



ROUTLEDGE
HANDBOOKS



Routledge Handbook on Tourism in the Middle East and North Africa

Edited by Dallen J. Timothy

ROUTLEDGE HANDBOOK ON TOURISM IN THE MIDDLE EAST AND NORTH AFRICA

The Routledge Handbook on Tourism in the Middle East and North Africa examines the importance of tourism as a historical, economic, social, environmental, religious and political force in the Middle East and North Africa (MENA). It highlights the ecological and resource challenges related to water, desert environments, climate change and oil. It provides an in-depth analysis of the geopolitical conditions that have long determined the patterns of tourism demand and supply throughout the region and how these play out in the everyday lives of residents and destinations as they attempt to grow tourism or ignore it entirely.

While cultural heritage remains the primary tourism asset for the region as a whole, many new types of tourisms are emerging, especially in the Arabian Gulf region, where hyper-development is closely associated with the increasingly prominent role of luxury real estate and shopping, retail, medical tourism, cruises and transit tourism. The growing phenomenon of an expatriate workforce, and how its segregation from the citizenry creates a dual socio-economic system in several countries, is unmatched by other regions of the world. Many indigenous people of MENA keep themselves apart from other dominant groups in the region, although these social boundaries are becoming increasingly blurred as tourism, being one socio-economic force for change, has inspired many nomadic peoples to settle into towns and villages and rely more on tourists for their livelihoods. All of these issues and more shape the foundations of this book.

This *Handbook* is the first of its kind to examine tourism from a broad regional and inclusive perspective, surveying a broad range of social, cultural, heritage, ecological and political matters in a single volume. With a wide range of contributors, many of whom are natives of the Middle East and North Africa, this *Handbook* is a vital resource for students and scholars interested in Tourism, Middle East Studies and Geography.

Dallen J. Timothy is Professor of Community Resources and Development and Senior Sustainability Scientist at Arizona State University. He also holds visiting professorships and research associateships in China, Spain and South Africa. His research interests include cultural heritage-based tourism, religious tourism, peripheral regions, heritage cuisines and geopolitics.



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

ROUTLEDGE HANDBOOK ON TOURISM IN THE MIDDLE EAST AND NORTH AFRICA

Edited by Dallen J. Timothy

First published 2019
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
52 Vanderbilt Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2019 selection and editorial matter, Dallen J. Timothy; individual chapters, the contributors

The right of Dallen J. Timothy to be identified as the author of the editorial material,
and of the authors for their individual chapters, has been asserted in accordance
with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised
in any form or by any electronic, mechanical, or other means, now known or
hereafter invented, including photocopying and recording, or in any information
storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks,
and are used only for identification and explanation without intent to infringe.

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Names: Timothy, Dallen J., editor.

Title: Routledge handbook on tourism in the Middle East
and North Africa / edited by Dallen J. Timothy.

Description: Milton Park, Abingdon, Oxon ; New York, NY : Routledge, [2019] |

Includes bibliographical references and index.

Identifiers: LCCN 2018035929 (print) | LCCN 2018039682 (ebook) |
ISBN 9781315624525 (master) | ISBN 9781317229247 (Adobe Reader) |

ISBN 9781317229230 (Epub) | ISBN 9781317229223 (Mobipocket) |

ISBN 9781138651920 (hardback) | ISBN 9781315624525 (ebook)

Subjects: LCSH: Tourism—Middle East. | Tourism—Africa, North.

Classification: LCC G155.M66 (ebook) |

LCC G155.M66 R68 2019 (print) | DDC 338.4/79156—dc23

LC record available at <https://lcn.loc.gov/2018035929>

ISBN: 9781138651920 (hbk)

ISBN: 9781315624525 (ebk)

Typeset in Bembo
by Out of House Publishing

CONTENTS

<i>List of figures</i>	<i>ix</i>
<i>List of tables</i>	<i>x</i>
<i>Notes on contributors</i>	<i>xi</i>

PART I

The space and place of MENA 1

1	Introduction: Understanding the Middle East and North Africa <i>Dallen J. Timothy</i>	3
2	The physical geography of the Middle East in the Anthropocene <i>C. Michael Hall</i>	11
3	The Middle East and North Africa: A dynamic cultural realm <i>Dallen J. Timothy</i>	24
4	Tourism trends and patterns in MENA: A resource perspective <i>Dallen J. Timothy</i>	36

PART II

Heritage, culture and urban space 55

5	Intangible heritage and cultural protection in the Middle East <i>Mairna H. Mustafa</i>	57
---	--	----

6	Deciphering 'Arab hospitality': Identifying key characteristics and concerns <i>Marcus L. Stephenson and Nazia Ali</i>	71
7	Tourism and indigenous communities: Linking reterritorialisation and decolonisation in North Africa <i>Christine N. Buzinde</i>	83
8	Urban heritage in the Middle East: Heritage, tourism and the shaping of new identities <i>Aylin Orbaşlı</i>	95
PART III		
	Religion and tourism	107
9	Religion, pilgrimage and tourism in the Middle East <i>Daniel H. Olsen</i>	109
10	Islamic tourism in the Middle East <i>Hamira Zamani-Farahani, Michele Carboni, Carlo Perelli and Neda Torabi Farsani</i>	125
11	Contemporary Jewish tourism: Pilgrimage, religious heritage and educational tourism <i>Noga Collins-Kreiner</i>	137
12	Christian tourism in the Middle East: Holy Land and Mediterranean perspectives <i>Dallen J. Timothy and Amos S. Ron</i>	147
PART IV		
	Natural and environmental challenges	161
13	MENA as a critical meeting point between tourism and water resources <i>Nurit Kliot</i>	163
14	Oil in the Middle East: A critical resource for tourism <i>Susanne Becken and Harald A. Friedl</i>	178
15	Desert landscapes and tourism in the Middle East and North Africa <i>Alan S. Weber</i>	189

16	Tourism and climate change in the Middle East <i>C. Michael Hall</i>	199
----	---	-----

PART V

Tourism and geopolitics **211**

17	Tourism as a tool for colonisation, segregation, displacement and dispossession: The case of East Jerusalem, Palestine <i>Rami K. Isaac</i>	213
18	Tourism and conflict in the Middle East <i>Richard W. Butler</i>	231
19	Image repair strategies adopted by MENA national tourism boards during and following crises <i>Eli Avraham</i>	241

PART VI

Transportation **257**

20	Cruise tourism in the Middle East <i>Magdalena Karolak</i>	259
21	Local transportation and tourism in the MENA region <i>Ammar O. Abulibdeh</i>	272
22	Air route development and transit tourism in the Middle East <i>Bojana Spasojevic and Gui Lohmann</i>	290

PART VII

Contemporary trends **307**

23	Halal tourism: A growing market on a global stage <i>Asad Mohsin and Chris Ryan</i>	309
24	Much ado about halal tourism: Religion, religiosity or none of the above? <i>Omar Moufakkir, Yvette Reisinger and Dhoha AlSaleh</i>	319
25	Tourism, migration and an expatriate workforce in the Middle East <i>Kevin Hannam and Cody Morris Paris</i>	330

Contents

26	Business travel and the MICE industry in the Middle East <i>Joan C. Henderson</i>	340
27	Medical tourism: In search of an economic niche <i>John Connell</i>	352
28	Shopping, tourism and hyper-development in the Middle East and North Africa <i>Esmat Zaidan</i>	365
29	Conclusion: Future research directions <i>Dallen J. Timothy</i>	378
	<i>Index</i>	387

FIGURES

14.1	OPEC countries' share of OPEC oil reserves in 2015	181
14.2	Increase in tourism receipts from international arrivals	182
17.1	The difficulties facing Arabs from Jerusalem	222
20.1	Ports of call along the Nile River	263
20.2	Ports of call in the Red Sea and the Mediterranean	265
20.3	Ports of call in the Arabian Gulf	266
22.1	Air transport development model	293
22.2	A theoretical example of a grid network converted to hub-spoke	294
22.3	Air transport passenger growth for 15 airports in the Middle East	297
22.4	Origin–destination air transport passenger country market using Dubai as a transit airport	300
22.5	Origin–destination air transport passenger country market using Abu Dhabi as a transit airport	301
22.6	Origin–destination air transport passenger country market using Doha as a transit airport	303

TABLES

1.1	The countries of MENA and their basic characteristics	5
3.1	Religious adherence in MENA	28
3.2	Examples of the peoples of MENA	30
4.1	International tourism in MENA, 2012–2016	38
4.2	Cruise passengers arriving in MENA countries, 2012–2016	40
5.1	Examples of MENA’s intangible heritage on UNESCO’s List of Intangible Cultural Heritage	59
5.2	A sample of unique handicrafts in the MENA region	63
12.1	Patterns of Christian tourism in the Middle East and North Africa	148
13.1	Water resources in MENA: Supply and demand	165
13.2	Economic indicators of agriculture and tourism sectors in selected MENA countries	167
13.3	Desalination capacity and contribution to water resources	170
13.4	Water use categories for various tourism uses	173
13.5	Empirical data on water use in tourism in the MENA region	174
13.6	MENA’s water consumption	175
14.1	Airport development in Middle Eastern countries	183
15.1	Desert tourism challenges and recommended mitigation strategies	196
16.1	Observed changes in a range of climate indices since the middle of the twentieth century	201
20.1	The growth of cruise passengers 2003–2013	260
22.1	Percentage of inter- and intra-continental passenger route growth in the period 2006–2015	292
28.1	A selection of current waterfront development projects in the Middle East	369

NOTES ON CONTRIBUTORS

Ammar O. Abulibdeh received his PhD from the University of Waterloo in Canada in 2013 in Geography and Environmental Management. He completed two Master's degrees from the University of Waterloo, a Master of Civil Engineering in 2006 and a Master of Applied Sciences in Economic Development in 2007. Dr Abulibdeh is an assistant professor of geography and urban planning at Sultan Qaboos University in Oman. He was formerly a faculty member at the United Arab Emirates University and Qatar University. He specialises in urban planning and development, specifically in transportation and environmental planning. His research interests focus on urban sustainability and planning policies, travel behaviour, climate change and implications of sustainable transportation systems on sustainable development.

