Discourse and Disaster: A Universal History of Lisbon's 1755 Earthquake

ABSTRACT: This essay analyzes one of the most important and often quoted eyewitness accounts of the November 1, 1755 Lisbon earthquake that was written in Portuguese, História universal dos terramotos [Universal history of earthquakes] by Joaquim José Moreira de Mendonça, published in 1758. It attempts to interpret and understand the text not as it has been traditionally read—as an individual reaction or first-hand account of the event—but instead as the scientific and historic treatise that the author intended to write. What is most striking about Moreira de Mendonça's attempt to respond scientifically to the disaster is not the accurateness of the notions put forth, but the narrative structures and the epistemological forms of reasoning that emerge from it. These rhetorical and theoretical strategies point to conceptual developments in the orientation of thinking and writing in relation to crisis and disaster.

KEYWORDS: Lisbon Earthquake of 1755; História universal dos terramotos; Joaquim José Moreira de Mendonça; disaster; universal history

RESUMO: Este ensaio analisa um dos mais importantes e frequentemente citados relatos escrito em português sobre o terramoto de Lisboa de 1 de Novembro de 1755, História universal dos terramotos de Joaquim José Moreira de Mendonça, publicado em 1758. O ensaio tenta interpretar e compreender o texto de Mendonça não apenas como ele tem sido tradicionalmente lido—isto é como uma resposta individual ou um relato de uma testemunha ocular do evento—mas antes como o tratado científico e histórico que o autor pretendeu escrever. O que mais impressiona da tentativa do autor de responder cientificamente ao desastre não é a precisão das noções apresentadas, mas sim as estruturas narrativas e as formas epistemológicas de raciocínio que emergem no texto. Estas estratégias retóricas e teóricas apontam para desenvolvimentos conceituais na orientação do pensamento e na escrita em relação à crise e ao desastre.

PALAVRAS-CHAVE: Terramoto de Lisboa de 1755; História universal dos terramotos; Joaquim José Moreira de Mendonça; desastre; história universal

On the morning of All Saints' Day, November 1, 1755, Joaquim José Moreira de Mendonça made his way to the medieval castle of São Jorge, which sits atop one of Lisbon's many hills overlooking the city, and observed the destruction of the deadliest earthquake in Portugal's modern history. The Great Lisbon Earthquake of 1755, as it is known, is arguably the most consequential natural catastrophe in European history and no doubt Portugal's greatest and most memorable. The tremors—followed by a tsunami and extensive fires that largely destroyed the capital of the Portuguese empire—were felt in disparate parts of the world, triggered intense debates throughout Enlightenment Europe, and produced a new political alignment within the country. Moreira de Mendonça was in charge of the Royal Archive and Registry, which was housed at the time in the tower of the castle of São Jorge. Because of the widespread damage to the tower, the national archives would be moved in the aftermath of the earthquake to what is known today as the Palace of São Bento, the current home of the Portuguese parliament, before settling permanently in 1990 in the modern Torre do Tombo.

Beyond the fact that he held this official post, which made him a member of Lisbon's intellectual elite, not much is known about Joaquim José Moreira de Mendonça. The different religious authorities and censors who reviewed Moreira de Mendonça's work and whose opinions, which were required for approval by the Inquisition, appear at the beginning of the text, refer to him as a philosopher of science and as a historian. They emphasize his erudition, the scientific veracity of his facts, and the moderation of his tone. Father João Chevalier explains that Moreira de Mendonca describes the 1755 earthquake" com a maior moderação, e verdade sem aqueles encarecimentos, que só servem de aterrar os povos, antes com muitas notícias de que se pode utilizar o público" [with the greatest moderation and truth and without those enhancements, which serve only to frighten people, but instead with much information that can be useful for the public].¹ His brother, Veríssimo António Moreira de Mendonça wrote his own scientific dissertation on the Lisbon earthquake, which was published earlier in 1756.² Despite the fact that Moreira de Mendonça's História universal dos terramotos is regularly quoted by scholars and is one of the most important eyewitness accounts written in Portuguese of the Lisbon earthquake to have survived, it has never been reedited and issued in a modern edition. It was originally published in 1758, three years after the disaster, under the full title: História universal dos terramotos, quetêm havido no mundo, de que hánotícia, des de asuacriação atéosé culo presente.Comumanarraçãoindividualdoterramotodoprimeirodenovembrode1755, enotíciaverdadeiradosseusefeitosemLisboa, todoPortugal, Algarves, emaispartesda Europa, África, eAmérica, aondeseestendeu: eumadissertação físicas obreas causas gerais dosterramotos, seusefeitos, diferenças, eprognósticos; easparticulares doúltimo [Auniversal history of earthquakes that have occurred in the world, and which are known to us, from its creation until the present century. With a personal account of the November 1, 1755 earthquake and the true news of its effects on Lisbon, all of Portugal, the Algarve, and other parts of Europe, Africa, and America to which it extended: And a physical dissertation on the general causes of earthquakes, their effects, differences, and prognostics, and the particularities of the last one].

The title alone, however, reveals that this was not merely or even primarily an eyewitness narrative of the tragic events. Moreira de Mendonça intended to write a three-part treatise on earthquakes in general, combining historical essay and personal account with scientific discourse on the physical causes of a natural phenomenon. In addition to the three separate sections, there is also a short prologue by the author describing his motivation for writing the work, the necessary permissions from the Inquisition referenced above, and an index organized in alphabetical order listing not only the lands that have suffered earthquakes, but also the more notable terms and concepts used throughout the book. The first part provides a history of earthquakes from antiquity to the middle of the eighteenth century. The significantly shorter second section discusses the Lisbon earthquake specifically, giving a detailed assessment of the physical losses, and a short but vivid account of the author's own experience as a survivor and eyewitness. In the final section, Moreira de Mendonça elaborates on the scientific explanations for the causes of earthquakes. Thus, the personal or subjective story appears enfolded, almost hidden, in the middle of the two longer, more objective parts. The lengthier sections nearly submerge the account that attempts to describe and grapple with the consequences and details of the Lisbon disaster.

