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A History of Earthquakes in the Luzon Island, Philippines during the 19th and 20th Centuries

Historical seismology, bureaucratic responses, and socio-cultural interpretations of disasters

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A History of Earthquakes in the Luzon Island, Philippines during the 19th and 20th Centuries: Historical seismology, bureaucratic responses, and socio-cultural interpretations of disasters

by

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TABLE OF CONTENTS

	Page No.
Title Page	
Acknowledgements	
Author's Bionote	
Table of Contents	i-vi
Abstract	vii
List of Tables	viii-ix
List of Maps	x
List of Photos	xi-xii

	Page No.
CHAPTER 1	
Introduction	1-41
a. Topic and Objectives of the Study	1-3
b. Theoretical Guide of the Study	3-4
b.1 Earthquakes as "Historical Events"	3-7
b.2 Historical Seismology	8-10
b.3 <i>La Longue Dureé</i> and a History of Environmental Hazards	10-13
c. State of the Arts: Methodology and Description of Sources	14
c.1 Government Reports, Newspapers, and Scientific Works on Historical Seismology in the Philippines, 19 th -20 th centuries as Primary Sources	14-20
c.2 Primary Sources from several archives	20
c.2.1 National Archives of the Philippines (NAP), Manila, Philippines, and Biblioteca Tomás Navarro Tomás-Centro de Ciencia Humanas y Sociales-Consejo Superior de Investigaciones Científicas (BTNT-CCHS-CSIC), Madrid Spain	20-21
c.2.2 Archivo Historico Nacional (AHN), Madrid, Spain	21-22
c.2.3 Biblioteca Nacional de España (BNE), Madrid, Spain	22
c.2.4 Manila Observatory Library and Archives (MOA), Quezon City, Philippines	23
c.2.5 University of Michigan (UMich) Library Online	24
c.2.6 University of the Philippines Main Library (UPML), Quezon City, Philippines	24-25
c.2.7 Philippine Institute of Volcanology and Seismology (PHIVOLCS) Library, Quezon City, Philippines	25
c.3 Related Literature Review	26
c.3.1 On Environmental History and History of Disasters	26-29
c.3.2 On Historical Seismology	29-34
c.3.3 On Historical Earthquakes in the Philippines	34-39
d. Scope and Limitation	39-40
Sum Up	41

	Page No.
CHAPTER 2	
Locating the roots of “Historical Seismology”: Philippine geography, oral traditions, and early-recorded earthquakes	42-68
a. Geology and Geography of Luzon Island	42
a.1 A Geological Overview	42-44
a.2 Geography of Luzon: Fault Lines and Volcanic Arcs	44
a.2.1 Origin of the Philippine Archipelago	44-45
a.2.2 Fault Lines and Volcanic Zones	47-48
b. Philippine oral and popular traditions	49
b.1 Culture and Environment: Boas’ “Anthropogeography”	49-51
b.2 Oral literature and environmental hazards	51-54
b.3 Local-Popular Knowledge	55-59
c. Early “Historical” Earthquakes, 16 th and 18 th centuries	59-67
d. The possibility of historical seismology of the early modern period in Philippine History	68
Sum Up	68

	Page No.
CHAPTER 3	
Earthquakes in Luzon in the 19th Century: The Spanish bureaucracy, the emergence of institutional seismology, and the post-disaster local responses	69-184
a. Setting the Context: 19 th century Luzon Earthquakes	70-72
b. The June 1863 earthquake	72
b.1 The June 1863 earthquake and the destruction it caused	72-83
b.2 Initial measures taken by the Spanish civil government in Manila	83-89
b.3 Measures implemented by the Madrid Government	89
b.3.1 Initial Madrid response	89-91
b.3.2 Donations and subscriptions	91-94
b.3.3 National subsidiary and loan funds	94-95
b.3.4 Mobilizing professionals and workers in Spain	95-98
b.4 <i>Socorros</i> , donations from the provinces, and petitions from the residents of Manila	98-107
b.5 Comprehensive rehabilitation and reconstruction plans	107-112
b.6 Other responses and initiatives of the local population	113-115
b.7 The 1863 earthquake and the Secularization movement	115-117
c. The July 1880 earthquake	117
c.1 The July 1880 earthquake and the destruction it caused	117-119
c.2 Luzon-wide assessment of the effects of July 1880 earthquake	120-137
c.3 The initial response of the civil government of the Philippines, July-December 1880	137-138
c.3.1 Orders from the <i>Junta de Autoridades</i>	138-141
c.3.2 On the use of prisoners as workers	141-144
c.4 Reconstruction of Manila and other Luzon provinces	143
c.4.1 Immediate suspension orders on construction and control of prices of goods	143-144