Nazia Ali is Senior Lecturer in Events and Leisure Management at the University of East London. She is a graduate in Sociology from Middlesex University; she was awarded her doctorate from the University of Bedfordshire. Her research agenda is largely qualitative, operating within an interpretive framework to investigate the role of tourism in identity formation. Nazia has published in areas of tourism, migration and researcher reflexivity.

Dhoha AlSaleh is an assistant professor at Gulf University for Science and Technology—Kuwait. She has published in several journals including *Industrial Marketing Management*, *Tourism Recreation Research*, *Journal of Business Ethics Education*, *Health Marketing Quarterly* and *Journal of Business Inquiry*. She received a number of research grants from Kuwait Foundation for the Advancement of Sciences. She has participated in many international conferences. Her research interests include consumer behaviour and technology, social media and cross-cultural studies. She has recently become interested in the tourism behaviour of Arab and Muslim tourists, including destination marketing and development.

Eli Avraham is Media Professor in the Department of Communication at the University of Haifa, Israel. He is the author/co-author of a number of books including *Campaigns for Promoting and Marketing Cities in Israel* (2003), *Media Strategies for Marketing Places in Crisis and Improving the Image of Cities, Countries and Tourist Destinations* (2008) and *Marketing Tourism for Developing Countries: Battling Stereotypes and Crises in Asia, Africa and the Middle East* (2016). His

research interests include public relations and marketing strategies, marketing places, nation branding, advertising, image repair and crisis communication.

Susanne Becken is the Director of the Griffith Institute for Tourism and a Professor of Sustainable Tourism at Griffith University, Australia. She has widely published on the topics of sustainable tourism, climate change, energy use and greenhouse gas emissions, tourist behaviour, environmental policy and risk management. She was a contributing author to the Fourth and the Fifth Intergovernmental Panel on Climate Change Assessment Reports. She is on the editorial boards of *Annals of Tourism Research*, *Journal of Travel Research*, *Journal of Sustainable Tourism*, *Journal of Policy Research in Tourism, Leisure and Events*, *Tourism and Hospitality Prospects* (China) and the *Tourism Review*.

Richard W. Butler, a geographer by training, is Emeritus Professor in the Strathclyde Business School and Visiting Professor at NHTV University in Breda, Holland. He has published 20 books on tourism and many articles and chapters, his main research interests being destination development, island tourism and the links between tourism, war and religion. He is a past president of the International Academy for the Study of Tourism and UNWTO Ulysses Laureate (2016).

Christine N. Buzinde is an associate professor at Arizona State University. Her research focuses on two areas: community development through tourism and the politics of tourism representations. Her work on representations regards tourism texts as cultural repositories through which inclusion/exclusion, North/South and core/periphery can be understood. Her work on development adopts a grass-roots approach and aims to understand the relationship between community well-being and tourism development within marginalised communities.

Michele Carboni is currently a researcher at CRENoS, University of Cagliari and University of Sassari (Italy). His research interests are related to mobility, tourism and development in Africa. In recent years, he has published mainly on tourism and Islam in Northern Africa.

Noga Collins-Kreiner is a professor in the Department of Geography and Environmental Studies at the University of Haifa, Israel, the Head of the Haifa and Galilee Research Institute and the Vice-President of the Israeli Geographical Association (IGA). Her main research interests are pilgrimage, heritage tourism, hiking and tourism development and management. She is also a resource editor for *Annals of Tourism Research* and has published many papers on the topics of tourism and human geography.

John Connell is Professor of Human Geography in the School of Geosciences, University of Sydney. He has been a consultant to the World Health Organization and to the International Labour Organization, the South Pacific Commission, the World Bank, the Asian Development Bank, the Commonwealth Secretariat and the International Organisation of Migration. His research interests span various themes in geography and development studies, but in this century has focused on development in small island states, especially in the Pacific; the global and regional migration of health workers, the development of medical tourism and other forms of migration in the Pacific region, including temporary guestworkers and potential 'environmental migrants'. He has written more than 300 articles and over 20 books. The books include *Papua New Guinea. The Struggle for Development* (1997); *Urbanisation in the Island Pacific. Towards*

Sustainable Development (with J. Lea, 2002); *The Global Health Care Chain. From the Pacific to the World* (2008); *Migration and the Globalisation of Health Care: The Health Worker Exodus* (2010), and more recently, *Medical Tourism* (2011) and *Islands at Risk* (2013).

Harald A. Friedl is the Head of the Tourism Research Department and a Professor of Sustainability and Ethics in Tourism at the FH JOANNEUM—University of Applied Sciences, Austria. He has published on the topics of sustainable tourism, nature and health tourism, terrorism in tourism, tourism in the Greater Middle East and innovative didactics in higher tourism education.

C. Michael Hall is a professor at the University of Canterbury, New Zealand, and Visiting Professor at Linnaeus University, Kalmar, Sweden, and Docent, University of Oulu, Finland. His research interests include tourism, regional development, environmental change, food, sustainability and World Heritage.

Kevin Hannam is a professor and Dean of the Faculty of International Tourism at City University of Macau. He is also a senior research fellow at the University of Johannesburg, South Africa. He holds a PhD from the University of Portsmouth, UK. Previously he held positions as Head of Tourism & Languages at Edinburgh Napier University, Director of Doctoral Programmes at Leeds Beckett University and Associate Dean (Research) and Head of Tourism, Hospitality and Events at the University of Sunderland, UK. He has edited and authored/co-authored ten books and over 100 academic articles and book chapters. He is founding co-editor of the academic journals *Mobilities* and *Applied Mobilities*. He is also a resource editor for *Annals of Tourism Research* and serves on the editorial boards of *Tourist Studies*, the *International Journal of Tourism Anthropology*, the *Journal of Heritage Tourism* and *Tourism Geographies*.

Joan C. Henderson was Associate Professor in the Division of Marketing and International Business, specialising in tourism studies, at Nanyang Business School (Singapore) for over 20 years before her retirement from full-time employment in 2019. Prior to moving to Singapore, she lectured in travel and tourism in the United Kingdom after periods of working in the public and private tourism sectors there. She is a regular reviewer for a number of international tourism and hospitality journals and sits on the editorial board of several. She has published widely on the subject, contributed chapters to edited books and written one book. Current research interests include issues of tourism development in the Middle East and South East Asia and heritage tourism.

Rami K. Isaac was born in Palestine, did his undergraduate studies in the Netherlands, his graduate studies in the UK and has earned his PhD from the University of Groningen in the Netherlands. He is a senior lecturer in tourism, teaching at the NHTV Breda University of Applied Sciences. In addition, he is Assistant Professor at Bethlehem University, Palestine. His research interests are in the area of tourism development and management, critical theory and political aspects of tourism.

Magdalena Karolak is Associate Professor of Humanities and Social Sciences at Zayed University, UAE and has a PhD in Linguistics at the University of Silesia, Poland. Her research interests include transformations of societies in the Arabian Gulf and comparative linguistics. She has published more than 30 journal articles and book chapters on shifting gender relations, social media, culture and identity and political system transformations in the Gulf Cooperation Council countries.

Nurit Kliot is Emerita Professor in the Department of Geography and Environment Studies at the University of Haifa, Israel. Her main research areas are management of water resources, local and transboundary resources, environmental resources management, political geography and geopolitics, population migration and refugees, Middle East, terrorism, climate change, tourism and tourism management. She is the author of five books, seven edited volumes, four monographs and about 100 scientific papers and chapters in edited volumes. Her current research interests include hiking trails, refugees and human rights, and climate change effects.

Gui Lohmann is Associate Professor in Aviation Management and Head of the Aviation Discipline at Griffith University (Australia). He has authored several books, including *Tourism Theory: Concepts, Models and Systems* (2012), and peer-reviewed journal articles in English, Spanish and Portuguese on transport- and tourism-related topics. He has worked as a consultant for the Brazilian Ministry of Tourism, the World Tourism Organization and the United Nations Environment Programme, in addition to providing consulting to Adelaide Airport, Brisbane Airport Corporation and Queensland Airport Ltd. He is the founder and previous executive director of ABRATUR, the International Academy for the Development of Tourism Research in Brazil.