In this essay, I propose to analyze the ways in which Moreira de Mendonça's work continues to be relevant not so much because of its content—although it does provide abundant and intriguing information that is both pragmatically andstylisticallyvaluable—butmoresobecauseofthenarrativeandepistemological conventions and strategies it employs. A careful study of the ways in which Moreira de Mendonça approaches the Lisbon earthquake in terms of form and rhetoricallowsustobetterunderstandhowtherelationshipbetweendisasterand discourse has evolved. Moreira de Mendonça does not write a straightforward narrationofthedifficulteventsandwidespreaddestruction, butinsteadattempts

to situate his account within a wider intellectual and scientific understanding of natural phenomena. The treatise fits within the broader ideological and conceptual discourse of universal history, which in the eighteenth century began to parallel the encyclopedic tradition that was then gaining prominence. With its multiple parts, chronological ordering, and indexes, História universal resembles an encyclopedia of all known earthquakes in world history. Furthermore, as one of the few surviving accounts written in Portuguese, the text has been used recently by cultural critics, such as Helena Buescu, as exemplary of the non-religious response to the disaster within Portugal, one that champions a secular, scientific interpretation—God seldom appears in the work and never as a cause of the tragedy.³ Moreira de Mendonça's work confirms what historical and philosophical tradition has claimed started or was solidified with the Lisbon disaster. The 1755 catastrophe provoked a shift in the collective consciousness of Europeans. According to Susan Neiman in her seminal work, Evil in Modern Thought (2002), since the Lisbon earthquake, "natural evils no longer have any seemly relation to moral evils; hence they no longer have meaning at all. Natural disaster is the object of attempts at prediction and control, not of interpretation" (250).⁴ This played out in the philosophical discussions and debates on the odicy between twoof the main Enlightenment thinkers of the time, Jean-Jacques Rousseau (1712-1778) and Voltaire (1694-1778). In his Candide (1759), Voltaire famously used the event to criticize Leibniz's doctrine of optimism. Immanuel Kant (1724-1804) would respond with three important scientific essays on the physical causes of earthquakes, reassuring readers that they are not acts of divine punishment, but natural events that should inform urban planning. Kant's essays added to the emerging and growing scientific literature on seismic activity. Moreira de Mendonça's work should be seen as having made an important contribution to these philosophical and scientific discussions. His text, written in a pragmatic discursive tone, interprets the earthquake as a natural, recurring disaster with a long and predictable history, and raises wider guestions concerning the broader implications that a crisis has on the orientation of thought and discourse.

História universal is widely regarded as perhaps the or one of the most definitive eighteenth-century accounts of the 1755 earthquake written in Portuguese. Among the many and diverse eyewitness descriptions written in response to the powerful tremors, the more detailed and dramatic texts were by foreigners living in Lisbon who wrote letters to inform family and friends back home. Reports of the tragedy by Portuguese are far fewer in comparison. As historian Mark Molesky writes, "relatively few literate lisboetas who survived the earthquake felt the need to commit their personal experiences to paper in any extended fashion" (233).⁵ There were notable exceptions, as Molesky admits, including the brief account in Moreira de Mendonça's book. História universal is thus mostly, almost exclusively, read today because of the importance of its eyewitness account. Critics and historians are interested in the personal narrative and in the details describing the damage to the city, and its buildings, and the loss of human life. The rest of the text, that is, most of it, is rarely relevant to modern readers which is understandable considering the obsolete scientific propositions and the dubious and repetitive catalog of earthquakes. But as I hope to show by examining the account of Lisbon within the structure of the narrative as a whole, certain strategies and intentions can be detected. The formal tactics used by Moreira de Mendonça reveal both how the nature of discourse changes over time and, in particular, how these transformations occur in relation to crisis.⁶

Prefacing Disaster

Though brief, Moreira de Mendonça's three-page prologue to his História universal is arguably the most revealing part of the text. The author is determined to make his intentions for writing this account clear from the onset. As he explains, he hopes that awareness of the multiplicity of these phenomena—the many and continuous earthquakes that have occurred throughout the ages—will diminish the horror of the most recent one, the Lisbon earthquake, and help moderate the damage caused by future catastrophes: "Escrevo a História universal dos Terramotos, narração lamentável, porém útil para conhecimento destes Fenómenos, e seus efeitos; ou para que a multiplicidade deles nos diminua o horror do último; ou porque a sua repetição nos acautele do perigo, regulando todos as suas consciências, para que não se percam as almas, e as suas habitações, para que não pereçam as vidas" [I write the universal history of earthquakes, a lamentable account, but useful for the knowledge we gain of this phenomenon and its effects, either because their multiplicity will diminish the horror of the last one or because their repetition will warn us of the dangers, regulating our consciences, so that souls might not be lost, nor houses, nor lives perished]. He belittles the zealous, non-scientific writings and religious explanations that had already appeared about the Lisbon earthquake and makes no apologies for his simple style and pragmatic intentions: "Não desculpo a humildade do estilo. Cada um discorre como pode, ou como lhe parece mais próprio da matéria que trata" [I will not apologize for the humble style. Each writes as he can and as seems to him most appropriate to the material he treats]. He also discusses the urgency to publish his work, lamenting that it has been postponed for too long, due to difficulties accessing archives and libraries that were damaged. Contrary to expectations, the author emphasizes that earthquakes, destruction, and tragedy are subjects that warrant a simple and straightforward style. The author seems intent on making earthquakes commonplace, a natural and banal occurrence, and on refuting the interpretations of tremors as supernatural events.