c.4.2 Cutting of trees to meet the demand of wood for public construction	144-145
c.4.3 Fiscal aspect of the reconstruction: Initial budget allotment and releases	145-147
c.4.4 “Aseismic” structures and towns: Standardization of building construction and the Madrid’s response in the need of professional workers	147-150
c.5 Interpretations of the July 1880 earthquake	150-151
c.5.1 The Natural-Religious: Interpretation of and responses on the earthquake from the point of view of the religious	151-155
c.5.2 The Scientific-Geological: Commissioned studies	156-158
c.5.2.1 The Jesuits and the July 1880 earthquake	158-168
c.5.2.2 The Engineers and the July 1880 earthquake	169-174
d. Writing 19 th Century Tremors: Scientific Studies and Post-disaster Reconstruction Policy Recommendations	175-184
Sum Up	184

	Page No.
CHAPTER 4	
Earthquakes in Luzon in the 20th Century: National Disasters, National Science, and Nation-Building	185-360
a. 20 th century earthquakes: An Overview	185-186
b. The 1937 earthquake: The Commonwealth Government’s response, and the documentation of a “cultural” understanding of earthquakes	186-187
b.1 American colonial perspectives, projects, and institutions related to science and environmental hazards	187-190
b.2 The August 1937 earthquake	190-191
b.2.1 The earthquake and the extent of destruction	191-198
b.2.2 Responses of the Commonwealth Government after the 1937 Earthquake	198
b.2.2.1 Collecting reports from the provinces	198-201
b.2.2.2 Scientific studies about the 1937 earthquake: PWB, NRCP, and the recommendations for public engineering	201
b.2.2.2.1 Philippine Weather Bureau’s Work on Seismology	201-204
b.2.2.2.2 Structural and Public Engineering Studies and Recommendations after the August 1937 Earthquake	204-207
b.2.3 Cultural correlation of the 1937 earthquake with other previous earthquake experiences in Luzon	207-211
c. The 1968 earthquake: Manila and Casiguran, and the Ruby Tower Tragedy	211-213
c.1 The 02 August 1968 earthquake: Devastated Manila and Casiguran	213-223
c.2 The Ruby Tower Rescue: The Government, the NGO sector, the Chinese, and the Scientific Community	223-224
c.2.1 “Operation Ruby”: Rescue operation at the heart of downtown Manila	224-227