Asad Mohsin is Associate Professor of Tourism and Hospitality Management at the Waikato Management School. He has accumulated several years of industry and academic experience working in different countries in the Middle East, Southeast Asia and Asia Pacific region, including Australia. His main research interests and publications are in the area of Tourism & Hospitality customer perceptions and contemporary trends, human resource issues and challenges, and product and service quality assessment.

Omar Moufakkir is currently Associate Professor of Marketing and Head of the Business Administration Department at the Gulf University for Science and Technology in Kuwait. His research interests include Arab travel, politics and prejudice in tourism. He also researches the influential role of cultural differences and how these manifest in the context of tourism.

Mairna H. Mustafa is an associate professor in the Queen Rania Faculty of Tourism & Heritage at the Hashemite University-Zarqa, Jordan. Her research interests and published work are mostly in the behaviour of tourists in archaeological sites, tourism education, socio-cultural impacts of tourism and sustainable tourism development.

Daniel H. Olsen is an associate professor in the Department of Geography at Brigham Young University in Provo, Utah, US. His research interests revolve around religious and spiritual tourism, heritage tourism and the management of sacred sites, with secondary research interests in tourism in peripheral areas and tourism and disabilities. He is co-editor of *Tourism, Religion and Spiritual Journeys* (2006), and has published over 40 journal articles and book chapters.

Aylin Orbaşı is Reader in Architectural Regeneration at Oxford Brookes University. Her research interests are focused on tourism and the conservation of historic urban districts, with a specific focus on the Islamic world. As a consultant she works across the Middle East with national and regional authorities and donor organisations supporting the conservation and management of cultural heritage, including World Heritage Sites.

Cody Morris Paris is the Deputy Director of Middlesex University Dubai and an Associate Professor in the School of Law and the Business School. He is also a Senior Research Fellow

with the University of Johannesburg. He holds a PhD in Community Resource Development, an MSc in Tourism Studies and a BIS in International Geography and Political Science–International Studies with minors in Cultural Anthropology and Tourism from Arizona State University. Cody is a social scientist with varied research and teaching interests within the areas of tourism, community development, experiential learning, technology, sustainable development, mobilities, international politics and global security. He is the Editor-in-Chief of the *e-Review of Tourism Research* and serves on the boards of several leading journals, professional organisations and NGOs.

Carlo Perelli is Associate Researcher at CRENoS, University of Cagliari and University of Sassari, Italy. His interests are in geography, tourism geography and planning mainly in Sardinia (Italy), Morocco and Tunisia. He has been working on heritage tourism and halal tourism as diversification strategies in Morocco and Tunisia. In parallel to research activities he participated as a consultant in several EU-funded projects focusing on tourism, planning and environmental management in the MENA Region.

Yvette Reisinger is Professor in Marketing, College of Business Administration, Gulf University for Science and Technology (GUST), Kuwait. Prior to joining GUST she taught in the United States and Australia. She has a long-standing research interest in tourism and culture and communication, particularly in the area of cultural influences on tourist behaviour and destination marketing with a special focus on cross-cultural and behavioural analytical/quantitative studies. Her most current research interests focus on travel behaviour of Kuwaiti nationals. Her books *Cross-Cultural Behaviour in Tourism: Concepts and Analysis* (with Lindsay W. Turner, 2001), *International Tourism: Cultures and Behaviour* (2009), *Transformational Tourism: Host Perspectives* (2013) and *Transformational Tourism: Tourist Perspectives* (2016) provide a path to a very important field of tourism study in a global world.

Amos S. Ron is a senior lecturer and head of the Department of Tourism Studies at Ashkelon Academic College in Israel. A tour guide and a cultural geographer by training, he is a specialist on the geography of monotheistic religions, with an emphasis on contemporary Christian travel, religious culinary tourism, religious-themed environments, perceptions of time in pilgrimage, tour guiding in sacred space, and sacred site management. He is currently engaged in research on the landscapes of Christianity and on the ethical dilemmas of Jewish guides guiding Christian pilgrims.

Chris Ryan has been a professor at the University of Waikato since 1998, having arrived from his previous post of Professor of Tourism at the Northern Territory University. Chris is the editor of *Tourism Management* and from 2012 to 2017 was also the editor of *Tourism Management Perspectives*, which he founded in 2012. He has written well over 350 academic journal articles, book chapters and conference papers.

Bojana Spasojevic is Lecturer in Aviation Management at Griffith University, with a particular interest in the field of air transport and tourism. Her PhD topic focuses on leadership and stakeholder engagement during the process of air route development. Bojana uses innovative teaching in her courses, including the use of the Airline Online simulation as well as the AirportIS database. She has worked on consulting projects for Brisbane Airport Corporation and Adelaide Airport Ltd, in Australia.

Marcus L. Stephenson is Professor of Tourism and Hospitality Management and Dean of the School of Hospitality at Sunway University (Malaysia). Prior to this appointment in October 2017, he was Professor and Head of the School of Tourism and Hospitality Management at the University of the South Pacific (Fiji). He has published extensively on the sociology of tourism, especially concerning nationality, race, ethnicity, culture and religion. He is co-author of *Tourism and Citizenship: Rights, Freedoms and Responsibilities in the Global Order* (2014). He is also co-editor of *International Tourism Development and the Gulf Cooperation Council States: Challenges and Opportunities* (2017).

Dallen J. Timothy is Professor of Community Resources and Development and Senior Sustainability Scientist at Arizona State University. He is also a Senior Research Associate at the University of Johannesburg, South Africa, and Visiting Professor at Beijing Union University, Luoyang Normal University, and the University of Girona, Spain, in the European Master's of Tourism Management Program. He serves on 26 editorial boards and is the editor of the *Journal of Heritage Tourism*. He has ongoing research projects in the Middle East, North America, Europe and the Pacific Islands on topics related to pilgrimage/religious tourism, food heritage, souvenirs, borders and tourism, and participatory development.

Neda Torabi Farsani is Assistant Professor at the School of Tourism, Art University of Isfahan in Iran. She received her PhD degree in Tourism in 2012 from the University of Aveiro, Portugal. She also has papers in the fields of tourism published in international conferences and journals. She has been involved in writing several book chapters and she is the editor of the book titled *Geoparks and Geotourism: New Approaches to Sustainability for the 21st Century* (2011).

Alan S. Weber, PhD, teaches medical humanities, philosophy and medical ethics at Weill Cornell Medicine in Qatar, a Cornell University campus in the Middle East. His current research interests include: environmental philosophy, bioethics, and the history and philosophy of medicine. He is the co-editor with Andy Spiess and Faisal Mubarak of *Tourism Development in the GCC States: Reconciling Economic Growth, Conservation and Sustainable Development*, forthcoming in 2019.

Esmat Zaidan is Assistant Professor of Policy, Planning and Development at Qatar University. She received her PhD degree from the University of Waterloo in Canada in 2011 in Geography and Environmental Management. She holds a Master's in Urban Planning and a Master's in Applied Environmental Studies in Local Economic Development from University of Waterloo. Her research interests focus on sustainability in tourism planning and development, more specifically in economic and socio-cultural dimensions of sustainability.

Hamira Zamani-Farahani has a PhD in Tourism Management and has worked as a tourism researcher, writer, consultant and lecturer for several years. She is founder of the Astiaj Tourism Consultancy & Research Centre in Tehran. Publications include international and local journal papers, book chapters and three books. Her research interests are wide and summarised to tourist/host attitudes, religious tourism, tourism impact, event and special interest tourism, tourism development and management, rural/urban tourism, tourism marketing and entrepreneurship and train cruise tourism.

PART I

The space and place of MENA



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

1

INTRODUCTION

Understanding the Middle East and North Africa

Dallen J. Timothy

Remnants of prehistoric civilisations; vast deserts with nomadic peoples and green oases; the life-giving Nile, Tigris and Euphrates Rivers; the tales of Lawrence of Arabia and the Arabian Nights; the abiding cultures of Persia, Arabia, Egypt and the Maghreb; the Tower of Babel and the Land of Ur; Mesopotamia and the ancient empires of Assyria, Egypt, Babylon, Greece and Rome—these and multitudes of other quintessential representations have long conjured up images of romance, faith and fantasy, and fed the wanderlust of explorers, traders, pilgrims and tourists. The region commonly referred to today as the Middle East is home to some of the most remarkable historic localities, imposing topography and natural phenomena, richest resources, and venerated religious hearths on the planet. These have cultivated classical sagas and buttressed iconic places that have become the foundations of legends, motion pictures, novels, medieval explorations and modern day travel.

Despite its pivotal past and present, there is no consensus on the geographical extent of the Middle East and North Africa. Various organisations, international bodies, and geographical societies define the region in different ways using disparate criteria. For example, the World Bank includes Djibouti but does not include Afghanistan, Israel or Turkey. The World Tourism Organization, a UN-affiliated agency, classifies Israel and Turkey as Europe, and Iran as part of South Asia. Some international agencies include the Caucasus countries of Armenia, Azerbaijan and Georgia in their definitions, while others include Turkey, Cyprus, Sudan, South Sudan, Niger, Chad, Mali, Mauritania, Afghanistan and Pakistan as part of MENA. Thus, there are considerable geographical disparities between which countries are part of MENA and which are not, and these classifications are typically based upon the mandates of each agency involved.