Moreira de Mendonça published his treatise in 1758 after a number of others had already appeared, but, according to the author, his work will be unlike those "outros discorrendo sobre as causas; mas com pouco conhecimento da matéria, ou confusa ideia dos princípios. Poucos são os que merecerão o aplauso dos Eruditos" [others writing about the causes but with little knowledge of the subject matter, or with confused ideas of the principles. Few are they who will deserve the applause of the Erudites]. He does not even praise his own brother's account as one that might be recognized by the scientific community. The two texts about the earthquake that he cites explicitly in the prologue are Francisco de Pina e Melo's moralist poem, published in 1756, "Ao terramoto do primeiro de Novembro de 1755," and the Spanish essay, which according to Filomena Amador (289) was often cited by natural philosophers at the time, Disertación física (1755) by Francisco Martinez Molés.⁷ Although Moreira de Mendonça laments having taken three years to finish and publish his account, he believes his essay will be more accurate, scientifically rigorous, and better-documented as a result. The author mentions in the prologue the specific archives and collections he consulted and thanks those institutions for their assistance. His concerns and philosophical stances fit squarely within the ideological context of the disaster's aftermath. José de Carvalho e Melo, later known as the Marquis of Pombal, the Secretary of State of Foreign Affairs of King José I, took control of the country after the disaster, attempting to minimize disruptions from the earthquake and instead to use the state of emergency to implement reforms and bolster Portugal's prosperity and political strength. This implied the promoting and publishing of scientific discussions and guarded reactions to the earthguake and the criticizing and prohibiting of sensationalist portrayals, fantastic descriptions, and religious narratives. As Ana Cristina Araújo explains, Pombal would gather and mobilize writers, scientists, and other intellectual collaborators at home and abroad to control the news and the narrative that was told of the events.⁸ Moreira de Mendonça continued this trend, but he was not, it would seem, interested only in Lisbon.

Lisbon is the starting point for Moreira de Mendonça, but his text aims to convince readers that the 1755 earthquake is merely a small part of a long history. At the end of the volume he includes an eleven-page index, which readers can use to find information on specific earthquakes that have affected certain areas or countries, as well as explanations of terms and phenomena described in the work. História universal can be used, with this specific structure and index, as a type of reference or encyclopedic treatise to be consulted by future generations, especially after the memory of the effects of the Lisbon earthquake have disappeared. He refers to these memories as the convoluted ideas and feelings people maintain about the devastating events: "Os entendimentos envoltos na confusão de ideias tristes, de pensamentos horrorosos, nada discorrerão, e de pouco se lembrarão" [The understandings mixed with the confusion of sad ideas and horrible thoughts, will not result in anything, nor will much be remembered]. For him an accurate and scientifically credible narrative of the Lisbon earthquake can appear only after the initial emotional responses have been mitigated, and after a thorough scientific tabulation of the sources and explanations can be recovered from the remnants. This is why in the prologue he justifies, and to a certain degree commends, the postponement of the publication of his work. In other words, he turns the belatedness of the publication into one of the strengths of the text.

Finally, he remarks at the end of the prologue that he is a very busy man and has little time under the pressing circumstances for this endeavor, which, as he explains, also contributed to the delay: "Quem me conhece sabe, que vivo ocupado com obrigações multiplicadas, e que esta composição é somente uma prova da minha grande curiosidade, para a qual roubei algumas horas ao natural descanso" [Those that know me know that I am busy with multiple obligations and that this composition is merely proof of my great curiosity, for which I stole a couple of hours from my rest time]. Although a typical example of the author's false modesty and a characteristic trope of the period, Moreira de Mendonça emphasizes here the emotional distancing between his treatise and the recasting of the devastating event. Scientific curiosity should be the most important motivation for producing such an account, not any individual desire to confront personal memories or traumas. Without being explicit, Moreira de Mendonça suggests that it is essential to write such a work later rather than earlier, after one has gained sufficient emotional distance from the event, as he has. Here Moreira

de Mendonça exemplifies a clear rejection of the sensual and sensitive response that Tim Blanning calls the culture of feeling, identifying instead with the analytical, rational, and pragmatic culture of reason.⁹ The author intends his universal history to be useful to readers epistemologically, not only expanding our understanding, but also asking us to reconsider our ways of knowing. It is deliberately not presented as a therapeutic or spiritual consolation to heal tragic memories, though the knowledge it provides can keep our irrational, affective reactions at bay and our theological reasoning resilient. More than one of the Inquisition censors noted that Moreira de Mendonça was a good enough scientist and historian to write about the natural causes of the disaster without forgetting the moral lessons these reinforce.

A Universal Natural History

The first part, which is 112 pages in length and features 471 numbered paragraphs, carries the title, "História universal dos terramotos" [Universal history of earthquakes]. Here the author provides an extensive account of notable earthquakes in world history (almost as many as there are paragraphs), beginning with ancient descriptions of land formations he attributes to earthquakes and moving on to a compilation of documented or referenced earthquakes. The author provides footnotes and sources for most of the earthquakes listed. One of the more striking features of this first part is the intricate system of numbering and listing that Moreira de Mendonça uses throughout. Beginning with section one all paragraphs are numbered on the left margin, while on the right margin the author writes the dates of the earthquakes he describes starting over one thousand years before Christ and ending in the year 1755. Helena Buescu, who has also noted this exhaustive system of numbering in her analysis of Moreira de Mendonça's text, further points to the fact that paragraph number 472, which $begins section two of Hist {o} ria universal doster ramotos — the eyewitness account$ of the Lisbon earthquake—is more or less the number to which the 1755 disaster would correspond in the list of earthquakes the author presents to us. These numeric details have particular implications. Despite the dubious nature and description of some of these earthquakes, the purpose of this impressive inventory is to demonstrate that historically natural disasters have been and continue to be frequent events. Looking at this long catalog of recurrent destruction one has the sense that earthquakes are normal, almost banal occurrences, something with which the earth and humanity have always lived. Thus, Buescu writes:

...avontadedeenumerarexaustivamente, bemcomoavontadedenumerarquese lhe encontra associada, se se relacionam e convergem, representam ambas gestos diferentes, com diferentes implicações. E, entretanto, ambas são devedoras de uma visão do mundo em que o terramoto parece fazer parte integrantes da sua mesma história...ele integra os terramotos enquanto fenómenos da história humana, quase a transformar-se em ocorrências "normais," tal a sua frequência... (original emphasis 45)

[...the wish to exhaustively enumerate, as well as the wish to numerate, which is associated with it, if they relate and converge, represent different gestures, with different implications. And, meanwhile, both are indebted to a world vision in which the earthquake seems to form an integral part of the same history...it integrates earthquakes as phenomena of human history, almost transforming them into "normal" occurrences, based on their frequency;]