c.2.2 Support from other government institutions and the private and non-government organizations	227-228
c.2.3 Deaths, casualties, and survivors of the Ruby Tower collapse	228-231
c.2.4 The Ruby Tower and the Chinese	232-238
c.2.5 Geological problems and engineering lapses: Scientific Reports and Studies about the Ruby Tower incident	239-241
c.2.6 The August 1968 earthquake and the revisions in the National Building Code	241-244
d. 1983 earthquake: Disaster and Politics under a Dictatorial Regime	245
d.1 Disasters and the Marcos Dictatorship: A Context	245-246
d.2 The August 1983 Ilocos Norte earthquake: A double-edged tremor	246-247
d.2.1 The earthquake of 02 August 1983: Extent and damage	247-251
d.2.2 Bongbong and the Ilocos Norte Provincial Government, and the AFP, the OCD, and the NDCC: Multiple groups, one rescue operation	251-254
d.2.3 Casualties, survivors, and the Marcos Family	254-258
d.3 The Days of August 1983: The Situation in Ilocos Norte, and Marcos and Ninoy Aquino	258-263
d.4 The 17 August earthquake and the Marcos-Araneta “Royal Wedding”	264-267
d.5 Intertwined work: PAGASA, and COMVOL and PHILVOLCS	268-269
e. 1990 earthquake: A “Fiscal Earthquake” and a “Political Tremor”	270-271
e.1 The June 1990 earthquake: Intensity and extent	271
e.1.1 Intensity and magnitude	271-277
e.1.2 The situation in Baguio and Cabanatuan after the earthquake	277-285
e.1.3 The situation in Pangasinan, La Union, and Metro Manila after the earthquake	286-291
e.2 Government Response	292
e.2.1 Responses of the national and local governments, and problems encountered	292
e.2.1.1 Initial rescue and relief operations in Baguio and Cabanatuan	292-295
e.2.1.2 The National Government acted on: Proclamations and initial fiscal decisions	295-297
e.2.2 Work of other government branches and departments	298-303
e.2.3 Local governments’ responses	303-306
e.2.4 Larger fiscal “calamity”: National budget and foreign debt	306-310
e.3 Donation and Support	311
e.3.1 Support from Non-Governmental Organizations (NGOs)	311-317
e.3.2 Support from foreign governments and organizations	317-323
e.3.3 Benefit concerts and shows to raise funds for the victims of the earthquake	323-324
e.4 Deaths and casualties	325

e.4.1 Deaths and survivors	325
e.4.1.1 In Baguio	325-330
e.4.1.2 In Cabanatuan	330-331
e.4.1.3 In Pangasinan, La Union, Nueva Vizcaya, and Tarlac	332-333
e.4.2 Statistics and reporting of deaths and injuries	333-334
e.5 “ <i>Lindol sa loob ng lindol</i> ”: Criticisms to the national and local governments	334-335
e.5.1 The NDCC and the OCD: Disastrous agencies?	335-336
e.5.2 Estuar in hot water: The Public Works chief was accused of corruption	336-338
e.5.3 Criticisms from the “Opposition”	338-342
e.6 Other “problems” that surfaced after the earthquake	343
e.6.1 Rebuilding Baguio: Views of residents	343-344
e.6.2 False panic and “suffering porn”: Lapses in the media’s coverage of the tragedy	344-346
e.6.3 Disaster vultures: Opportunism, hoarders and profiteers, and lower-level corruption	346-349
e.6.4 Dealing with the rebels: NPA and RAM	349-350
e.7 “Meanings” and “effects” of the July 1990 earthquake	350
e.7.1 The July 1990 earthquake as a scientific phenomenon	350-353
e.7.2 The July 1990 earthquake and Filipino religiosity	353-356
e.7.3 The July 1990 earthquake and the discourses of nation-building	357-359
Sum Up	359-360

	Page No.
CHAPTER 5	
A History of Earthquakes in the Philippines, A History of Philippine Earthquakes: A Transversal Summary and Interpretation	361-391
a. Development of Institutional Responses, 1863-1990: Technological and Bureaucratic	362-367
b. Development of Public Responses, 1860s-1990s	367-370
c. Prospects in Disaster Communication and the Public: Earthquake Disasters and the Media	371-373
c. An Analysis of Filipino Resilience: Scientific and Nationalistic	373
c.1 Meaning(s) of “resilience”	373-375
c.2 Development of national scientific institutions as a response to strengthen resilience	375-378
c.3 Deconstructing Filipino Resilience	378-382
e. Situating the Filipino Experience in relation to other “Earthquake Countries”: The Philippines, Japan, and Indonesia	382-383
e.1 On Japan	383-386
e.2 On Indonesia	386-387
e.3 Comparing Experiences: The Philippines, Japan, and Indonesia	388-391
f. What’s with June, July, and August? Approaches for a History of Philippine Earthquakes	401-404