Strictly in locational terms, MENA is comprised of two major areas: Southwest Asia and North Africa. Southwest Asia is frequently referred to as the Middle East and includes two sub-regions based on landforms and culture: the Arabian Peninsula and the transition zone between the Arabian Peninsula, the Mediterranean Sea and the Mountains of Iran and Turkey (Lew, Hall, & Timothy 2015). The Arabian Peninsula is dominated by a true desert landscape and Arab culture and is home to Yemen, Oman, Saudi Arabia, the United Arab Emirates, Qatar, Bahrain and Kuwait. The transition zone is comprised of highlands, smaller deserts, more water resources and fertile areas, and is more culturally diverse. It includes Iran, Turkey, Iraq, Syria, Jordan, Lebanon, Palestine and Israel.

In North Africa, Western Sahara is a stateless territory that is administered partly by Morocco and partly by the displaced government of the Sahrawi Arab Democratic Republic—considered a government in exile by much of the international community. Thousands of displaced Sahrawis, a Berber people, live in refugee camps in Algeria near the border of Western Sahara. The Maghreb (the land where the sun sets) was the traditional region that today includes Morocco, Algeria and Tunisia, although Libya is now frequently included as part of the Maghreb. Egypt and Southwest Asia have been known throughout history as *Mashriq*, or the land where the sun rises (Lew, Hall, & Timothy 2015). The Maghreb, together with Egypt, comprise the region of North Africa, which is characterised by desert environments, high mountains in Morocco and Algeria, Arab and Berber cultures, and Islamic religious traditions (Drysdale & Blake 1985; Heing 2017).

Geographers define regions not only by their locations but also by their boundaries, which unite areas using certain criteria that reflect a degree of homogeneity in cultural and/or physical characteristics (de Blij & Muller 2006). Thus, Southwest Asia and North Africa are defined by their cultural qualities, including their ancient role as cultural hearths or origins of great civilisations and innovations; the ubiquity of religious, cultural and ethnic conflicts; the dominance of Arabic-speaking populations; their role as the source area of three major world religions—Islam, Christianity and Judaism—and the current predominance of Islam as the main religion in every country, except Israel. The physical or natural features that also help define the realm include the dominance of hyper-arid deserts, scarce water supplies, and an abundance of oil and natural gas (Davis 2012; Downing 2007; Hobbs 2009; Longrigg 2017; Stewart 2013).

The term ‘Middle East’ is frequently used in popular lexicon, the media, educational spheres, and amongst government agencies to refer to Southwest Asia and North Africa, again owing largely to their association with Islam and arid environments. The term ‘Middle East’ was initially used by the British India Office in the mid-nineteenth century in reference to Southwest Asia. East and Southeast Asia were known as the ‘Far East’; the area of the Ottoman Empire that is today Turkey was known as the ‘Near East’, and the ‘Middle East’ referred to the area of Southwest Asia that lies southeast of Turkey. The term has been widely criticised for its Eurocentric undertones and geographical imprecision (Adelson 2012; Bonine, Amanat, & Gasper 2012; de Blij & Muller 2006; Lew, Hall, & Timothy 2015) but has nonetheless become commonly used throughout the world.

For the purposes of this book, based on location and geography, climate and limited water resources, and religion, ethnicity and culture, the Middle East and North Africa includes the following countries of Southwest Asia: Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, UAE and Yemen. In this book, North Africa is delineated as: Algeria, Egypt, Libya, Morocco and Tunisia (see Table 1.1).

In common with other world regions, MENA is a mix of affluence and poverty. Qatar’s per capita GDP of US\$124,900 is the second highest in the world, second only to that of Liechtenstein. Yet Yemen, a country sharing the Arabian Peninsula, has one of the world’s lowest (US\$2,300). In Egypt, the most populous country in the realm, less than 3 per cent of the total territory is arable land, and agriculture is overwhelmingly concentrated in a narrow strip along the banks of the Nile River, yet the country produces a significant portion of its food products. Several countries have vast oil and natural gas resources (e.g. Qatar, Saudi Arabia, Iran, Iraq, Kuwait, UAE, Egypt, Bahrain), while others have little or none. Those with few petroleum products have tended to rely much more on tourism and other service sectors than the states with vast oil wealth. Several countries have large, agriculturally productive areas fed by rainfall and plentiful groundwater (e.g. Morocco, Algeria, Turkey, Iran), while others cannot feasibly grow their own foodstuffs owing to the prohibitive cost of ocean water desalination, which

Table 1.1 The countries of MENA and their basic characteristics

Country	Capital city	Area/Size (sq. km)	Population	GDP per capita (2017 est., US\$)	Largest ethnic group(s)
Algeria	Algiers	2,381,741	40,969,443	\$15,100	Arab, Berber
Bahrain	Manama	760	1,410,942	\$51,800	Arab, Asian
Egypt	Cairo	1,001,450	97,041,072	\$13,000	Arab, Copt
Iran	Tehran	1,648,195	82,021,564	\$20,000	Persian, Azeri, Kurdish
Iraq	Baghdad	438,317	39,192,111	\$17,000	Arab, Kurdish
Israel	Jerusalem*	20,770	8,299,706	\$36,200	Jewish, Arab
Jordan	Amman	89,342	10,248,069	\$12,500	Arab, Circassian, Armenian
Kuwait	Kuwait City	17,818	2,875,422	\$69,700	Arab, Asian
Lebanon	Beirut	10,400	6,229,794	\$19,500	Arab, Armenian
Libya	Tripoli	1,759,540	6,653,210	\$9,800	Arab, Berber
Morocco	Rabat	446,550	33,986,655	\$8,600	Arab, Berber
Oman	Muscat	309,500	4,613,241	\$45,500	Arab, Baluchi
Palestine	Jerusalem**/ Ramallah***	6,220	4,543,126	\$4,300 (2014 est.)	Arab, Jewish
Qatar	Doha	11,586	2,314,307	\$124,900	Arab, Asian
Saudi Arabia	Riyadh	2,149,690	28,571,770	\$55,300	Arab, Asian
Syria	Damascus	185,180	18,028,549	\$2,900 (2015 est.)	Arab, Kurdish, Armenian
Tunisia	Tunis	163,610	11,403,800	\$12,000	Arab, Berber
Turkey	Ankara	783,562	80,845,215	\$26,500	Turkish, Kurdish
UAE	Abu Dhabi	83,600	6,072,475	\$68,200	Arab, Asian
Yemen	Sanaa	527,968	28,036,829	\$2,300	Arab

Source: Compiled from data in Central Intelligence Agency (2018).

* Proclaimed capital, without universal recognition; many administrative departments and foreign emissaries are based in Tel Aviv.

** Proclaimed capital.

*** Current administrative capital during Israeli occupation.

makes them overdependent on imports. Global patterns of climate change continue to exacerbate the water scarcity in much of MENA, while a few countries, including Israel, have adapted to limited water resources by creating extremely efficient irrigation systems that enable them to limit their reliance on imported agricultural products.

MENA is endowed with vast deserts, snow-capped mountains, coastlines and beaches, rivers, forests, marine environments and many other natural attractions. It is home to a wide range of modern cultures, ancient traditions, trade routes, marketplaces, material culture and archaeology, villages and cities, colonial and indigenous architecture, labyrinths of languages, diverse religious traditions and hospitality unmatched by other cultures (Timothy 2011; Timothy & Daher 2009).

Instability and security concerns dominate the socio-political and economic landscapes of the Middle East and North Africa (Hall, Timothy & Duval 2003). Nearly every day, news headlines around the world depict the turmoil deriving from the geopolitical problems of MENA. While there were wars during the Ottoman period, those since its collapse in the 1920s

have lasted longer and been more impactful on entire nations and regional development. At the time of writing (2018), Syria is embroiled in a civil war, and Islamist extremism has divided the country and spilled over into Iraq and Turkey. The recent Iran–Iraq War, while officially over, continues to overshadow contentious relations between the two large neighbours. The US invasion of Iraq had destabilised the country, giving rise to extremist elements and internal conflict, and eventually helping to empower Iraqi Kurdistan to hold an independence referendum in September 2017. Soured relations between Iran and the West have placed an otherwise resplendent destination country on many states' travel warning lists. Turkey is experiencing internal conflict between the state and the independence-minded Kurds, who are accused of terror activities throughout the country. Turkey's image has also been tainted in recent years by human rights violations against its Kurdish population and political dissidents, which has been a major stumbling block to its joining the European Union. Israel continues to occupy and control the Palestinian territories with increasing settlement encroachment in the West Bank and limitations on Palestinians' mobility. Qatar is currently under a complete trade, travel and diplomatic embargo by several of its neighbours for political reasons. Morocco continues to occupy Western Sahara, forcing most of the Sahrawi nation to live in exile in nearby Algeria. The 2011 Arab Spring affected the political, social and economic lives of several MENA countries, resulting in a failed Libyan state and an overthrow of governments in Egypt and Tunisia and persistent unrest in several countries. In addition to this, the region has suffered many high-profile terrorist attacks directly against tourists and the tourism establishment.

