

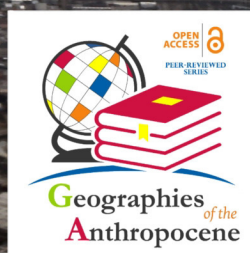
THE ANTHROPOCENE AND ISLANDS:

VULNERABILITY, ADAPTATION AND RESILIENCE TO NATURAL HAZARDS AND CLIMATE CHANGE

Miquel Grimalt Gelabert - Anton Micallef - Joan Rossello Geli
Editors

Preface by
Ilan Kelman

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“The Anthropocene and islands: vulnerability, adaptation and resilience to natural hazards and climate change”

Miquel Grimalt Gelabert, Anton Micallef, Joan Rossello Geli (Eds.)

is a collective and multilingual volume of the Open Access and peer-reviewed series

“Geographies of the Anthropocene”

(Il Sileno Edizioni), ISSN 2611-3171.

www.ilsileno.it/geographiesoftheanthropocene



Cover: imaginary representation of a tsunami that impacted an island. Source: pixabay.com

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ISBN 979-12-800640-2-8

Vol. 3, No. 2, November 2020



Geographies *of the* Anthropocene

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ISSN 2611-3171

Geographies of the Anthropocene

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The book series “Geographies of the Anthropocene”, edited by the international scientific publisher “Il Sileno Edizioni”, will discuss the new processes of the Anthropocene epoch through the various worldviews of geoscientists and humanists, intersecting disciplines of Geosciences, Geography, Geoethics, Philosophy, Socio-Anthropology, Sociology of Environment and Territory, Psychology, Economics, Environmental Humanities and cognate disciplines.

Geoethics focuses on how scientists (natural and social), arts and humanities scholars working in tandem can become more aware of their ethical responsibilities to guide society on matters related to public safety in the face of natural hazards, sustainable use of resources, climate change and protection of the environment. Furthermore, the integrated and multiple perspectives of the Environmental Humanities, can help to more fully understand the cultures of, and the cultures which frame the Anthropocene. Indeed, the focus of Geoethics and Environmental Humanities research, that is, the analysis of the way humans think and act for the purpose of advising and suggesting appropriate behaviors where human activities interact with the geosphere, is dialectically linked to the complex concept of Anthropocene.

The book series “Geographies of the Anthropocene” publishes online volumes, both collective volumes and monographs, which are set in the perspective of providing reflections, work materials and experimentation in the fields of research and education about the new geographies of the Anthropocene.

“Geographies of the Anthropocene” encourages proposals that address one or more themes, including case studies, but welcome all volumes related to the interdisciplinary context of the Anthropocene. Published volumes are subject to a review process (**double-blind peer review**) to ensure their scientific rigor.

The volume proposals can be presented in English, Italian, French or Spanish.

The choice of digital Open Access format is coherent with the flexible structure of the series, in order to facilitate the direct accessibility and usability by both authors and readers.

CONTENTS

<i>Preface</i>	8
<i>Introduction (English, Spanish and Italian languages)</i>	11

Section I

Natural hazards, volcanism, earthquakes and societal impacts

1. Riflessioni sul rischio vulcanico nei paesaggi lavici antropizzati della regione dell'Etna
Salvatore Cannizzaro, Antonio Danese, Riccardo Privitera 21
2. Large island, big issues. Vulnerability and resilience in Sardinia
Andrea Corsale, Carlo Perelli, Giovanni Sistu 59
3. When the giant shakes. Anthropology of the seismicity of Ischia, an island-volcano in the Mediterranean Sea
Giovanni Gugg 78
4. Le politiche di contrasto al rischio da maremoto: il caso di Stromboli
Giovanni Messina 101

Section II

Climate and Global Change, vulnerability, water resources and sustainability

5. Climate relocation of Indigenous peoples from island territories: Issues related to the misunderstanding of their indigenesness
Adèle de Mesnard 122
6. Impacts of climate change on the evolution of water resources in the context of the Mediterranean islands using as an example two Aegean Sea islands: consequences for touristic activities in the future
Christian Depraetere, Konstantinos X. Soulis, Demetrios E. Tsesmelis, Georgios Avgoustidis, Ioannis Spilanis 143

7. Caractérisation des ressources en eau et de leurs facteurs de dégradation dans l'île de Carabane <i>Cheikh Faye, Antoine Demba Manga</i>	183
8. Les îlots du Sahel (Tunisie orientale) : variété, intérêt géoarchéologique et risques <i>Ameur Oueslati</i>	203
<i>The Authors</i>	238

Preface

*Ilan Kelman*¹

Humanity and the environment are inseparable. No way exists to avoid their mutual influence, their mutual dependence, or their mutual support. Islands as homes for life and livelihood illustrate this intertwining perfectly, demonstrated by science and by islander experience. Science and experience are also interconnected, systemising and disseminating knowledge which islanders have developed, held onto, and implemented for centuries and millennia to ensure that their island becomes and remains their home.

