
Geography of Small Islands

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Outposts of Globalisation

 Springer

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ISBN 978-3-319-63867-6 ISBN 978-3-319-63869-0 (eBook)
<https://doi.org/10.1007/978-3-319-63869-0>

Library of Congress Control Number: 2017952248

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Cartography and Graphics by Dipl.-Ing. Claus Carstens, Hamburg

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Mutabor – ‘*I will be transformed*’.

From *The Story of Caliph Stork*, a fairy tale by Wilhelm Hauff

Foreword

A letter from ‘a gentleman’ in the Harz Mountains jolted Professor Ratter, not into becoming an island collector, but a person who does geographical research on and about small islands. This is not such a great stretch as an island is foremost a geographical feature, so it is geographers who naturally are drawn to them, like those who study mountain communities or river lands. As islands are ‘land surrounded by water’, this provides a natural focal point, even a demarcation zone for those with that temperament. This book is more about islands as they extend into the world, not as dots on a map or insects pinned to a collector’s board: they are living, breathing entities that however remote, such as the Rapa Nui (Easter Island) I study, are joined in complex daily, if not hourly, ways. This is the motor for Beate Ratter’s talisman, *Mutabor*, that infuses her introductory remarks: change and connections that move that mutation energy.

In the following seven chapters, Beate Ratter takes us through her experiences, direct and scholarly, modern and even classical, so that we can see from where her perspectives derive. The seven chapters paint a very broad canvas of the geographical and the imaginary feature in the earthscape that is the island, a place that people can enjoy and/or exploit, sometimes without even apprehending the details of the physical feature itself.

Each of these chapters begins with an informative abstract and keywords to reflect the orderly fashion that Ratter adopts in composing her volume as a whole. Throughout the book, the focus is on the connectedness of the islands presented. For example, the transformative tourism plans in the Maldives have led to the export (by personal means, to be sure) of an excess of foreign fighters in the destructive fields of the conflict in Syria; read it for yourself to see the impeccable logic of those relationships and how one local plan can influence events in distant lands.

As well as expertly taking us through key concepts in the study of islands as places and spaces, the book also introduces an analytical concept: *Gestaltwechsel* or a ‘change in perspective of the epistemology of islands’. That is, instead of the hand-wringing of victimage, islands are to be seen as agents in the creation of themselves, even if this is done, to paraphrase a famous sentence, not in circumstances of their own choosing.

I may be forgiven, I hope, for including *Gestaltwechsel* as a seminal concept in my own proposal of a nissological approach, to study islands in their own terms.

Chapter 6 introduces the IIDAB or ‘Integrated Island Database’ to facilitate comparative island studies, a practical outcome of decades of research. IIDAB is an imaginative project that the corporate university would reject on economic rationalist grounds as not bringing in business money but that the scholarly university – and Hamburg must be one of those – will embrace and foster.

This is a serious scholarly book and that is obvious in the high level of discussion, citation of works and respectful overall construction. But, as part of this, there is a joy and a playfulness in the writing that does not detract at all from the more abstract work. Whilst scattered throughout the text, this is most obvious in the ‘rewards’, one might say, that are at the end of each chapter: ‘Brain Teasers’ about islands, a series of, usually, one-answer quizzes, identifying an island place, with the correct answer being available on a dedicated website. There are six of these that range from cold, northern ones to tropical Pacific ones. Most have been involved in trade and that is how they have become known. As well, there are ‘Textbox’ explanatory pieces that pepper the chapters: five in all that take up island terms that have become part of European languages as well as one (number three) about the most famous island that never existed (Utopia). Textbox 4, for example, goes into some detail about those islands exploited for their guano.

I think it is a book that can be read for pleasure, if you are interested in islands. It also is a solid reference work bringing together a number of studies from the twentieth and twenty-first centuries about islands. Because of its light didactic touch, this book also could be a very useful textbook, and students will be fortunate to have one so well composed.

‘Islands are agents capable of creatively using their assets’ is my standout sentence for this book. It figures at the end of the abstract for Chapter 6, the conclusions. And it serves to characterise the forceful optimism that pervades this delightful and very interesting volume.

Thanks to the bloke from Harz who wrote to the author all those decades ago and thanks to Beate Ratter for carrying that awakened passionate flame to produce the work presented here.

Sydney
June 2017

Grant McCall

Preface

It is key events, usually unforeseen, that set one's course in life. Often, these watersheds are only recognised in retrospect, but it might just be possible to (re)construct why and when I became an island researcher. Although it is rarely a single event that leads to decisions, there is a certain contingency in events – as well as a great deal of randomness in assigning significance to them at a later stage and giving them more weight than could have been foreseen at the time. One of these bifurcation points occurred many years ago when I was a PhD student at Hamburg University working on my dissertation on the cultural resistance of small Caribbean islands to globalisation. Back then, an unassuming letter arrived, sent by an unknown gentleman from the Harz region and addressed to my supervisor. The letter contained a cover note written in shaky and old-fashioned handwriting and a stack of tightly written lists with island names. In the cover note, the gentleman explained that he had been compiling a list of the islands of the world for some time, a list he would now like to share with us as we were 'island researchers'. I will never forget our astonishment. Here was an elderly gentleman in the Harz mountains, reading atlases and world maps and compiling lists with island names.