The long-time geopolitical hostility in the region that was exacerbated by colonial interference before and after the collapse of the Ottoman Empire, the establishment of Israel in 1948, religious conflict, territorial disputes, and contemporary Islamist extremism, have kept tourism at bay and dictated the types of tourism that have grown and developed in the region (Almuhri, Alriyami, & Scott 2017; Daher 2006; Hazbun 2004; Kalesar 2010). They have furthermore contributed to environmental degradation and the mass destruction of some of the world's most important historic sites. Except for Sub-Saharan Africa, there is no other region on earth that is so well endowed with cultural and natural assets yet lacks the level of tourism development commensurate with its potential (Timothy & Nyaupane 2009). For some observers in the region, this is not an entirely negative prospect. Tourism is often regarded as a corrupting influence in the conservative societies that dominate MENA, and several countries or factions within those countries have been quite vocal in their disdain for tourism and their desire to avoid it, or certain manifestations of it, where possible (Hazbun 2006).

This book

The chapters in this book address these and many other core issues facing the MENA region today. They reflect the growing importance of the Middle East and North Africa not only as a tourist destination but also as a laboratory for understanding tourism in the face of environmental, political, cultural and security challenges. Every effort was made to involve a wide range of authors from throughout MENA, as well as others with considerable research experience in the region. This proved to be challenging for a variety of reasons that shall not be enumerated here. Nevertheless, success was achieved with a balance of authors from MENA and from other parts of the globe with expertise in subjects that are directly relevant to the Middle East and North Africa.

For organisational purposes, ease of reading and based upon current trends and issues in MENA, the book is divided into the following seven parts: (I) The space and place of MENA; (II) Heritage, culture and urban space; (III) Religion and tourism; (IV) Natural and environmental

challenges; (V) Tourism and geopolitics; (VI) transportation; and (VII) Contemporary trends. The chapters in Part I provide an overview of the social, cultural and environmental contexts of the region, examining the most pressing human and physical geographical issues in the region today to help set the context for the broader discussions that follow. It also provides a tourism context, looking at patterns and trends throughout the region.

Part II examines the human foundations of tourism from a cultural and heritage perspective. Mairna Mustafa describes the most prominent elements of intangible patrimony that help define MENA and sell it as an important heritage destination, including, amongst others, oral traditions and folklore, music and dance, handicrafts, festivals and community life. He also identifies several of the threats facing intangible culture in the region. Marcus Stephenson and Nazia Ali examine the cultural and theological foundations of the world-famous Arab hospitality, as well as the importance of private and public spaces of Arab hospitality. In Chapter 7, Christine Buzinde considers the concepts of deterritorialisation and reterritorialisation in the context of colonialism and indigenous knowledge in North Africa. In her chapter on urban and built heritage, Aylin Orbaşlı looks at the role of tourism in maintaining the survival of historic Arab cities, as well as how these urban spaces are depicted by locals and interpreted for commercial gain from an Orientalist perspective.

MENA's critical position as the birthplace of the Abrahamic religions, which provides the impetus for much of the region's tourism, is the focus of the third part. Daniel Olsen probes the relationship(s) between religion and tourism in the Middle East and contends that the region has unique challenges in managing pilgrim and religious tourism than the challenges facing other religious destinations. Within the broader context of Middle East tourism, Hamira Zamani-Farahani, Michele Carboni, Carlo Perelli and Neda Torabi Farsani examine the long-established but only recently studied Islam-oriented tourism, most noteworthy being the annual *Hajj* in Saudi Arabia. They consider intra-regional and global Muslim tourism and ask critical questions about cultural appropriateness and intercultural relations, religious needs, codes of conduct, and the impact of geopolitics in Muslims' travel patterns. Noga Collins-Kreiner surveys Jewish tourism in the Middle East. While obviously most Jewish travel takes place in Israel, there are other MENA localities that are home to important Jewish heritage and communities. However, given the political tensions of the region, little Jewish-oriented tourism takes place outside of Israel. She examines the growing importance of Jewish pilgrimage tourism, as well as current trends in heritage, diaspora and educational tourism. In Chapter 12, Dallen Timothy and Amos Ron assess the role of the Middle East in Christian tourism and travel patterns. They examine the places, products and dissonances that are unique to Christianity and also the denominational differences within Christianity as regards travel to the Holy Land. The chapter also draws out critical discussion points about solidarity with Palestinians or Israelis and the role of religious politics in shaping travel to the region.

Part IV delivers a critical examination of the natural and ecological challenges in MENA from a tourism perspective. Second only to geopolitical turmoil, environmental concerns are one of the most disconcerting trials facing the countries of the Middle East. Water scarcity is the focus of Nurit Kliot's chapter. She investigates water as an inadequate resource and political pawn, as well as water management challenges and alternative sources of water to meet the agricultural and tourism needs of the region, with tourism being an over-user of this meagre resource. Susanne Becken and Harald Friedl look at the region's abundance of oil and how it has been exploited during the past century to raise MENA out of economic obscurity. However, with the realisation that oil is a finite resource, some states, particularly in the Gulf region, have turned to tourism as an alternative means of economic development. Chapter 15 describes desert environments as ideal localities for tourism, especially given their unique natural and

cultural environments. In this chapter, Alan Weber discusses many challenges, both natural and cultural, that confront desert tourism development—water deficiencies and cultural sensitivities being amongst the most prevalent. One of the biggest challenges facing the earth today, and raising questions about its viability as a habitat for humankind, is climate change, which has been studied in considerable detail in recent years by climate scientists and within the tourism context by social scientists. In Chapter 16, Michael Hall outlines the most prevalent climate change indicators in the Middle East and indicates how these are playing out, and will continue to play out, in the context of tourism, including rising seas, increased droughts, coral bleaching, algal blooms, and extreme weather events, to name but a few. He also points out the irony that so many of the countries facing these problems are also mass producers of natural resources (i.e. hydrocarbons) that contribute radically to global warming.

The fifth part of the book directly addresses conflict and geopolitics, although several other chapters in other parts address political discord indirectly. Rami Isaac examines the Israeli occupation of Palestinian lands and argues that tourism and urban planning are used by Israel to keep the Palestinian population of East Jerusalem in an underprivileged state of dispossession and displacement. He asserts that this is done via city planning policies that evict Palestinians and the suppression of the Old City's economy, increasing East Jerusalem as a tourist destination and a hub for Israeli high-tech industries and education. In Chapter 18, Richard Butler questions the dominant image of the Middle East as a region of conflict and how this affects tourism there. He underscores the importance of image and political tensions in the region's efforts to develop tourism but concludes that the conflicts and security challenges themselves are more important than how they manifest in tourism. Eli Avraham addresses the important question of how MENA countries can and do counter-market the effects of crises. He looks at each country's efforts to repair their broken images during and following crisis events, especially as regards their coping strategies, messaging and marketing efforts.

The focus of Part VI is transportation. MENA leads in many areas of tourist transportation but also lags behind in others. The chapters in this part examine the most pertinent of these issues. Magdalena Karolak provides a solid overview of the cruise sector, not just as a mode of transportation but also a vacation experience in the Middle East. She traces the historical development of the cruise sector in MENA and explores its current patterns and trends. Importantly, Karolak also appraises the future of cruises and how the subsector might develop or languish in the broader Middle East. Ammar Abulibdeh adopts an urban transportation and planning perspective to review the relationships between tourism and local transportation. He describes transportation trends in several major urban areas and delves into the growing areas of smart transportation and information technology in urban transport systems and informal and formal means of urban mobility. Given the escalating importance of several cities in the region as hubs of global air transportation and the development of Gulf-based mega airlines, Bojana Spasojevic and Gui Lohmann focus their attention on air transport and route development, as well as the causes of rapid network growth and transit tourism development in the Gulf States, particularly the United Arab Emirates and Qatar.

Part VII is the final part of the book and focuses on established and emerging trends in tourism in MENA. Touched upon by a few other chapters in the volume, Chapter 23 examines halal tourism in considerable depth. In their discussion of halal tourism, Asad Mohsin and Chris Ryan describe the unique needs of Muslim travellers and the requisite services that destinations should provide to cater to this increasingly lucrative market segment. Following Mohsin and Ryan's essay, Omar Moufakkir, Yvette Reisinger and Dhoha AlSaleh provide a critique of the current trend in halal tourism research. They argue that not all Muslims who travel are seeking halal experiences and that the tourism industry and academic researchers often fail

to differentiate between Arabs and Muslims, and between Islamic journeys and Muslims taking vacations. The focus of Chapter 25 is migrants working in tourism in the Middle East. Kevin Hannam and Cody Paris document how the rapid growth of urban tourism in parts of the Middle East gave rise to the sponsored worker programme that was responsible for the rapid rise in expatriate populations in many Gulf States. These immigrant workers from within MENA and from outside the region support the growth of tourism both as workers and as tourists. Joan Henderson's chapter provides an overview of business tourism in the Middle East, looking at the demand for MICE tourism, the supply of MICE features, the patterns of business travel between countries of the region, and the challenges encountered by MICE developers. Medical tourism is a flourishing phenomenon throughout the world, and the Middle East is no exception. John Connell in Chapter 27 investigates many elements of supply and demand for medical tourism in MENA, both from within and without the region. He also questions the ethics and appropriateness of this lucrative form of tourism and whether or not the hype associated with this service can live up to the local political turmoil and inequitable conditions that dominate the region. Finally, Esmat Zaidan directs readers' attention to the important role of shopping as a focus of tourism development in the Middle East, in particular in the Gulf States. This is closely aligned with the patterns of urban hyper-development that accentuate retailscapes and cater to high-end local and tourist consumers. Shopping in traditional marketplaces and in hyperreal shopping centres continues to play an important role in the tourism development efforts of several MENA countries and will likely continue to do so far into the future.