The enumeration also creates continuity and likeness between what are quite different events that occurred in disparate parts of the world over a long period of time. Moreira de Mendonça brings together earthquakes narrated in the Bible and those recounted by Plato with contemporary ones that took place in Asia and the Americas. These last ones were recent enough for a number of accounts of the Lisbon earthquake to have used them as points of comparison. Between the numbers on the left and the dates on the right, the account evinces a rigorous, numerically-organized quality, one resembling an easy-to-access list. Although similar accounts at the time, such as some of the other physical dissertations (as they were called by Mendonca and the Inquisition's censors), also numbered their paragraphs, these paragraphs were significantly fewer and did not include dates on the right margin. Nevertheless, the descriptions are neither dry nor void of lyrical and affective language. Quite to the contrary, the author attempts to counter the repetitiveness of the document's format and subject matter with specificity, highlighting what was original or remarkable about individual earthquakes, including an ecdotes about people who were directly affected. For example, Moreira de Mendonça concludes his description in paragraph 281 of what he claims was one of the worst earthquakes to have occurred in 1556 by describing the region of Mount Sinai, where cities were "subvertida[s], aparecendo em seu lugar um grande lago, não escapando mais, que um Menino nadando em um pau"[subverted, appearing in their place a huge lake, with no one surviving but

a boy swimming on a log]. He often describes people's facial expressions and emotional responses, their fears, and their sometimes irrational or courageous reactions. This personalization makes for a text that wishes to present itself as an objectivescientific discourse that is even more genuine because it seems to create synchronybetween the human or social and natural or geographical phenomena. This would also apparently contradict his vigorous wish to keep the emotional response out of his narrative, as well as his repeated declarations on the negative effects of relying on our senses and emotions to describe or make sense of disasters. In the end, the account is not able to remove fully the affective elements, and the emotional and human dimensions become, in fact, the more memorable parts of the otherwise monotonous descriptions. Not only does Moreira de Mendonça attempt to paint a human geography affected by these catastrophes, but he also mentions throughout names of noteworthy monuments, cities, or public squares that were destroyed, recognizing how architecture, urbanism and their ruins also reveal the signs of historic development influenced and shattered by natural history.

In addition, Moreira de Mendonça's account is heavy on details and statistics, informing the reader of the exact number of houses destroyed or of people dead, and giving the specific date, day of the week, and sometimes even the time when earthquakes occurred. For example, he begins paragraph number 338, accompanied by the date 1630 on the right margin, with the following description: "Em 2 de Setembro, segunda feira pelas nove horas da noite, teve princípio um grande Terremoto na Ilha de S. Miguel, com impulso tão veemente, que se tocarão os sinos da Cidade de Ponte-delgada, como a fogo, o que pôs a todos seus moradores em um mortal desacordo" [On Monday, September 2nd, around nine o'clock at night, a large earthquake on the Island of S. Miguel began with such a vehement impulse, like a fire, that the bells of the Ponte-Delgada cathedral were heard ringing, which put all the citizens in great disorder]. He describes everything from the types of trees destroyed or number of animals lost, to how many palms a flame or a widening of the earth might measure, calculating temperatures, weights, and other measurements, sizes, and dimensions. It would depend on impossible fact checking to ascertain the accuracy of Moreira de Mendonça's descriptions and analyses. Of course, much is evidently dubious and questionable—as Buescu writes, Moreira de Mendonça "faz uma impressionante (se bem que duvidosa, naturalmente) listagem de terramotos" [makes an impressive (although dubious, of course) list of earthquakes] (45).

Yet, it is not the validity of the information that is relevant here. Instead, the style of thought and structure orienting this text reveals the complexity of how moments of crisis and transition affect strategies of knowledge production. In fact, the author admits throughout that much data is missing, and that we do not know or have all the facts. In paragraph 220 Moreira de Mendonça writes about an event in 1309, "Em 22 de Fevereiro houve um grande Terremoto em Portugal. Propagou-se a toda a Europa. Ignoramos os estragos, que fez" [On February 22 there was a large earthquake in Portugal. It extended throughout Europe. We are unaware of the damage it caused]. This hesitation gives more credibility and veracity to the work, reinforcing the fact that admitting unknowability is fundamental to proper scientific analysis and thinking.

Furthermore, the author links earthquakes to other natural phenomena such as floods, volcanic eruptions, winds, rains, inundations, and fires. Earthquakes not only have a history and form part of our human and geographical landscape, but, ironically, instead of shattering and breaking things apart, they serve as connecting events. They are experiences that link humans and civilizations with broad natural and geographical developments, such as the formation of islands and mountains, changes to bodies of waters, and the unveiling or covering over of land masses. In other words, it is as if the history of earthquakes were also a history of the earth and its geographical formations. The account attempts to historicize all these different narratives— biblical, ancient, contemporary, geographic—while focusing on the frequency and normality of these phenomena, suggesting that repetition is a way of not only connecting human experience with natural disasters, but also preparing humans for these events by providing more pre-visibility and scientific knowledge for the future.

Understanding earthquakes within the context of the history of the world allows us to face disaster on different terms. Moreira de Mendonça connects conceptually with two different meanings of universal. This history of earthquakes is universal because it is part of world history, encompassing the entire universe and all of known history. In this sense, Moreira de Mendonça understands the expression as it had been used in antiquity and medieval and early modern Europe: the term had long been in use to indicate a history of the world from its beginning to the present. But his account is also a universal history in a more enlightened sense, as Moreira de Mendonça's narrative strategies reveal a broader understanding of and approach to natural philosophy and historiographythatinvolveamodern, ethical, and moral approach or reaction to phenomena. It is, of course, impossible to know exactly what Moreira de Mendonça aimed to develop abstractly around the idea of universal history, but it seems to me that we have in this text a very early example, a sort of genesis or beginning of the theoretical development of a more modern concept of universal history, which was beginning to surface more notably toward the second half of the eighteenth century. The concept was popularized in AUniversal History, from the earliest account of time, a multivolume world history published in London between 1747 and 1768.¹⁰ Immanuel Kant's essay advocating universal history as a means of demonstrating how humanity was becoming increasingly rational, "Idea for a Universal History with a Cosmopolitan Purpose," would be published only in 1784.¹¹ And it was not until 1789 that Friedrich von Schiller would deliver a famous lecture on the topic, "The Nature and Value of Universal History."¹² Toward the end of the eighteenth century there were universal histories and there were theoretical reflections on what this scientific, historic, and philosophical approach to and understanding of human development and thinking might mean.

