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DOCTOR OF HISTORY

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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Award date:
2019

Awarding institution:
University of Namur

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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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A dissertation for the degree

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05 April 2019

ACKNOWLEDGEMENTS

In life, as in History, we nourish the past as we traverse the present, and as we chart our future. And along with that protracted journey from the distant long ago to the unknown forthcoming, let us all be each other's footnote – a gentle reminder of how we come up where we are now.

This dissertation work will not be possible without the help and support of many people and institutions.

To my supervisors, Prof. Isabelle Parmentier of the Université de Namur (UNamur), and Prof. Noel Teodoro of the University of the Philippines Dlliman (UPD), thank you for guiding me in this journey. Thank you for imparting me your wisdom and for staying patient to me throughout the years. I will not achieve this if not because of your unwavering support.

To my family, my mother, Caring and father, Ramon, and to my sisters, Jennifer, Sheryl, Karen Jane, my nephew, Jerrence Skye, and to our 8th member, our dog Oliver, thank you for everything. I have left the country for quite a time, but I came back and will stay for good. You are the wind beneath my wings.

To Prof. Maria Luisa Bolinao of the UPD and Prof. Francis Gealogo of the Ateneo de Manila University (AdMU), my supervising committee members and jury members; to Prof. Darlene Gutierrez of the UPD, and Prof. Serge Schmitz of Université de Liège (ULiège), my dissertation jury members; to Prof. Maria Dolores Elizalde Pérez-Grueso, my research supervisor in Spain, thank you for your support and valuable critique to my work.

To the co-members of our project, Lou Ann Ocampo (ULiège), Donna Palaruan and Lito Nunag of Université Catholique de Louvain (UCL), Prof. Nestor Castro and Prof. Sol Dalisay of UPD Department of Anthropology, Prof. Olivier Servais and Prof. Frédéric Laugrand of UCL, and Khail Macadaeg, thank you. Thank you for being my family in the last five years.

To the Académie de Recherche et d'Enseignement Supérieur-Commission de la Coopération au Développement (ARES-CCD), the Commission on Higher Education (CHED) of the Philippines, and the Instituto de Historia, Centro de Ciencias Sociales y Humanas, Consejo Superior de Investigaciones Científicas (IH-CCHS-CSIC) thank you for the academic grants and institutional support you gave to me. This doctoral study will not be possible without the support of these institutions.

To my UP History Department family, thank you for your trust. To Chair Neil, Dean Dette of CSSP, Sir Ruel, Sir Raymund, Ma'am Rhoda, Sir Jely, Aaron Mallari, Maam Rowie, Dondy, Jio, Alvin, Francis, Aaron Viernes, Michael, Diego and the rest of the faculty, and to Ate Tess, Ate Mesh, and Kuya Arnel, thank you very much for the encouragement and support to me.

To my fellow Ph.D. students, Ate Ros, Ate Kristyl, and Allen, thank you for being my elder "academic siblings". Thank you for always being my "sponge" whenever I need to rant about the hardships of being a graduate student abroad. Thank you for making this journey bearable. In good times, and bad, you were by my side.

To my drinking buddies, Gino, Dan, and Jigs thank you for being there whenever I need someone to talk to. Thousands of miles apart, you make me feel I am just a couple of bottles away. *Mahal ko kayo!*

To my Etheria family, Jeff, Erika, and Ron, thank you for always showing me what “Para sa Bayan” means. Our pursuit of social justice and social progress moves forward. *Pagpupugay mga teh!*

To my CSSP colleagues, Andoy, Hannah, Pryor, Madz, Sir Ton, and Sir Jay, thank you for the support.

To my student assistants, EJ, Mai, and Christelle, thank you for helping me with the archival materials I need in the Philippines. I will not be able to finish collecting all the materials without your help.

To my friends in Spain, Julio, Ralf, Raisa, Miguel, Frank, Daryl, Shane, and Ebu, thank you for making my stay in Madrid memorable. I will treasure our friendship, over wine and chorizo.

To my UP LIKAS alumni friends, Sir Atoy, Maam Janet, Sir Lars, Maam Rinna, Mark, thank you.

To my friends at the UNamur Pôle Academique d’Histoire et de Sociologie Environnementale (PolleN), Natacha Acuit, Carole Ledent, Carole Payen, Diane Delangre, and to the Institute of Life-Earth-Environment (ILEE) of UNamur, thank you for helping me during my stay in Namur. I am grateful to all your help to me.

To my barkada in Malabon, Daryl, Richard, Ping, Edison, Edwin, Ian, Honey, Raymond, Ate Tina, Kuya Allan, and Ate Maluz, thank you.

To my high school best friends, Faye, Nicole, Ina, and Renelle, thank you. Towards adulthood and forever awesomeness!

To the rest of my friends from UP and beyond, Jay, Jael, Christian, Jan, Gelo, Aidel, Ian Alfonso, Kevin, and Emil, thank you.

Kay Bathala at Inang Bayan, salamat sa gabay at biyaya,

Again, to all the people who have always believed in me, thank you. I hope I can pay your good wishes back at the soonest possible time.

Muli, walang hanggang pasasalamat sa inyong lahat!

Thank you all! *Merci beaucoup à tous!*

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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.

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