I could never quite let go of that letter. It did not turn me into a collector of islands, even though I was able to discover that this species really exists. When my British colleague Stephen Royle meets our Japanese colleague Shunsuke Nagashima, they greet each other with '897' and '3897', respectively, indicating the total number of islands they have visited at that point. Island collectors are a strange and wonderful species, but although I never joined their ranks, the self-styled expert on the Caribbean did become an island researcher, whatever this may mean.

Three decades has passed since that letter first arrived. Numerous research trips, conference visits and private stays on islands have taken me to the Caribbean, Europe, Africa, Asia and Oceania, eventually leading me to write this book on the geography of small islands.

The objective of this book is to go beyond existing geographical research and present an extensive epistemology of small island studies. Taking a global perspective, and supported by specific case studies based on experience and my own work, the book focuses on the spatiality of islands – in other words, the role of islands in space and the place they represent to their inhabitants. Its specific contribution to the Geography of Islands is the perspective of spatiality and the spatial (re)construction on islands and with islands in a globalised world. Rather than a collection of islands, the book is thus a

geographical introduction to the world of small islands, their specificities, historical backgrounds and current developments. It examines overlapping sets of geographical discourses – which can broadly be characterised as physical geography, geopolitical significance, cultural-historical projection, economic spaces and vulnerable places.

Dennis Cosgrove described islands as ‘... the loci of imagination, desire, hopes and fears, the goal of dreamers and mystics and misfits, multiplying moulds into which cosmographers and cartographers could pour both art and science, material spaces which the merchant venturer, pirate, colonist and governor could penetrate and exploit’ (Cosgrove, 2005: 302). At the same time, islands are subject to globalisation, especially small islands that have long represented escape and intervention, discovery and remoteness, interests and power and self-esteem and *eigenwert*. For me, islands are ‘outposts of developments’ – with an emphasis on the plurality of developments, since there are many different forces, trajectories and topics within which change is a constant. Tomorrow will never be the same as today. Mutabor – I will be transformed.

In this global network of ‘increasingly complex connectivity’ (Tomlinson 1999), islands are considered ‘places of condensation’ (Debarbieux 1995) in which the general can be found in the specific and the specific in the general. Islands are not passive victims but agents of knowledge production and territorial transformation, processes that must be seen in a global context. I attempt to provide case study evidence for the selected topics, but should point out that everything I write is exemplary, in that it may be valid for several islands but will never apply to *all islands* of the world.

A book like this does not write itself. Many people contributed, and I’d like to thoroughly acknowledge their support and express my profound thanks. Cartographer Claus Carstens drew all the figures, maps and graphs in this book. Simon Strobelt supplied a valuable Pacific perspective and helped select and write the island brain teasers, giving readers some tough nuts to crack. This idea was borrowed from ‘Rafi Reiser’s Inselrätsel’, a regular contribution in the German weekly *Die Zeit* that began in the 1990s and ended in 2006. Rather than copy the existing ‘island brain teasers’, we came up with our own to mirror the respective chapter topics. We hope our readers will enjoy them as much as we enjoyed writing them.

I am also grateful to Jan Petzold, my former PhD student, who co-authored the chapter 6 on island vulnerabilities. Environmental historian Nils Franke led me through the history of culture with unfailing good humour and curiosity about islands, opening up ever new island perspectives along the way. A range of colleagues have given invaluable advice and support. Corinna, Lisa, Jan-Hendrik, Martin, Manfred, Prem, Ludwig and Silke provided help, comments and proofread chapters; to each and all of them: a big thank you. Last but not least, Kira Gee helped me draft an English version of a book that was originally conceived in German. Her eternal optimism prevented me from giving up whenever the feeling arose that everything was getting too much.

I sometimes wonder what became of the author of the letter I received all those years ago. Should he come across this book by some accident, I sincerely hope it will make him smile. After all, it was your letter that somehow laid the foundation of this book. Many thanks for this.

Hamburg
February 2017

Beate M.W. Ratter

References

- Cosgrove, Dennis. 2005. Review of John R. Gillis: *Islands of the mind: How the human imagination created the Atlantic World*. *Geografiska Annaler* 87B(4): 302–303.
- Debarbieux, Bernard. 1995. Le lieu, le territoire et trois figures de rhétorique *L'Espace géographique* 24(2): 97–112.
- Tomlinson, John. 1999. *Globalization and culture*, 248 pp. Chicago: University of Chicago Press.

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