Moreira de Mendonça begins this exercise of creating a global history of earthguakes while also asking, in the way he structures the text and strategically prioritizes his intentions: how can this universal scheme of earthquakes speak to a unified and rational process of human and intellectual development? Critics and cultural historians often point to the ways in which the Lisbon earthquake influenced religious and philosophical thinking throughout Europe, but it becomes evident by looking more closely at Moreira de Mendonça's account that the earthquake also provided an opportunity to integrate the disaster into contemporary debates and concepts current at the time of a new idea of history. The ethical and ideological implications of the concept of universal history, which became increasingly popularized and institutionalized in the latter part of the eighteenth century, are intertwined with Moreira de Mendonça's objectives. The author sets out to write an ethical, scientific, and historical account that can explain a hierarchal and pragmatic pattern, a reasonable development to social, human, or natural events, and an increasingly rational form to think about and react to these changes.

A History of the Lisbon Earthquake

In order to connect this history specifically to the account of Lisbon, Moreira de Mendonça gives more attention and weight in the first section to earthquakes that have occurred in Portugal or its territories. He emphasizes the numerous

catastrophes and amount of damage the Portuguese coast has suffered throughout its history, mentioning, in particular, two previous well-known massive earthquakes, one in 1355 and another in 1531. In fact, Moreira de Mendonça claims that the 1531 earthquake was perhaps even more devastating than the 1755 one, since estimates of 1,500 houses destroyed would represent the devastation of a fourth of the entire city at that time. This again stresses the author's attempt to rationalize our reaction to the 1755 Lisbon earthquake in light of the past. He attempts to diminish the magnitude of the destruction of the Lisbon tremors even further in the short second part of the treatise, the personal account of the Lisbon earthquake. This seems to us to be the heart of his text. Thus, there is an apparent contradiction between Moreira de Mendonça's stated aim and his enthusiasm for a universal history of earthquakes, emphasizing in the prologue and elsewhere the prioritizing of a scientific and historiographical interpretation, and the possibility of construing all of this excessive enumerating as a mere evasion. Only through this process of amelioration and rationalization can he approach the narrating and the meanings of the destruction of the 1775 Lisbon earthquake. As we shall see, Moreira de Mendonça puts forth specific strategies in an attempt to resolve this ostensible incongruity.

This universal history, then, prepares the reader for part two of the account, which describes the 1755 Lisbon catastrophe, giving a detailed assessment of the physical losses, and a short description of the author's own experience. This section is shorter and more tentative than both the first and third sections. The personal, subjective, and emotional story is thus framed, enclosed, or protected by the predominantly objective and scientific discourse of the other two parts.¹³ Section two consists of about sixty pages and is titled, "História do terremoto do primeiro de Novembro de 1755" [History of the earthquake of the 1st of November of 1755]. Once again, this title is meaningful because the author juxtaposes the "history" of the 1755 disaster with the "universal history" of all earthquakes of the first section. Furthermore, he begins this second part with: "O Terremoto, que experimentou o Mundo no penúltimo mês deste ano, será memorável a todos os séculos da posteridade pela sua extensão" [The earthguake that the world experienced on the penultimate month of this year will be memorable to all centuries of posterity because of its extension]. Hence, this was an earthquake that was experienced across various regions of the globe. Even though in this section he gives a personal account of the Lisbon earthquake and his emotions interfere with the flow of this narration, what he aims to provide is an official history of a particular occurrence that is also a universal event, not only in how it impacted much of the world, but also in the sense that it can be used to exemplify the global conceptualization that informs his writing. Thus, the history lesson of the specific earthquake is that it can be universal in a moral and intellectual sense as well.

Sometimes the text interrupts the listing of the destruction to Portugal's capital to refer to the author's own memory, occasionally revealing personal feelings and lamenting: "Que cena lamentável me recorda a memoria! Tanto objecto lastimoso me representa a lembrança, que a multidão, a variedade, e a mágoa me embaraça o discurso para a narração" [What a lamentable scene my memory brings back to me! So many regrettable objects are remembered, that the multitude, the variety, and the pain obstructs my discourse for the narration]. Because this is one of the few moments when he refers to the difficulty or inability of recounting the tragic events, it seems to the reader less truthful or sincere and more rhetorical. In fact, when this comment is juxtaposed with the rest of the section, it seems to be clearly out of place, since he details and describes in paragraph after paragraph and with linguistic ease the diversity of destructive events and multiplicity of human feelings, reactions, and actions. In other words, he does indeed seem to find the words, or a discourse, for narrating the events. Paragraph 493 is the only one Moreira de Mendonça dedicates exclusively to his personal circumstances, describing the moment when he felt the earthquake strike, and his initial reactions:

Eu fui uma das Testemunhas destas fatalidades. Havendo experimentado o primeiro Terremoto, e visto os seus estragos do Jardim das minhas casas, e vendo-me por Misericórdia de Deus, e a toda a minha Família livre de tantas desgraças, ficando também as mesmas casas sem ruina considerável, saí para o campo de Santa Bárbara, aonde continuei a implorar a Clemência do Senhor, e auxilio de sua Santíssima Mãe, de quem sou muito fervoroso, mas indigno devoto. O temor do fogo do Castelo, fez despovoar aquele campo de muitas mil pessoas, que ali exortavam alguns Padres. Eu porém com o cuidado no Cartório do Tombo da Câmara desta Cidade, que está a meu cargo, e muito estimável por conter os títulos de mais de 1,600 propriedades, me não afastei da frente das casas para poder salvar este Cartório, quando fosse necessário. Ali acompanhado de poucas pessoas passei os primeiros dias sem ver mais, que estragos, e horrores; e sem ouvir mais, que lastimas, e choros.

[I was one of the eyewitnesses of those fatalities. Having experienced the first earthquake, and seen its damage from the garden of my houses, and having found myself and all of my family by God's mercy free of so many misfortunes, our houses remaining without considerable ruin, I left for Santa Bárbara field, where I continued to pray to God and for aid from his saintly mother, of whom I am a fervent, though not deserving, devotee. The fear of fires in the Castle left that field depopulated by many thousands of people, which some priests had called there. I, on the other hand, having under my charge the Royal Archive of our city's governance, as I am its director, and it is very esteemed because it contains more than 1,600 property titles, did not go away from the doors, in order to be able to save the archive when it was necessary. There, accompanied by few people, I spent the first days without seeing anything but damage, horrors, and without hearing anything other than misfortunes and laments.]

