mercantile centre. The departure of the Portuguese royal family, however, put the Lisbon nobility at a distinct disadvantage, since 'if the king was prepared to give up prime real estate, then it would be difficult for anyone else not to do so' (Maxwell, 30). Unlike the seismophobic José I, 'a king without a capital', as he took to describing himself, many among the nobility were unhappy at the loss of Lisbon's pre-quake street and property lines, the ruins of their old mansions having been cleared by Pombal to create a space 'fit for a new middle class on whom national prosperity would depend' (Jack, 15).<sup>14</sup> Pombal's 'radicalism', as Malcolm Jack characterises the blend of anti-clericalism and economic nationalism that lay at the heart of his post-quake reforms, caused great resentment among the Portuguese nobility, but in 1758 the opportunity arose for Pombal to excise all opposition 'from the old aristocrats', when a group of leading conservative nobles plotted against the life of the king in a failed *coup d'état* (Jack, 17). Pombal's retaliation was brutal in the extreme, the public torture and execution of several members of the prominent Tavora family, along with the confiscation and destruction of their property at Belem, serving to tighten his grip on all aspects of the city's affairs, in which he remained in unopposed charge until the death of his patron, José I, in 1777. When the Duke de Chatelet visited Portugal just after José I's death, he stood at the site of the demolished Tavora mansion, where a pillar 'commemorating the crime' had been erected, the whole area 'sprinkled with salt, in order, as it was said, to prevent it from producing any thing.'<sup>15</sup> Even as the rest of the surrounding city was slowly being reinstated, the site was kept bare as a public reminder of the consequences of civic dissent.

## CITY OF DEATH \_\_\_\_\_

The gruesome executions which punctuated Pombal's reign did much to perpetuate Lisbon's reputation as a city of violent death. Although this idea was intensified by news of the earthquake, the notion long predated the disaster, having chiefly arisen from the notorious severity of the Portuguese Inquisition, which by the mid-18th century had grown into an object of fascination on the part of northern European Protestants. The presence of the Inquisition, the Lisbon headquarters of which was established in the early 1530s, loomed large in reality as well as in rumour, and in the century before the earthquake some 45,000 people, most of whom were Jewish converts (the so-called 'New Christians'), had passed through the underground interrogation chambers located beneath the Rossio, to the north of the Terreiro do Paço (where the annual *autos da fé* were staged). Although Pombal scaled down the Inquisition's activities – the last *auto-da-fé* was held in 1766 – and its imposing headquarters was not rebuilt following its destruction by the earthquake, it nevertheless remained an icon of dread for decades after, especially among the British, several thousand of whom were long-term residents of the city. The scale of the British presence was due to a series of binding trade agreements dating back to 1385, when England had agreed to protect the vulnerable Portugal 'as though she were England herself', in return for the right to export and sell unlimited quantities of valuable homespun textiles and, later, port wine; these agreements proved so favourable to British commercial interests that by the time Charles II married the Portuguese princess, Catherine of Braganza (whose legendary dowry included Bombay, Tangier and the Sri Lankan port of Galle), the bulk of Portugal's valuable import and export business was being handled by British merchants, whose offices and warehouses commandeered the length of the Lisbon waterfront.<sup>16</sup>

The relationship between the Lisboetans and the growing British merchant community was generally cordial, although each expressed ambivalent feelings towards the religious practices of the other. The Portuguese clergy had been fiercely opposed to the building of Protestant places of worship, and particularly the British burial ground, which was eventually established in 1729 after a century of diplomacy. Shielded behind a high wall on the edge of the city, the Protestant cemetery soon began to fill with increasing numbers of consumptive Britons, who had been despatched to the warmth of Lisbon for the sake of their health, but never made it home. The novelist Henry Fielding remains its most celebrated burial; he died in October 1754 after three painful and dispiriting months in the city, during which he quarrelled with most of the merchants he encountered there, 'a Set of People who are tearing one anothers' Souls out for Money', as he described them in his posthumously published journal.<sup>17</sup> Regular funeral-going became a way of life for Lisbon's British residents and visitors, a circumstance which continued long after the earthquake. 'We have now lost most of our hill acquaintance', as Southey noted during his second stay in Lisbon, in June 1800; 'and I have only been three months in Portugal... 'Tis like the end of the *Pilgrim's Progress* – one by one our friends go before us, and leave us at the side of the Great Water that we all must cross'.<sup>18</sup> Earlier, in 1785, when Mary Wollstonecraft set sail for Portugal to comfort the dying Fanny Blood, she shared her cabin with a consumptive 'so opprest by his complaints I never expected he would live to see Lisbon – I have supported him hours together gasping for breath, and at night if I had been inclined to sleep his dreadful cough would have kept me awake'.<sup>19</sup> Henry Matthews actually served as a pall-bearer at the funeral of a fellow invalid whom he had befriended on the boat from England – 'It may be my turn next', he wrote, 'he lodged next door' (Matthews, 26).