This book contains many perspectives on tourism in the Middle East and North Africa, yet there are unquestionably many other topics and themes of pertinence to tourism in MENA that are not covered in detail, yet are embedded throughout the volume in several chapters. This volume brings together a wide range of scholars from throughout the world, and especially MENA, to provide a foundation from which researchers can continue to progress knowledge in a dynamic region, a region defined by its natural and cultural characteristics and a region that has yet to realise its full tourism potential.

References

- Adelson, R. (2012) 'British and U.S. use and misuse of the term "Middle East"', in M.E. Bonine, A. Amanat, & M.E. Gasper (eds), *Is There a Middle East? The Evolution of a Geopolitical Concept* (pp. 36–55). Stanford, CA: Stanford University Press.
- Almuhri, H., Alriyami, H., & Scott, N. (eds) (2017) *Tourism in the Arab World: An Industry Perspective*. Bristol: Channel View Publications.
- Bonine, M.E., Amanat, A., & Gasper, M.E. (eds) (2012) *Is There a Middle East? The Evolution of a Geopolitical Concept*. Stanford, CA: Stanford University Press.
- Central Intelligence Agency (2018) *World Factbook*. Available online: www.cia.gov/library/publications/the-world-factbook/ (Accessed 27 February 2018).
- Daher, R.F. (ed) (2006) *Tourism in the Middle East: Continuity, Change and Transformation*. Clevedon: Channel View Publications.
- Davis, D.K. (2012) 'Scorched Earth: The problematic environmental history that defines the Middle East', in M.E. Bonine, A. Amanat, & M.E. Gasper (eds), *Is There a Middle East? The Evolution of a Geopolitical Concept* (pp. 170–187). Stanford, CA: Stanford University Press.
- de Blij, H.J., & Muller, P.O. (2006) *Geography: Realms, Regions, and Concepts*, 12th edn. Hoboken, NJ: Wiley.
- Downing, D. (2007) *Geography and Resources of the Middle East*. Milwaukee, WI: World Almanac Library.
- Drysdale, A., & Blake, G.H. (1985) *The Middle East and North Africa: A Political Geography*. Oxford: Oxford University Press.
- Hall, C.M., Timothy, D.J., & Duval, D.T. (eds) (2003) *Safety and Security in Tourism: Relationships, Management and Marketing*. New York: Haworth.

- Hazbun, W. (2004) 'Globalisation, reterritorialisation and the political economy of tourism development in the Middle East', *Geopolitics*, 9(2): 310–341.
- Hazbun, W. (2006) 'Explaining the Arab Middle East tourism paradox', *The Arab World Geographer*, 9(3): 201–214.
- Heing, B. (2017) *Geography, Government, and Conflict across the Middle East: Understanding the Cultures of the Middle East*. New York: Cavendish Square Publishing.
- Hobbs, J.J. (2009) *World Regional Geography*, 6th edn. Belmont, CA: Brooks/Cole.
- Kalesar, M.I. (2010) 'Developing Arab-Islamic tourism in the Middle East: An economic benefit or a cultural seclusion', *International Politics*, 3(5): 105–136.
- Lew, A.A., Hall, C.M., & Timothy, D.J. (2015) *World Regional Geography: Human Mobilities, Tourism Destinations, Sustainable Environments*, 2nd edn. Dubuque, IA: Kendall-Hunt.
- Longrigg, S.H. (2017) *The Geography of the Middle East*, 2nd edn. London: Routledge.
- Stewart, D.J. (2013) *The Middle East Today: Political, Geographical and Cultural Perspectives*. London: Routledge.
- Timothy, D.J. (2011) *Cultural Heritage and Tourism: An Introduction*. Bristol: Channel View Publications.
- Timothy, D.J., & Daher, R.F. (2009) 'Heritage tourism in Southwest Asia and North Africa: Contested pasts and veiled realities', in D.J. Timothy, & G.P. Nyaupane (eds), *Cultural Heritage and Tourism in the Developing World: A Regional Perspective* (pp. 146–164). London: Routledge.
- Timothy, D.J., & Nyaupane, G. (eds) (2009) *Cultural Heritage and Tourism in the Developing World: A Regional Perspective*. London: Routledge.

2

THE PHYSICAL GEOGRAPHY OF THE MIDDLE EAST IN THE ANTHROPOCENE

C. Michael Hall

Introduction

The geographical concept of the Middle East is more a political and cultural construct than a physical geography one. Nevertheless, the landscape and physical environment of the region play an important part in its attractiveness, as well as create many of the challenges tourism in the region faces. The Middle East is a meeting place of both human and physical geography. The very notion of the Middle East is usually associated with the role the region plays in being a cultural and economic crossroads between Asia and Europe, and Africa and Europe (Lew, Hall, & Timothy 2015). However, the physical geography is greatly shaped by the various tectonic plates that interact with each other and have helped contribute to the spectacular landscapes that draw tourists, as well as to the region's active geology. Indeed, the tectonic landscape is closely related to the cultural landscape, and tectonic events such as earthquakes and tsunamis have shaped the region's history, folklore and religions (Al Rabady 2013; Finkel 2014; Pappé 2014).

Mountains and deserts divide the Middle East and North Africa (MENA) into a number of geographically distinct zones that have had an enormous influence on culture and economic development. Emberling (2010) identifies these as the Nile River (Egypt); the eastern Mediterranean coastal plain (Israel, coastal Syria, Lebanon, Palestine); the Anatolian Plateau (Turkey); the Arabian Peninsula (Bahrain, southern Iraq, eastern Jordan, Kuwait, Oman, Qatar, Saudi Arabia, southeast Syria, United Arab Emirates, Yemen); Mesopotamia (the river valleys of the Tigris and Euphrates rivers that run through Turkey, Syria, Iraq and Iran into the Persian Gulf); and the Zagros Mountains that stretch from the Persian Gulf of Iran through northern Iraq (Iraqi Kurdistan) and into eastern Turkey. However, Emberling's (2010) categorisation, though useful, misses a number of other significant geographical features and distinct physiographic regions, including the Sahara Desert, through which the Nile runs; the Sinai Peninsula of Egypt; coastal western Turkey; and the mountains of Eastern Iran that stretch from the Indian Ocean through to the Caspian Sea and the Atlas Mountains in North Africa.

Saharan North Africa is a distinct geographical entity determined by the Mediterranean Sea to the north, the Atlantic Ocean to the west and the Red Sea to the east. To the south, Saharan North Africa is distinguished from the Sahel, which is a belt of semi-tropical savannah characterised by higher rainfall. The Mediterranean coast has sufficient rainfall for agriculture

and urban centres, but the region's geography is dominated by the Sahara Desert, which is the largest non-polar desert on Earth. With an area of approximately 92 million km², it is more than a million km² larger than the contiguous United States and covers about 6 per cent of the land surface area of the Earth (Cook & Vizzy 2015).

The Middle East has one of the driest climates in the world (Drake 1997). The area generally has a hot arid climate with the wettest part of the region being the Caspian Sea coast of northern Iran and the Black Sea coast of northern Turkey, although the influences of mountain ranges also mean that some of the desert areas of Iran may receive no rain for many years, a phenomenon that can also occur in other desert portions of the region. Coastal areas, especially in the eastern Mediterranean and northern Turkey tend to have more moderate temperatures, although lowland desert areas in the interior of the Arabian Peninsula, Iran, Iraq, Syria and Egypt have extreme summer temperatures (Fisher 2013). The Sahara Desert region, which extends into the Arabian Peninsula and Somalia, has the highest annual temperatures of any region on the planet along with very low levels of rainfall (Cook & Vizzy 2015). One of the ironies of the region's physical geography is that though many of its economies are driven by oil and gas exploitation, the climate actually makes it ideal for wind and solar power generation (Nematollahi, Hoghooghi, Rasti, & Sedaghat 2016).