This book supports the prominence of island approaches through eight chapters presenting and analysing island-related examples. The focus is society-nature integration, never assuming a duality or separation which then needs to be forced together, but instead accepting as the starting point that it is not possible to have one without the other. The research presented by the diverse authors is framed within the buzzword of the so-called “Anthropocene”, but also recognises that there might not be a single, linear, one-size-fits-all Anthropocene pathway. Multiple changes and influences occur simultaneously at all scales, forging numerous Anthropocenes with hierarchies and dominating factors morphing according to specific circumstances and contexts.

The richness of this approach is shown by the book’s first half, comprising a quartet of chapters on Italy. Cannizzaro et al. detail the long-term process of volcanic disaster risk creation for the Catania area of Sicily while Corsale et al. cover a breadth of vulnerabilities and hazards for Sardinia. Much in both chapters relates to local decision-making generating risk—yet the decisions are made for understandable reasons, aiming for livelihoods and opportunities for the people. This theme is repeated by Gugg for earthquakes rattling Ischia and by Messina for tsunamis striking Stromboli. While it might seem odd that these dangerous hazards are apparently not prioritised in terms of risk reduction, especially given past lethal experiences, decisions are being taken within wider contexts of people viewing the places as their home and wishing to have fulfilling lives and livelihoods there.

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As such, the case studies epitomise the depth of vulnerability as a long-term process which must consider multiple factors—and this is a baseline lesson from decades of island studies. In some Anthropocene discourses, this long-term view of vulnerability (and resilience) has been frequently neglected or circumvented in favour of a perspective which focuses on climate change by preferring a superficial snapshot of the present state. The chapters here reinvigorate the need for cultural depth, historical understandings, and processual insights to identify and then tackle the real, long-term causes of vulnerabilities.

Illustrating how climate change and Anthropocene discourses can and should embrace the long-term view of vulnerability, this book's second half presents four chapters accepting the need for the contextual and processual approach to vulnerability, even for climate change. de Mesnard selects what it is effectively the only current example of communities seeking to move due to climate change: coastal indigenous island communities in Alaska. The need to relocate does not stand alone, but must be considered within the communities' cultures, histories, and indigeneities, because all of these contribute to creating and tackling the identified vulnerabilities.

Depraetere et al. continue with climate change while returning to the Mediterranean. They detail climate change's physical impacts alongside those of tourism for a slew of islands followed by a focus on Rhodes and Samos, especially with respect to fresh water. Irrespective of the physicality of climate change impacting water, they offer plenty of solutions for reducing vulnerabilities though concerted efforts over the long-term. Faye et al. continue the water theme, but head south to explore the island of Carabane situated at the mouth of the Casamance River in Senegal. They note how the changing fresh water regime emerges from both declining precipitation—as part of wider climate variabilities, not just climate change—and increasing water use. The key to dealing with the challenges is management, rather than worrying too much about the climate. The book's final chapter by Oueslati stays in Africa by covering five groups of Tunisia's isles. The necessity of the long-term view for understanding and interpreting vulnerability is evidenced by adopting an archaeological perspective.

This collection of chapters encompasses three continents, an array of disciplines, well-known and lesser-known islands, and a diversity of hazards and risks—always converging on the needed concepts of vulnerabilities.

Climate change is present, as it must be considered, but never dominates, as it never should. Anthropocenes are incorporated into the analyses, yet the focus is rightly on people and places rather than buzzwords. This book is an important step forward in using islands and islander experiences to document the realities which people face in addressing difficult situations.

While risks might not always be reduced as much as external observers might want, the reasons for these decisions are far from illogical, balancing different needs and perspectives. It does mean that sometimes disasters are being set up to happen, although the people also deal with the day-to-day disasters of not earning enough income to have enough food and water. The lesson from these island analyses is perhaps that the Anthropocene should be more about what we do to others on a daily basis to remove opportunities and to increase marginalisation and inequity, rather than highlighting large-scale environmental changes.

"The Anthropocene and islands: vulnerability, adaptation and resilience to natural hazards and climate change" include 8 original research chapters, of authors from around the world, explaining how islands are affected by natural hazards and global change. The volume contributions range from small islands in Alaska to large ones such as Sicily in the Mediterranean and focus on facts such as water resources, sustainability and societal impacts of risk and climate change. The author's reflections share a wide scientific approach that will enrich a subject, islands and its future, which will become more and more important in the next decades.

Miquel Grimalt is Lecturer at the Geography Department of the Universitat de les Illes Balears in Mallorca (Spain) and director of the Climatology, Hydrology, Natural Hazards and Landscape Research Group. He holds a PhD in Geography with a thesis about natural hazards and floods. He is author or co-author of several papers published in international or national journals. His main research interests are climatology, risk geography and anthropical geomorphology.

Anton Micallef is an Associate Professor at the University of Malta lecturing at the Institute of Earth Systems on the Mediterranean coastal and marine environment, coastal hazards, coastal risk management and ocean systems. His area of specialisation is Coastal Geomorphology and Integrated Coastal Area Management, particularly that related to Beach Management. Since 1989, he has served as the Director of the Euro-Mediterranean Centre on Insular Coastal Dynamics (ICoD), a Council of Europe specialized Centre pertaining to the EUR-OPA Major Hazards Agreement.

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ISBN 979-12-80064-02-8

IL Sileno
Edizioni