This crucial and vivid first-hand account is impressive in its optimism. The author, his family, and his property suffered very little. He is able to make clear that his priority during this time of crisis was to be the guardian of knowledge and of the empire's intellectual property. He must protect the doors of the archive he directs not only because it is his duty to do this, but also because collecting and preserving the country's historical memory will be critical to its survival. He is accurate and mathematical, even amid moments of stress, giving us the specific number of manuscripts in the archive. Although mentioning his initial religious reactions, these are put aside, for, unlike the work of the priests, his calling is a different one. He will not follow in the footsteps of the majority of people and abandon the city's center, but will remain and care for the castle for days to witness the unfolding of events, and more importantly, to protect the books and documents. His watching over the doors of the archive can be read metaphorically to evoke what the treatise attempts to do, that is, to use a scientifically documented and rationalized knowledge, a universal history of earthquakes, as a discursive response to the trauma of disaster, and to prepare proper responses to future catastrophes, as well as forms of thinking about them.

Although constituting an impressive and comprehensive catalog of destruction, Moreira de Mendonça's version of events attempts to downplay the effects of the disaster in several respects. Mark Molesky's study of marginalia written onanedition of Moreira de Mendonça's História universal by another unidentified eyewitness shows that these comments often supplement, reinforce, or contradict information we know about the damage from Moreira de Mendonça and other accounts. Moleskly notes that the marginal annotations correct Moreira de Mendonça's version regarding two specific matters: the estimated number of dead is clearly too low (he estimates that about 10,000 died, one of the lowest figures of any account), and the fact that the infamous fires that raged in the aftermath of the earthquake did not last only days or weeks as previously believed, but probably took months to be fully extinguished.

This softening of the magnitude of the damage is consistent with what the author aims to achieve, which is to provide a historical perspective to help people and societies better cope with the present, most recent destruction, and better prepare for future recurrences. As we have seen, this clearly aligns Moreira de Mendonça with the response of Pombal's government. It is only important to remember the disaster in so far as it can help to improve its understanding and help mediate reactions to forthcoming catastrophes. It is also significant that in this section the author points to the different predictive signs that he laments most people had ignored: agitation among animals; changes to the taste of well water; turbulence to the seas in contrast to the unseasonable, serene weather; and a dense and colored fog or light in the sky. He writes about climate abnormalities that had occurred in the preceding years: excessive rains in 1751 followed by droughts, extreme winters that froze waters in 1753 and 1754, and large amounts of rain and winds in the autumn of 1755. By explaining these signs, which, according to him, announced the imminent tragedy, the author is again able to convey the idea that this tragedy was predictable and a mere consequence or effect of a natural process.

Scientific Conclusions

In the third and final section, which is slightly over one hundred pages and is titled "Dissertação Física" [Physical Dissertation], Moreira de Mendonça offers explanations for the causes, origins, and effects of the tremor, exploring a number of different theories. This is the section that solidifies Moreira de Mendonça's scientific reaction to the seismic events. The third section resembles very much the first part of the treatise. It mirrors the style of enumeration as it surveys a plethora of different explanations of the causes of earthquakes and other natural disasters. In fact, this part is yet another history, as the first two were, but here we find a specific history of a particular science, seismology. This remarkable assessment, citing of sources, and review of theories reinforces the fact that a great number of natural and seismic histories were already circulating even within the Iberian Peninsula.¹⁴ Although he is not a famous writer of the Portuguese eighteenth century—very few other publications by him are known—he belonged to Lisbon's intellectual elite and held a position of leadership as caretaker of the national archives. Moreira de Mendonça's account seems to fit well within the objectives of the influential programs supported by the king's minister, the Marguis of Pombal. Whether intentionally or not, Moreira de Mendonça wrote a work that would gratify Pombal's administration, which deliberately sought to give guarded descriptions and accounts of the devastating events, paint a picture of order and continuity, and work toward rebuilding a radically new city and society.¹⁵ But its broader scope and the framing of the work with two longer sections, a universal history in the first part and a review of seismic theories in the third part, also put this work in dialogue with texts that go beyond thinking, describing, or narrating the Lisbon account. The Lisbon earthquake compelled him to aim higher and reach, or at least attempt to reach, broader scientific conclusions.

The objectives of História universal are manifold, but an obvious and pressing aim was to show that the Lisbon earthquake was by no means exceptional, but instead part of a historical continuum. For Moreira de Mendonça, the unique a spect of the earth quake was the fact that it belonged to a greater natural or worldhistory. In other words, the November 1755 earthquake was highly significant only because it was central to a universal movement and had a fundamental role in these larger phenomena. A striking aspect of the intellectual discussions and varied philosophical reactions to the earthquake was that a geographical, human, natural, and architectural disaster fueled a symbolic and theological discussion that asked readers to grapple with the meaning of an event that transcended the boundaries of comprehension. The earthquake thus became a paradigm of the incomprehensible, and debates ensued about how to make God compatible with the destruction, but, ultimately, it was an event that pushed writers and scientists to reinforce, and convince readers and themselves to accept, different philosophical stances and scientific theories.¹⁶ Interestingly, in his guest to create a universal history of earthquakes, Moreira de Mendonça seemed to strip the Lisbon earthquake of its singularity, while also unintentionally revealing that without it, and without the experience of it, this global perspective might never have been conceptualized. Placing the 1755 event within a larger narrative was a way of responding to the tragedy's incomprehensibility and coping with it, even if in a displaced manner. The singularity of the Lisbon earthquake served, perhaps ironically, as the primary impetus for Moreira de Mendonça to theorize a universalist project. The scope, intentions, and formal implications of História universal have been greatly underestimated by scholars. In this essay, I have tried to show the ways in which the text makes significant contributions to broader intellectual discussions and scientific projects under development at the time, including the evolving concept of universal history. More importantly, I have tried to argue that specific strategies and forms emerge from attempts to examine and narrate catastrophic events, and that these help us to better understand the relationship between crisis and discourse.

notes

1. All quotes come from the digitalized edition of Moreira de Medonça's treatise, which is available in the John Carter Library and on-line at www.archive.com: Joachim José MoreiradeMendonça,Históriauniversaldosterramotos,quetêmhavidonomundo,dequehánotícia,desdeasuacriaçãoatéoséculopresente...(Lisboa:OficinadeAntónioVicentedaSilva,1758). I have modernized the spelling and the translations are mine unless otherwise indicated.