Death and interment remained much on Matthews's mind during his fretful weeks in Lisbon. 'The inquisition is still an object of mysterious dread', he wrote: 'A young man of considerable fortune disappeared about a year ago, and it was supposed for some time that he was murdered. A large reward was offered for the discovery of his body, but the river was dragged, and every well and hole in the town explored without success. It is the opinion of many, that he is now immured in the prisons of the inquisition' (Matthews, 23). Though the inquisition headquarters had been demolished more than fifty years earlier, the idea that its dungeons had survived intact was much entertained by visitors to the city, drawn to imagining unseen violence going on beneath the pavements. It was as though Lisbon had been built and rebuilt over a pit of horrors, to which the earthquake had given concrete geophysical expression. This release of buried or repressed power is a familiar preoccupation of gothic novels, such as Matthew Lewis's *The Monk* (1796), with its 'curtained recesses, subterranean passages, and dingy vaulted dungeons', as Markman Ellis has characterised its key narrative spaces.<sup>20</sup> Throughout such novels, places of safety are transformed into places of darkness and danger, a repressive transformation that also features in numerous Lisbon travel accounts, Guiseppa Baretta, for one, declaring that post-quake Lisbon resembled 'the work of some benevolent Necromancer' (Baretta, i. 81). The memoirs of the Grey family, describing a three-year sojourn in Portugal during the 1820s, were also much preoccupied by thoughts of threatening spaces lurking beneath the city, especially by the idea that family excursions through the rebuilt streets might carry them directly over subterranean torture chambers: 'At the Rossio, Mr. Grey called the attention of his little party to the remarkable features of the place on which they stood. He pointed out the buildings

erected since the earthquake, and those that had survived its influence':

'and here, underneath the very spot on which we now stand, are the dungeons of the Inquisition.' There was, at these words, a general start amongst his auditors; but the next moment they drew closer to him, eager to hear more. 'They are said to exist no longer,' resumed Mr. Grey, 'and I thank God that there is reason to believe the assertion true; but it must always be a melancholy reflection, that while all above was light and life, and liberty and enjoyment, scenes were acted below too fearful to dwell upon.'<sup>21</sup>

As has been seen, the image of prisoners immured beneath the pavement was an established feature of visitor accounts of the city, the dungeons of the Inquisition (in tandem with the associated image of thousands of nuns 'buried alive' in the city's many convents) looming large in the representation of Lisbon as a place of cruelty and fanaticism. 'The particulars of that odious institution are but too well known', as the Duke de Chatelet observed in 1777; 'the picture which I should exhibit of its dungeons, its fetters, its faggots, and of all the tortures invented to honour a God, who, we are told, is love itself, could not add to the universal horror which it excites' (*Travels*, i. 90). Many of the sermons published immediately after the earthquake had pointed to the presence of the Inquisition as a particular affront to God, 'that bloody *House of Mercy*', as John Wesley described it in his hastily-written response to the disaster, declaring that: 'it is not surprizing that He should begin there, where so much Blood has been poured on the Ground like Water'.<sup>22</sup> Such anxieties over Lisbon's subterranean cruelties had unnerved Protestant visitors for centuries, but they escalated in the years following the earthquake, with the idea of peril beneath the