The aridity of MENA has shaped the pattern of human settlement which is concentrated along the eastern and southern Mediterranean coastlines and its extensions, such as the Black Sea and the Sea of Marmara, and in river valleys, such as the Nile, Tigris and Euphrates (Nematollahi et al. 2016). Snow is also found along some of the highest mountain ranges with Turkey and Iran also being dominated by mountain plateaus. Although the Sahara is often represented as consisting of ergs—sandy 'seas' of dunes—in popular culture, it is actually dominated by hamada (stone plateaus), while much of it is also mountainous. Ranges include the Adrar n Ifoghas (Adrar des Iforas) on the border of northeastern Mali and southern Algeria; the Saharan Atlas mountain range that runs from Morocco through Algeria to Tunisia; the Air Mountains that extend from northern Niger to the Ahaggar Mountains in southern Algeria; and the Tibesti Mountains ranging between northern Chad and southern Libya. The Eastern Desert region of Egypt, which lies to the east of the River Nile, is also relatively mountainous. In northwest Africa the Atlas mountain range also includes Middle Atlas, the Anti-Atlas and the High Atlas range; and the Tell Atlas range that lies predominantly on the Algerian coast. Also of interest is the Rif mountains in Morocco, which geologically are connected to the mountains of the southeast Iberian Peninsula bordering the Alboran Sea rather than the Atlas Range (Martínez-García, Comas, Soto, Longergan, & Watts 2013). The mountain regions are significant in terms of human settlement and tourism as they provide different climate and rainfall regimes to the far more arid desert lands, and are often focal points for ecotourism operations because of their relatively high levels of biodiversity. Also of significance for human settlement and tourism are the Saharan oases that are usually located in geological depressions, such as the Siwa Oasis in Egypt, or in wadis. Oman is also on the margin of the South Asian monsoon system (Gupta, Yuvaraja, Prakasam, Clemens, & Velu 2015) and the Dhofar Region of Oman experiences a substantially less arid climate than most of the Arabian Peninsula.

The chapter is divided into two main sections. The first section places the physical geography of the region in the context of its tectonic plates as a way of organising the different regions and main water bodies. The second section discusses issues of understanding its physical geography, given the notion of the Anthropocene as a distinct geological period, especially in relation to vegetation and landscape change.

The arrangement of the tectonic plates of the Middle East

The Middle East is a meeting point of a number of tectonic plates, the centre point of which is the Arabian Plate which broadly corresponds to the Arabian Peninsula but which also includes a small piece of Africa (the Afar Depression). The Arabian plate is bordered by the Somali Plate to the south, which runs the length of the African continent with the East Africa Rift separating the Somali Plate from the African Plate. To the west is the African Plate, the northern boundary of which borders the Eurasian, Aegean Sea and Anatolian plates. To the north of the Arabian Plate is the Anatolian Plate, which comprises most of the Anatolian peninsula (also referred to as Asia Minor). To the north of both the Anatolian Plate and the northeastern side of the Arabian Plate is the Eurasian Plate, and to the east the Indian Plate.

Arabian Plate

The Arabian Plate was part of the African Plate until the Oligocene; it began to separate approximately 25 million years ago and is moving north at the rate of 20–25 mm a year. The separation between the plates has led to the opening of the Red Sea Rift and the growth of the Red Sea, as well as the Dead Sea Fault, which runs from the southern tip of the Sinai Peninsula to southeastern Turkey. The Red Sea Rift extends from the Dead Sea Fault System to the Afar Depression on the borders of Eritrea, Djibouti and Ethiopia. The Red Sea is clearly a major geographical feature that serves as an important transport route and which is also important for tourism because of its coral reefs. Although not widely recognised, the Red Sea Rift is also an active volcanic region, including the island of Jabal al-Tair located northwest of the Bab al-Mandab passage at the mouth of the Red Sea, about halfway between Yemen and Eritrea, which erupted in September 2007 with the loss of several lives (BBC News 2007). There is also another group of active volcanic islands in the southern Red Sea, the Zubair Archipelago also between Yemen and Eritrea. In addition there are active volcanic fields in Saudi Arabia, Harrat Rahat and Harrat Khaybar, both being close to the holy city of Medina.

The Red Sea

The Red Sea (also called the Erythraean Sea), which occupies the border between the Arabian Plate and the African Plate, is underlain by the Red Sea Rift, which is a continuation of the Great Rift Valley between the African Plate and the Somali Plate. The Sea is a seawater inlet of the Indian Ocean, which is connected to the Indian Ocean by the Bab el Mandeb strait and the Gulf of Aden. The Red Sea is one of the saltiest areas of ocean water in the world with its higher than average salinity due to limited interchange of water with the Indian Ocean; few river systems draining into the sea; and high levels of evaporation. Nevertheless, the sea is biologically rich and has significant fringing coral reefs that serve as the basis for dive tourism, although they are now being threatened by climate change and coastal development (Furby, Bouwmeester, & Berumen 2013; Hall 2001; Riegl, Berumen, & Bruckner 2013).

There is no natural connection between the Red Sea and the Mediterranean Sea; however, the Suez Canal built in the mid-nineteenth century and enlarged in 2014–2016 provides a link between the two waterways. Because there are no locks on the canal, the waterway provides a sea route not only for ships but also for a number of species between the two seas. These introductions of exotic species that become invasive can have enormous impacts on the indigenous ecology (Galil 2007; Golani 1998; Goren, Galil, Diamant, & Stern

2016), even if their effects are often not immediately recognised. For example, ‘The siganids [rabbitfish], successful Erythrean invasive aliens, have altered the community structure and the native food web along the Levantine rocky infralittoral’ (Galil 2007: 316). Two species of siganid fish, *Siganus rivulatus* and *S. luridus*, which entered the Mediterranean from the Red Sea through the Suez Canal, were first recorded off the coast of Israel in 1924 and 1955 respectively. Both species are now found as far west as the southern Adriatic Sea, Sicily and Tunisia. The siganids comprise 80 per cent of the abundance of the herbivorous fish in shallow coastal sites in Lebanon and one third of the fish biomass in rocky habitats along the Israeli coast and have replaced native herbivorous fish in many locations in the Levantine Sea (Eastern Mediterranean) (Galil 2007). The impacts on biodiversity and coastal ecology by such invasions, of which there are many as a result of the Suez Canal, are substantial. As Galil (2007: 318) stated,

biodiversity is not a simple arithmetic. Local population losses and niche contraction may not induce immediate extirpation, but they augur reduction of genetic diversity, loss of functions, processes, and habitat structure, increase the risk of decline and extinction, and lead to biotic homogenization.

Leading her to conclude, ‘It seems that the establishment of alien biota, and the concurrent adverse changes in the native communities, are part of a catastrophic anthropogenic ecosystem shift in the Mediterranean Sea’ (Galil 2007: 319).

The Dead Sea Fault

The Dead Sea Fault has a number of geographical features, known as pull-apart basins, which are important tourist attractions, including the Gulf of Aqaba, the Dead Sea, the Sea of Galilee and Lake Hula, although the entire fault region is subject to earthquakes. The Gulf of Aqaba, which lies to the east of the Sinai Peninsula and divides Egypt, Israel, Jordan and Saudi Arabia, is a major international site for coral reef diving. Taba in Egypt, Eilat in Israel, and Aqaba in Jordan are all important resort destinations.

The Dead Sea is arguably the most well-known geographical feature of the rift. With a shoreline over 400m below sea level (and continuing to fall) the Dead Sea is the Earth’s lowest elevation on land. In addition, the sea is hypersaline and almost ten-times saltier than seawater, making it one of the world’s saltiest large bodies of water. The sea is an attraction in its own right but is also a significant health and spa tourism destination on both the Israeli and Jordanian sides of the sea with the salts being regarded as having health benefits. Because of water abstraction from the Jordan River (the sea’s only significant permanent inflow), for agriculture, industrial use and domestic supply, the sea levels have been continuing to decrease. In response, there are proposals to carry seawater from the Gulf of Aqaba to the Dead Sea for both hydroelectricity and desalination purposes and to stabilise the Dead Sea water level (World Bank 2013).

The Sea of Galilee, also known as Lake Kinneret, is the lowest freshwater lake on Earth and the second-lowest lake in the world, after the Dead Sea. However, water demand and reduced precipitation have meant that the lake has had a decreasing water level, raising concerns over its long-term sustainability as a fresh-water ecosystem. Lake Hula was a lake north of the Sea of Galilee that was drained in the 1950s, although a small part has since been reflooded in an attempt to regenerate the marshland ecosystem (Tal 2002).

The Anatolian, Iranian and Eurasian Plates

The Anatolian and Iranian/Eurasian Plates are both highly active and characterised by frequent earthquakes. The Anatolian massif with heights on average of over 400 m dominates Asian Turkey and means that lowlands are confined to the Black Sea and Mediterranean coastlines. The meeting of the Arabian Plate and the Eurasian/Iranian Plate is responsible for the mountainous terrain of most of Iran including the Zagros Mountains. These mountains roughly correspond to Iran's western border, and run from Iraqi Kurdistan/southeastern Turkey, the whole length of the western and southwestern Iranian plateau, ending at the Strait of Hormuz. The collision between the plates means that the mountains are continuing to gradually increase in height. The north–south shortening from Arabia to Eurasia is 2–2.5 cm/year, and the transition from subduction (southeast Iran at Makran opposite northern Oman) to collision (Zagros on the Persian Gulf opposite the United Arab Emirates) is very sharp and governs the different types of deformation observed in Iran. In the eastern part of Iran, most of the shortening is accommodated in the Gulf of Oman, while in the western part, the shortening is more distributed from south to north (Nilfroushan et al. 2003).