2. VeríssimoAntónioMoreiradeMendonça, Dissertaçãofilosóficas obreoterramotode Portugaldoprimeirodenovembrode 1755. Expendem-seassuascausas físicas, as dosseuse feitos, e prognósticos (Lisboa: Oficina de Domingos Rodrigues, 1756). Moreira de Mendonça discusses his brother's treatise and their disagreements over some of the theories. In an article, Filomena Amador analyzes critically a number of Portuguese and Spanish treatises on the Lisbon earthquake, including Veríssimo Moreira de Mendonça's, in light of the natural philosophy and scientific debates developing at the time in northern Europe. See "Explicação das causas naturais do Terramoto de Lisboa: o papel retórico das novas concepções e métodos científicos, em particular da experimentação, em textos portugueses e espanhóis do século xviii," published in the collected volume 1755: Catástrofe, memória e arte (Lisboa: Edições Colibri, 2006), edited by Helena Buescu et al.

3. See Helena Buescu's chapter, "Sobreviver à catástrofe: sem tecto, entre ruínas," in OgrandeterramotodeLisboa:ficardiferente, editedbyHelenaCarvalhãoBuescuandGonçalo Cordeiro (Lisboa: Gradiva, 2005), 19-72. In his well-known historical account, The Lisbon Earthquake (Philadelphia: J. B. Lippincott, 1957), T. D. Kendrick writes, "Moreira de Mendonça had nothing to say about Lisbon's abominable sins; nothing to say about the wrath of God" (112).

4. SeeSusanNeiman, EvilinModernThought (Princeton: Princeton University Press, 2002).

5. See Mark Molesky, "A New Account of the Lisbon Earthquake: Marginalia in Joaquim José Moreira de Mendonça's 'História Universal dos Terremotos''' in Portuguese Studies 26.2 (2010): 232-248 for references to some of the accounts that do exist in Portuguese

(footnote3), suchas António Pereira de Figueire do's Comentário Latinoe Português Sobreo Terramotoe o Incêndio de Lisboa (1756) and Miguel Tibério Pedegache Brandão Ivo's Novae Fiel Relação que Experimentou Lisboa (1756), amongothers. See Molesky's recent book, This Gulfof Fire: The Destruction of Lisbon, or Apocaly psein the Age of Science and Reason (New York: Alfred A. Knopf, 2015) and Isabel Maria Barreira de Campos's O grande terramoto (1755) (Lisbon: Parceria, 1998) for more extensive bibliographies and references to domestic and foreign accounts of and debates on the Lisbon earthquake.

6. T. D. Kendrick is one of the few historians to note the importance of the structure of the text, but he does not elaborate on its implications. He writes of Mendonça's work, "The main interest of his book, however, is that it is designed on a grand scale and has the imposing title História universal dosterramotos; for hethought that a full history of all the recorded earthquakes of the past would show them to be common events and sodiminish the horrors of the disaster" (107-8).

7. FranciscoMartinezMolés, Disertaciónfísica: origen, yformación del terremoto, padecido el díaprimero de Noviembre de 1755. Las causas, que lo produjeron, ylas que atodos los producen. Presagios, que antece dentemente anuncianeste terriblemeteoro, yexplicación detodas las cuestiones, que sobretanextraño fenómeno pueden hacerse (Madrid: Imprentade Juande San Martin, 1755). Francisco de Pinae Melo, Aoterremoto do primeiro de Novembro de 1755. Parenesis de Francisco Pina e Melo (Lisboa: Oficina de Manuel Soares, 1756). Published much later in 1803, Teodoro de Almeida's Dissertaçãos obreacaus anatural do famos oterramoto de Lisboano [ano] de 1755, which was annexed to his poem, Lisboa destruída (Lisboa: 1803) follows this tradition of providing scientific explanations and reasoned reactions to the disaster.

8. In her article, "The Lisbon Earthquake of 1755: Public Distress and Political Propaganda," Ana Cristina Araújo notes how details from Moreira de Mendonça's description of the day's event seem to be taken directly from the widely distributed account by MiguelTibérioPedegacheBrandãolvo,NovaefielrelaçãodoterramotoqueexperimentouLisboa etodooPortugalnoprimeirodeNovembrode1755(Lisboa:ManuelSoares,1756).Shewrites, "Curiously, as if plagiarism were involved, the same description is given by Joaquim MoreiradeMendonçainHistóriauniversaldosterramotos(1758)."AccessedMay2016,https://www.brown.edu/Departments/Portuguese_Brazilian_Studies/ejph/html/issue7/html/aaraujo_main.html.

9. SeeT.C.W.Blanning'sThe Pursuit of Glory: Europe, 1648-1815 (New York: Viking, 2007).

10. Hathi Trust. An Universal History, from the Earliest Account of Time (London: T. Osborne, 1747–68). 65 volumes. https://catalog.hathitrust.org/Record/000436117

11. Kant, Immanuel. "Idea for a Universal History with a Cosmopolitan Purpose." In H. S. Reiss, Kant (Cambridge: Cambridge University Press, 1991). 41–53.

12. Friedrich von Schiller, "The Nature and Value of Universal History: An Inaugural Lecture [1789]." History and Theory 11.3 (1972): 321-334.