pavements apparently amplified by visions of the ground beneath the city swallowing its victims alive, in 'an Inquisition for Blood', as Wesley characterised the convulsion (Wesley, 4). It was as though the city itself had become the victim of its own hidden subterranean regime. Five years on from the disaster, Baretti remained haunted by the thought of what might lie beneath his feet as he clambered over the ruins: 'My whole frame was shaking as I ascended this and that heap of rubbish. Who knows, thought I, but I stand now directly over some mangled body that was suddenly buried under this heap! Some beautiful woman! Some helpless infant! A whole family perhaps!' He then encountered an old woman who told him how she had become trapped beneath the ruins: 'do you see this cellar?', she asked; 'My house tumbled as I was in it, and in this cellar was I shut by the ruins for nine whole days' (Baretti, i. 97–98). Her home, along with much of the rest of the city, had been transformed into an underground dungeon. Like the cellars of the Inquisition, which remained intact though the buildings above them had all been razed, these underground spaces became refuges and tombs for thousands of Lisbon's homeless. Stories of survival fixated on events occurring below ground. The Greys, for example, were told of someone 'swallowed up by the earthquake, and again thrown upon dry land by a second convulsion, and thus restored to life', while Henry Matthews's landlady, Mrs. Dacey, 'an old Irish woman, above eighty years old', was a fount of stories relating to 'the horrors of that awful event' (including the claim that earthquakes 'were occasioned by a synod of Ghosts assembled under ground') (Matthews, 18).

By then, the earthquake itself was beginning to fade from living memory, although the frequent aftershocks did much to keep the subject at the forefront of people's minds. In January 1796, for example, Robert Southey

(who was visiting his uncle, the Revd Herbert Hill, Chaplain to the British Factory in Lisbon) reported that an earthquake, 'the severest that has been felt since the great one', shook the city the day after his arrival. 'The people are very much alarmed', as he noted in a letter, dated 26 January 1796; 'it is the seventh shock since the beginning of November. Some walls and a cross from one of the churches was thrown down by it; and they say most houses must be weakened so much that another shock, if equally strong, would destroy them' (*Letters of Robert Southey*, 11). There had been another tremor only ten days before, but, as Southey pointed out in his *Letters Written during a Short Residence in Spain and Portugal* (1797), 'the Connoisseurs in earthquakes say, that this last, though of shorter duration, was the most dangerous, for this was the perpendicular shake, whereas the other was the undulatory motion'; Lisboetans, long accustomed to thoughts of subterranean disturbances, impressed Southey with the the calm manner in which they set about extinguishing all stoves and candles, 'because the fire does more mischief than the earthquake' (*Short Residence*, i. 260).

Yet Southey was less impressed by the architectural appearance of post-quake Lisbon, complaining that 'Pombal ordered all the churches here to be built like houses, that they might not spoil the uniformity of the streets. This villainous taste has necessarily injured the appearance of the city' (*Short Residence*, i. 388), a sentiment that was later expanded upon by Henry Matthews, who claimed that 'there is something in the appearance of Lisbon that seems to portend an earthquake; and instead of wondering that it was once visited by such a calamity, I am rather disposed to consider its daily preservation as a standing miracle' (Matthews, 12). Antiseismic Lisbon, in other words, looked not merely post-quake, but pre-quake, its wide streets and stocky buildings constituting a built-in reminder of



the earlier disaster, with the expectation of future quakes written in to the very design of the new fabric, as if contemplating imminent calamity. This air of future threat was inescapable, particularly given the growing opinion of natural philosophers such as John Michell, deviser of the theory of seismic waves, that certain areas of the earth are 'subject to the returns of earthquakes', and that, moreover, the streets and squares of Lisbon are sited directly over one of the northern hemisphere's most seismically active areas.<sup>23</sup> Compared to London after the fire – a phoenix of commerce that rose from the flames – Lisbon continued to conduct itself like a city under threat of siege. The city may have been rebuilt from ground level up, but underneath, the forces that destroyed it (both seismic and psychological) remained latent. As the Duke de Chatelet observed in 1777, the earthquake may have 'excited the curiosity of the most celebrated philosophers', but 'the result of their observations is an inexhaustible source of alarm for the unfortunate inhabitants':

for it seems to have been demonstrated, from the ravages produced by that calamity, particularly on the spot where the city is built, that the focus of the fermentation is situated exactly beneath its scite. For near a thousand years its inhabitants have, from age to age, experienced periodical earthquakes which have ruined and destroyed the city, and in building it again, they may actually be considered to say: 'Our children and grand-children shall be buried under the ruins of the edifices which we are erecting upon the shattered relics of those which overwhelmed our fathers.' (*Travels*, 34).