	Page No.
CONCLUSION	392-399
a. Approaches to History of Philippine Earthquakes	392-394
b. Contribution to Historical Research	394-398
c. Final Thoughts and Recommendations	398-399

	Page No.
BIBLIOGRAPHY	400-438
a. Archival Documents	400
a.1 Archivo Histórico Nacional (AHN), Madrid, Spain	400-402
a.2 Biblioteca Tomás Navarro Tomás-Centro de Ciencias Humanas y Sociales-Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain	402
a.3 Manila Observatory Library and Archives (MOLA), Quezon City, Philippines	402
a.3.1 Institutional Records	402-403
a.3.2 Data Records	403-407
a.3.3 Personnel Data Records	407
b. Newspapers	407
b.1 August 1937 Earthquake	407
b.2 August 1968 Earthquake	407-408
b.3 August 1983 Earthquake	408-409
b.4 July 1990 Earthquake	409-420
c. Published Materials	420
c.1 Primary Materials	420-426
c.2 Secondary Materials	426-436
d. Online Sites	436-438

ABSTRACT

This dissertation discusses a history of earthquakes in the Philippines during the 19th and 20th centuries. It presents narratives of six major earthquakes that occurred in the island of Luzon: the 03 June 1863, 18-20 July 1880, 20 August 1937, 02 August 1968, 17 August 1983, and the 16 July 1990. This study used government records, newspaper reports, scientific studies, and local accounts as sources to reconstruct the story of the Filipino people's experiences and post-disaster responses during calamities.

The six earthquake disasters discussed in this work coincided with significant political and economic events and periods in Philippine History: from the late Spanish era to the period of American rule and Commonwealth Government, and the postwar Philippine Republic decades. These earthquake disasters further reveal the social fabric of Filipino society; the catastrophic events caused by geological hazards complicated the way Filipinos cope with social upheavals, such as colonial rule and independence, and political experiments on self-governance.

There is a pattern of continuity and change in the ways Filipinos responded to the challenges posed by earthquakes both as an environmental and social hazard. The government and the local population manifested a wide-range of post-disaster responses to rescue and provide relief to affected communities, and they as well implemented risk reduction mechanisms to mitigate the adverse effects of earthquakes. The agony of collective suffering and adherence to religious worldviews prevail during calamities. These are not mere sordid reactions to social emergencies, but more of coping mechanisms of people to get a foothold in dealing with catastrophic situation. The use of scientific knowledge and modern disaster response and rehabilitation programs provided safeguards for people living in a perennially hostile environment. The state used instrumental science and modern architecture and engineering as tools to create better infrastructures, and viable and resilient communities. In particular, measures such as rehabilitation and reconstruction of towns, as well as corresponding policy reviews were done to create safe and livable communities for people.

This story of earthquakes in the past 150 years is a story of a relentless journey for resilient communities. Aside from identifying the different bureaucratic and political mentalities in disaster response, these earthquake experiences illustrate the commendable values and deplorable acts of people in times of calamities. In the historical materials analyzed in this work, the people in power frequently acted and portrayed as saviors, scientists and experts as the intellectual minority, and the ordinary people as perpetual victims - helpless, hapless, and hopeful.

This work provides a portrait of Filipino society in times of catastrophes – a sketch of the tedious cycle of reactive responses from the government, exasperated scientific community, and continuously evolving disaster mitigation and rehabilitation projects, programs, and initiatives.