13. In previous research I have focused on literary accounts of the Lisbon earthquake and have discovered that most of these texts employ certain narrative strategies and are formally framed in ways that resemble Moreira de Mendonça's own tactics. These fictional renderings, stories or poems, like Mendonça's scientific account, try to minimize the gravity of events, hide the disaster under various layers, and exhibit an ongoing narrative of self-reflection, putting into question the possibility of narrating the disaster. Disaster is thus more prominent in its specter than in its reality. See Estela Vieira, "Escrever depois de uma catástrofe: o terramoto de 1755 e a literatura portuguesa" in O grandeterramotodeLisboa:ficardiferente,editedbyHelenaCarvalhãoBuescuandGonçalo Cordeiro (Lisboa: Gradiva, 2005), 265-282, and "The Lisbon Earthquake of 1755 and the PortugueseLiteraryImagination"inEllipsis:TheJournaloftheAmericanPortugueseStudies Association 5 (2007): 113-29.

14. See Amador (2006) for an analysis of how these Iberian seismic histories or dissertations compared to scientific theories being developed in northern Europe, especially in comparison to Kant's essays on the topic.

15. SeeKennethMaxwell'sPombal:ParadoxoftheEnlightenment(Cambridge:Cambridge University Press, 1995) and his chapter "Lisbon: The Earthquake of 1755 and Urban RecoveryundertheMarquêsdePombal"inOutofGroundZero:CaseStudiesinUrbanReinvention, edited by Joan Ockman (New York: Columbia University, 2002), 20-45, for further discussion of Pombal's governance and reform and reconstruction efforts in the aftermath of the earthquake.

16. See especially the exchange between Voltaire and Rousseau, and José O. Marques's reflection on this discussion, "The Paths of Providence: Voltaire and Rousseau on the Lisbon Earthquake" Cadernos de história e filosofia da ciência 15.1 (Jan.-Jun. 2005): 33-57.

works cited

- Almeida, Teodoro de. Lisboa destruída, poema. Lisboa: Oficina de António Rodrigues Galhardo, 1803.
- Amador, Filomena. "Explicação das causas naturais do terramoto de Lisboa: o papel retórico das novas concepções e métodos científicos, em particular da experimentação, em textos portugueses e espanhóis do século xviii." In 1755: Catástrofe, Memória e Arte. Eds. Helena Buescu et al. Lisboa: Edições Colibri, 2006.
 - ——. An universal history, from the earliest account of time. London: T. Osborne, 1747–68. 65 volumes. Accessed February 2015. https://catalog.hathitrust.org/ Record/000436117
- Araújo, Ana Cristina. "The Lisbon Earthquake of 1755: Public Distress and Political Propaganda." Accessed May 2016. https://www.brown.edu/Departments/ Portuguese_Brazilian_Studies/ejph/html/issue7/html/aaraujo_main.html

Blanning, T. C. W. The Pursuit of Glory: Europe, 1648-1815. New York: Viking, 2007.

Buescu, Helena. "Sobreviver à catástrofe: sem tecto, entre ruínas." In O grande terramoto de Lisboa: ficar diferente. Eds. Helena Carvalhão Buescu and Gonçalo Cordeiro. Lisboa: Gradiva, 2005. 9-72.

Campos, Isabel Maria Barreira de. O grande terramoto (1755). Lisbon: Parceria, 1998. Ivo,MiguelTibérioPedegacheBrandão.Novaefielrelaçãodoterramotoqueexperimentou

LisboaetodooPortugalnoprimeirodenovembrode1755.Lisboa:ManuelSoares,1756. Kant, Immanuel. "Idea for a Universal History with a Cosmopolitan Purpose." In H. S.

Reiss, Kant. Cambridge: Cambridge UP, 1991. 41–53.

Kendrick, T. D. The Lisbon Earthquake. Philadelphia: J. B. Lippincott, 1957.

Marques, José O. "The Paths of Providence: Voltaire and Rousseau on the Lisbon Earthquake." Cadernos de história e filosofia da ciência 15.1 (Jan.-Jun. 2005): 33-57.

Maxwell, Kenneth. "Lisbon: The Earthquake of 1755 and Urban Recovery under the MarquêsdePombal."InOutofGroundZero:CaseStudiesinUrbanReinvention.Ed.Joan Ockman. New York: Columbia University Press, 2002. 20-45.

———. Pombal: Paradox of the Enlightenment. Cambridge: Cambridge UP, 1995. Molesky, Mark. "A New Account of the Lisbon Earthquake: Marginalia in Joaquim José Moreira de Mendonça's 'História universal dos terramotos." Portuguese Studies 26.2 (2010): 232-248.

-------.ThisGulfofFire:TheDestructionofLisbon,orApocalypseintheAgeofScienceandReason. New York: Alfred A. Knopf, 2015.

- Moreira de Mendonça, Joachim José. História universal dos terramotos, que têm havido no mundo, de que há notícia, desde a sua criação até o século presente... Lisboa: Oficina de António Vicente da Silva, 1758.
- Moreirade Mendonça, Veríssimo António. Dissertação Filosóficas obreoterramoto de Portugal doprimeiro de novembro de 1755. Expendem-se assuas causas físicas, as dosse use feitos, e prognósticos. Lisboa: Oficina de Domingos Rodrigues, 1756.
- Molés, Francisco Martinez. Disertación física: origen, y formación del terremoto, padecido el día primero de Noviembre de 1755. Las causas, que lo produjeron, y las que a todos los producen. Presagios, que antecedente mente anuncianeste terriblemeteoro, y explicación de todas las cuestiones, que sobretan extraño fenómeno pueden hacerse. Madrid: Imprentade Juan de San Martin, 1755.

Neiman, Susan. Evil in Modern Thought. Princeton: Princeton UP, 2002.

- PinaeMelo,Franciscode.AoterremotodoprimeirodeNovembrode1755.ParenesisdeFrancisco Pina e Melo. Lisboa: Oficina de Manuel Soares, 1756.
- Schiller, Friedrich von. "The Nature and Value of Universal History: An Inaugural Lecture [1789]." History and Theory 11.3 (1972): 321-334.

- Vieira, Estela. "Escrever depois de uma catástrofe: o Terramoto de 1755 e a literatura portuguesa." In O grande terramoto de Lisboa: ficar diferente. Eds. Helena Carvalhão Buescu and Gonçalo Cordeiro. Lisboa: Gradiva, 2005. 265-282.
- ------. "The Lisbon Earthquake of 1755 and the Portuguese Literary Imagination." Ellipsis: The Journal of the American Portuguese Studies Association 5 (2007): 113-29.

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