The fabric of Lisbon had been erased and rebuilt many times before, and would doubtlessly be erased again by the destructive forces at work beneath its pavements. Though the Portuguese Inquisition was suppressed soon after the

earthquake, memories of its terrors persisted long after the reconstruction of the city, lingering even as memories of the earthquake itself began to fade. The earthquake gave expression to all the unearthly and subearthly terrors that had come to define the city. As the philosopher Walter Hamacher has commented, the figure of the earthquake has grown to exemplify the irrational, the uncontrollable, and the unsurpassable. Ever since the Lisbon disaster, 'which touched the European mind in one of its more sensitive epochs, the metaphors of ground and tremor completely lost their apparent innocence: they were no longer merely figures of speech.'<sup>24</sup>

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#### NOTES \_\_\_\_\_

1. *The Autobiography of Johann Wolfgang von Goethe (Dichtung und Wahrheit)*, tr. John Oxenford (London, 1971), 25–6; see also Robert H. Brown, 'The "Demonic Earthquake": Goethe's Myth of the Lisbon Earthquake and Fear of Modern Change', *German Studies Review*, 15. 3 (October 1992), 475–91.
2. *Kant's Gesammelte Schriften* (13 vols, Berlin, 1900–10), i. 456–8. Walter Benjamin claimed, in 1931, that Kant's reaction 'probably represents the beginnings of scientific geography in Germany. Certainly the beginning of seismology'; see Walter Benjamin, 'The Lisbon Earthquake', tr. Rodney Livingstone, in *Selected Writings 2*, ed. Michael W. Jennings, Howard Eiland, and Gary Smith (Cambridge, MA, 1999), 536–40. Voltaire's comment appears in the preface to *Poèmes sur la Religion Naturelle, et sur la Destruction de Lisbonne* (Geneva, 1756); Theodor W. Adorno, *Negative Dialectics*, tr. E. B. Ashton (London, 1973), 361. See also Gene Ray, 'Reading the Lisbon Earthquake: Adorno, Lyotard, and the Contemporary Sublime', *The Yale Journal of Criticism*, 17. 1 (2004), 1–18.
3. Susan Neiman, *Evil in Modern Thought: An alternative history of philosophy* (Princeton, 2002), 1.
4. Portuguese studies include an exhibition catalogue published by the Câmara Municipal de Lisboa,