LIST OF TABLES

Table No.	Title	Page No.
1	Summary of intensities and epicenters of earthquake studied	1
2	Summary of damages and casualties of the earthquakes studied	1
3	Earthquakes as defined in select 16 th to 19 th century dictionaries	61-62
4	List of select 16 th to 19 th century earthquakes in Luzon Island	66
5	Expenses of the Civil Government for salaries of workers in the clearing operations and demolition of damaged buildings, 06 June-17 September 1863	86
6	List of workers invited and enlisted in to help in the reconstruction of Manila, 1863	97-98
7	International subscriptions from Spain and Puerto Rico for the victims of the June 1863 earthquake in Manila, April 1864November 1866	99-100
8	Report of donations from the public subscription program opened in the provinces, in relation to the June 1863 earthquake, 26 March 1867	101-102
9	Number of Beneficiaries of the Junta Central de Socorros (as of 22 September 1866)	104-105
10	List of military facilities in the province of Manila that were damaged by the July 1880 earthquake	122-123
11	Public facilities identified by the IGOP as severely damaged and need to be rehabilitated immediately	124-126
12	List of ecclesiastical identified by the IGOP as severely damaged and need to be rehabilitated immediately	126-127
13	Effects of the July 1880 earthquake to towns and provinces in Luzon	131-133
14	Summary of tress/wood cut in virtue of the 28 July 1880 order	145
15	List of reported injured residents of Manila, rushed to the Philippine General Hospital (PGH), St. Luke's Hospital, San Juan de Dios Hospital, and Mary Johnston Hospital	195-196
16	Summary of initial reports received by the Bureau of Posts from provinces and towns regarding the 20 August 1937 earthquake, for the period from 20 to 26 August 1937	199-200
17	PWB Earthquake Bulletin No. 1 about the 02 August 1968 Earthquake	217
18	List of Damaged Buildings in Manila after the 02 August 1968 earthquake	219-220
19	Estimated Damages to Public Infrastructures and Government-owned Buildings	221
20	List of Casualties (deaths and injuries) of the 02 August Earthquake	229
21	Daily Number of reported fatalities and injuries of the 02 August 1968 earthquake	230
22	List of dead Chinese residents of the Ruby Tower after the 02 August 1968	232-233

23	List of casualties of the 17 August 1983 Ilocos Norte Earthquake	256
24	Estimated Damage of the 16 July 1990 Northern Luzon Earthquake	275
25	Donations from local institutions, private companies and individuals	312-313
26	Donations gathered by the Manila Bulletin Fund Drive, 17-30 July 1990	316-317
27	Donations from Foreign Governments and International Organizations	319-320
28	List of casualties in Baguio City (Hyatt, University of Baguio, La Trinidad, EPZ), reported after a week of rescue operations, 22 July 1990	326-327
29	Numbers of deaths and casualties as reported by different agencies that worked on the rescue and relief operation in earthquake devastated areas after the 16 July 1990 north Luzon earthquake, from newspapers and magazines	334
30	Summary of policies, institutions, and scientific studies, that are results/related to the 1863, 1880, 1937, 1968, and 1990 earthquake	366-367
31	Notable destructive Earthquakes in the Philippines (19 th -20 th centuries), Japan (19 th -20 th centuries), and Indonesia (19 th centuries)	383
32	Comparison of Earthquake experiences in the Philippines (19 th -20 th centuries), Japan (19 th -20 th centuries), and Indonesia (19 th centuries), in several aspects	388-390

LIST OF MAPS

Map No.	Title	Page No.
1	Map of Luzon Island	46
2	Distribution of Active Faults and Trenches in the Philippines	48
3	Croquis de Cavite y Fuerza San Felipe Neri, after July 1880 Earthquake	130
4	<i>Distribucion de Temblores, Atlas de Filipinas, 1899</i>	179
5	Isoleismal Map of the 02 August 1968 Earthquake	215
6	Epicenters and Aftershocks of the 02 August 1968 Earthquake	216
7	Location of Damaged Buildings in Manila after the 02 August 1968 Earthquake	220
8	Isoleismal Map of the 17 August 1983 Earthquake	248
9	Earthquake Intensity Map of the 16 July 1990 Earthquake	273
10	The 16 July 1990 Earthquake Rupture	274
11	Damaged roads and bridges in northern and central Luzon after the 16 July 1990 earthquake	276-277
12	Maps showing the areas in Pangasinan and la Union that were affected by liquefaction after the 16 July 1990 Earthquake	287-288