- Exposição Iconográfica e Bibliográfica Comemorativa da Reconstrução da Cidade Depois do Terremoto de 1755* (Lisbon, 1955); José-Augusto França, *Lisboa Pombalina e o Iluminismo* (Lisbon, 1977), and João Duarte Fonseca, *1755: O Terramoto de Lisboa* (Lisbon, 2005), while those in English include Jorge Morarji Dias Mascarenhas, 'A study of the design and construction of buildings in the Pombaline quarter of Lisbon', unpublished PhD Diss., (Glamorgan, 1996); Kenneth Maxwell, 'Lisbon: The earthquake of 1755 and urban recovery under the Marquês de Pombal', in *Out of Ground Zero: Case Studies in Urban Reinvention*, ed. Joan Ockman (Munich, 2002), 20–45; and Malcolm Jack, 'Destruction and regeneration: Lisbon, 1755', in *The Lisbon earthquake of 1755: Representations and reactions*, ed. Theodore E. D. Braun and John B. Radner (Oxford, 2005), 7–20.
5. Henry Matthews, *The Diary of an Invalid; being the Journal of a Tour in Pursuit of Health; in Portugal, Italy, Switzerland, and France in the years 1817, 1818, and 1819* (London, 1820), 12.
  6. See T. D. Kendrick, *The Lisbon Earthquake* (London, 1956), 29–36.
  7. 'Letters from Lisbon Harbour', *The Gentleman's Magazine*, 25 (December 1755), 560–2, 561.
  8. *The Gentleman's Magazine*, 25 (December 1755), 559.
  9. Joseph Baretti, *A Journey from London to Genoa, through England, Portugal, Spain, and France* (2 vols, London, 1770), i. 96–102.
  10. Cynthia Wall, *The Literary and Cultural Spaces of Restoration London* (Cambridge, 1998), ch. 2. See also Lisa Jardine, *On a Grand Scale: The outstanding career of Sir Christopher Wren* (London, 2001), 259–67.
  11. See A. J. R. Russell-Wood, 'Colonial Brazil: the gold cycle, c. 1690–1750', in *The Cambridge History of Latin America*, ed. Leslie Bethell (10 vols, Cambridge, 1984–95), ii. 547–600.
  12. William Dalrymple, *Travels through Spain and Portugal, in 1774; with a Short Account of the Spanish Expedition against Algiers, in 1775* (London, 1777), 140. William Beckford took Dalrymple's book with him on his 1787 tour, but found it 'dry, tiresome, and splenetic'. See Rose Macaulay, *They Went to Portugal* (London, 1946), 426.
  13. See I. Bernard Cohen, *Benjamin Franklin's Science* (Cambridge, MA, 1990), 120–60.
- A variant note of morally-inflected caution against the race to reconstruct the city was struck by Voltaire, in the preface to his *Poème sur la Destruction de Lisbonne*: 'If, when Lisbon, Mesquinez, Tetuan, and so many other towns were swallowed up in the month of November 1755, philosophers had called out to the miserable individuals who barely managed to pull themselves out of the ruins, *Tout est bien*. The heirs of the dead will get rich; the construction workers will make money rebuilding houses; animals will fatten themselves on the bodies buried under the rubble. This is the necessary consequence of inevitable causes; your personal ill-fortune is of no account, for you contribute to the overall well-being,' such a speech would certainly have been as cruel as the earthquake was destructive'; Voltaire, *Candide and Related Texts*, trans. David Wootton (Indianapolis, 2000), 98.
14. Elias Nason, *Sir Charles Henry Frankland, Baronet: or, Boston in the Colonial Times* (Albany, NY, 1865), 62.
  15. *Travels of the Duke de Chatelet in Portugal, comprehending Interesting Particulars relative to the Colonies; the Earthquake of Lisbon; the Marquis de Pombal, and the Court*, ed. J. Fr. Bourgoing, tr. John Joseph Stockdale, (2 vols, London, 1809), i. 166.
  16. See David Francis, *Portugal 1715–1808: Joanine, Pombaline and Rococo Portugal as seen by British Diplomats and Traders* (London, 1985), 31–145.
  17. Cited in Martin Batestin, *Henry Fielding: A Life* (London, 1989), 596.
  18. *Letters of Robert Southey: A Selection*, ed. Maurice H. Fitzgerald (London, 1912), 36–45.
  19. *Collected Letters of Mary Wollstonecraft*, ed. Ralph M. Wardle (Ithaca and London, 1979), 101.
  20. Markman Ellis, *The History of Gothic Fiction* (Edinburgh, 2000), 13.
  21. *Portugal; or, the Young Travellers: Being some account of Lisbon and its Environs, and of a Tour in the Alemtéjo . . . from a journal kept by a lady during three years' actual residence* (London, 1830), 27–28.
  22. John Wesley, *Serious Thoughts Occasioned by the late Earthquake at Lisbon* (London, 1755), 4.
  23. John Michell, *Conjectures concerning the Cause, and Observations upon the Phænomena, of Earthquakes; particularly of that great*

*Earthquake of the first of November 1755, which proved so fatal to the City of Lisbon, and whose Effects were felt as far as Africa, and more or less throughout almost all Europe* (London, 1760), 6.

24. Werner Hamacher, 'The Quaking of Presentation: Kleist's "Earthquake in Chile"', in *Premises: Essays on Philosophy and Literature from Kant to Celan*, tr. Peter Fenves (Cambridge, MA, 1996), 263–64.