LIST OF PHOTOS

Photo No.	Title	Page No.
1	Recorded earthquakes in the Philippines per region, 1565-1970	40
2	Destructed Public Buildings in Manila after the June 1863 Earthquake (Palacio del Capital General, Catedral de Manila, Casa del Consul de Dinamarca en Manila, Almacenes General de Tabaco, Casa del Ayuntamiento de Manila, Aduana de Manila, Torre del Iglesia de Binondo)	79-83
3	<i>Gaceta Estraordinaria</i> , 20 September 1863	92
4	Destructed structures and landscapes in Pangasinan and La Union after the July 1880 Earthquake	134-137
5	Sketches of San Emigdio, Obispo y Martir, Patron contra los Terremotos	154
6	Prayer handbook for earthquakes in Mexico (1765) and Cuba (1906)	155
7	Reports and studies made by the Manila Observatory about the July 1880 Earthquake	162-163
8	The Seismic Section of the Observatorio Meteorológico de Manila and its instruments	164-168
9	The July 1880 Earthquake in José Centeno's 1881 <i>Memoria</i>	171-172
10	The damaged Heacock Building in Escolta district, Manila	193
11	The Collapsed Ruby Tower after the 02 August 1968 Earthquake	227
12	A description of the Ruby Tower rescue operations in a feature article	231
13	Looters or Scavengers? People collecting goods at the disaster area of Ruby Tower, August 1968	234
14	The Ruby Tower Memorial inside the Manila Chinese Cemetery	237-238
15	Front page of Philippine Daily Express, 19 August 1983	250
16	Front page of the Philippine Daily Express, 22 August 1983	261
17	"FL Irked by Traffic", Philippine Daily Express, 23 August 1983	262
18	Ninoy Aquino Funeral, 31 August 1983	263
19	The Irene Marcos-Greggy Araneta Wedding, 11 June 1983	265-267
20	Ilocos Norte Governor Bongbong Marcos inspecting Santa Monica Church in Sarrat town	267
21	Collapsed Hyatt Terraces Hotel, Baguio Hilltop Hotel, Nevada Hotel, Baguio City Public Market, Session Road, and Burnham Park in Baguio after the 16 July 1990 earthquake	280-284
22	The Christian Colleges of the Philippines in Cabanatuan after the 16 July 1990 Earthquake	284-285
23	Dagupan, Pangasinan after the 16 July 1990 Earthquake	289-290
24	Submerged areas in Narvacan, La Union due to liquefaction caused by the 16 July 1990 Earthquake	291
25	Dick Gordon in Cabanatuan, PMA cadet volunteers in Baguio	294-295
26	Editorial Cartoon: "Reconstruction and Rehabilitation"	310

27	"Relief for victims": Photos of relief goods being delivered to different disaster stricken-areas in Nueva Vizcaya	328-329
28	Editorial Cartoon: "Helping Hand From The Outside"	321
29	Editorial Cartoon: "KABISIG-POST QUAKE"	322
30	President Aquino's ocular visit at the Hyatt Terraces in Baguio	329
31	Cartoons: Donation Jokes	341
32	Editorial Cartoon: UNITY IN ADVERSITY: Congress-Cory-Citizenry amidst earthquake and floods	342
33	Cartoon: Hoarding relief goods and the Elections	348
34	Editorial cartoon: Hoarders and Profiteers	348
35	Cartoon: "Lost formalin for earthquake victims"	349
36	A timeline of policies, institutions, and scientific studies that are results/related to the 1863, 1880, 1937, 1968, and 1990 earthquake	365
37	The photo of Janela Arcos Celies, carrying the Philippine Flag during a flood in Albay Province in July 2011	379
38	Photo of a Philippine Star Twitter Account tweet depicting a/the "The Filipino Spirit" during calamities	380
39	A compiled picture of "The Filipino Spirit is Waterproof" photos	380