The tectonic forces operating in Iran mean that the country is very susceptible to major earthquakes, some of which have occurred with substantial loss of life and impact on heritage. For example, the Bam urban earthquake of 26 December 2003 (Magnitude (M) 6.6) hit the Kerman province of southeastern Iran killing between 31,000 and 43,000 people. The city had been a major domestic and international tourist destination primarily because of its World Heritage 2000-year-old mud-brick citadel and its association with the Silk Road. The citadel was almost totally destroyed by the earthquake but has since been partially rebuilt. Previous large urban earthquakes in Iran include the 1930 Salmas (M 7.1, approximately 2,500 deaths), the 1978 Tabas–e–Golshan (M 7.4, approximately 20,000 deaths), and the 1990 Rudbar–Tarom (M 7.3, approximately 40,000 deaths) (Berberian 2005). The Bam earthquake was also 100 km south of the destructive earthquakes of 11 June 1981 (M 6.6, approximately 3,000 deaths) and 28 July 1981 (M 7.3, approximately 1,500 deaths) (Berberian 2005). Vulnerable urban areas in Iran, in which prominent potential seismic sources have been mapped under heavily populated centres, include greater Tehran–Karaj, Tabriz, Neyshabur, Mashhad, Kashan, Natauz and Bushehr. 'All these cities are located on and/or adjacent to numerous major exposed and blind capable faults' (Berberian 2005: s80) and:

The extent of destruction and the probable death toll in the poorly constructed and unprepared institutions of the mega-city of Tehran, covering an area of close to 900 sq km, hugging numerous active faults, with a population of greater than 7 million living in 1.5 million housing units composed of 48% old and traditional buildings, and aging infrastructure ... subjected to the same level of strong ground motion recorded in Bam or Tangshan, will be disastrous.

Although the region's tectonic forces can clearly be extremely destructive, they have also contributed to spectacular mountain landscapes and highlands that are important tourism resources and sources of many of the region's major rivers. In Turkey, for example, the Taurus Mountains provide winter skiing opportunities near Antalya, which is Turkey's largest resort region. The southeastern Taurus Mountains are also the source of the iconic Euphrates and Tigris rivers.

The Persian Gulf

The Persian Gulf (also referred to as the Arabian Gulf) marks the border between the Arabian and the Eurasian/Iranian Plates. The Gulf is an extension of the Gulf of Oman in the Indian Ocean through the Strait of Hormuz and lies between Iran to the northeast and the Arabian Peninsula to the southwest. In the north is the Shatt al-Arab river delta formed by the confluence of the Euphrates and the Tigris. The Gulf is an extremely recent geographical body being formed only 15,000 years ago with the present shorelines not being reached until 6,000 years ago. Because of this and its relative isolation, the Gulf hosts an ecologically significant fauna and flora although many of the ecosystems, such as coral reefs and mangroves, are under threat from coastal developments. The timing of the creation of the Persian Gulf and its basins also has implications for the early movements of people in the Middle East and the timing of the earliest settlements in lower Mesopotamia. For example, the early Gulf floor would have provided a natural route for people moving westwards from regions to the east of Iran from the late Palaeolithic to early Neolithic (Lambeck 1996). Although the Persian Gulf is extremely important as a transport route, its most well-known geology is arguably the extensive oil and gas deposits that lie both onshore and offshore and which have fuelled economic development in the region.

The Mediterranean

The Mediterranean is an arm of the Atlantic Ocean, and its coastlines are focal points for tourism development while it has also grown as a cruise location in recent years. The Mediterranean also has a number of regional seas located within it. The Levantine Sea, or the Eastern Mediterranean Sea, is bordered by Turkey in the north, Syria, Lebanon, Israel and Palestine in the east, and Egypt and Libya in the south. Coastal areas of the Levantine Sea off Israel, Palestine and Egypt have significant gas and oil deposits, as do coastal areas of Libya and Egypt. In the Western Mediterranean the main regional sea is the Alboran Sea, between Spain and Morocco. The Strait of Gibraltar at the west end of the Alboran Sea, is the narrow strait that connects the Mediterranean with the Atlantic Ocean and separates North Africa from Europe. At the narrowest point, the strait is only 14.3 km (8.9 miles) wide and is a major tourist attraction in its own right. The western coast of Morocco borders the Atlantic Ocean, which plays an extremely important role in providing moderate temperatures on the coastal plains even in summer, owing to the effect of the cold Canary Current that lies offshore. This means that coastal Morocco is significantly cooler than the high temperatures that exist in the inland Sahara at the same latitude. As a result, the climate of much of Morocco is similar to that of California and has proven to be attractive for tourism, although climate change appears to be impacting both the productivity of the marine ecosystem and the potential increases in the intensity of coastal storms (Aouiche et al. 2016).

The Aegean Sea in the northwestern part of the Eastern Mediterranean is usually regarded more as part of Europe than of the Middle East as a result of its association with European culture and the Ancient Greeks in particular, although the coastal Aegean between Greece and Turkey also represents a political and, to a certain extent, a cultural boundary as well. Many of the islands in the Aegean are volcanic and have been historically associated with major natural disasters. Similarly, the island of Cyprus in the Eastern Mediterranean Sea is also very much a cultural and political meeting point between the Middle East and Europe. However, geographically it is closer to countries of the Middle East than Mediterranean Europe, and it is situated in the Eastern Basin of the Levantine Sea. Because of its climatic similarity to the countries of

the region, Cyprus also shares many of their same ecological and environmental problems. The two main problems are (1) loss of the indigenous vegetation as a result of agriculture, introduced species and lack of an effective conservation programme, and (2) declining precipitation and a warming climate placing pressure on water supply (Grove & Rackham 2003; Blondel 2006).

The Mediterranean also represents the boundary between the African and Eurasian Plates (Gaina et al. 2013). In the central and eastern Mediterranean, the African Plate is subducting underneath the Eurasian Plate leading to significant mountain building and volcanic activity in the Mediterranean region. The Western Mediterranean is also geologically active and the region, including the Atlas Mountains system, represents a diffuse plate boundary in which the Atlas Mountains comprise narrow deformable zones bounding larger, relatively rigid crustal blocks (Gomez, Beauchamp, & Barazangi 2000). The tectonic convergence between the African and Eurasian plates is also responsible for the formation of the Mediterranean. One of the most significant events is the Messinian salinity crisis, believed to have begun about six million years ago, in which the Mediterranean Sea became progressively isolated as a result of a combination of tectonic uplift and variations in the level of the Atlantic Ocean. The isolation of the Mediterranean Basin from the Atlantic Ocean was established between 5.59 and 5.33 million years ago, leading to a large fall in the Mediterranean's water level of 1500–2500 metres (Gargani & Rigollet 2007). The isolation of the Mediterranean from the Atlantic is believed to have ended 5.33 million years ago when eastward regressive stream erosion opened the Gibraltar Strait with the refill of the Mediterranean Basins potentially taking less than 40 years (Blanc 2012). This event is known as the Zanclean flood. Approximately 500 km³ of rock was eroded at the Gibraltar Strait during the flood climax (Garcia-Castellanos et al. 2009). The Messinian salinity crisis and the geomorphological characteristics of the Western Mediterranean remain important to the present-day because of their influence on the nature of the Mediterranean Sea.

Because of the limited access to the Atlantic Ocean, tides in the Mediterranean are very limited and water circulation is linked more to changes in water salinity. Overall the Mediterranean is more saline than the Atlantic because of the high rate of evaporation in relation to precipitation and inflow from rivers, as well as the limited exchange of waters between the two bodies. The marine biota of the Mediterranean is primarily derived from the Atlantic Ocean. However, growth in global shipping and the construction and enlargement of the Suez Canal have meant that many exotic marine species have now become established. The Mediterranean has also experienced previous sea level change as a result of geological and climate changes. Under the impact of present anthropogenic climate change the Mediterranean is expected to become more saline and experience substantial shifts in ecosystem change as well as sea level rise (SLR) (Marcos & Tsimplis 2008), although rates are lower than the global average. The Eastern Mediterranean will potentially have lower rates of SLR than the Western, but will be more affected by salinification as a result of reduced runoff from the Black Sea and increased evaporation (Marcos & Tsimplis 2008). Nevertheless, SLR and environmental change already appear to be having impacts on the Nile Delta and agricultural production, as well as increases in flooding of coastal urban areas. An additional element of climate change in North Africa and the Eastern Mediterranean is the potential increase in the severity of the Sirocco, a wind of sometimes hurricane speeds that originates in the Sahara and causes dusty dry conditions along the north coast of Africa with significant implications for health and comfort (D'Amato et al. 2013).

The total area of Egypt is about one million km², of which approximately 94 per cent is desert. The water of the Nile River represents the only renewable water resource in Egypt, as well as being a significant transport route for the country and source of national identity (Abd-Elhamid, Javadi, Abdelaty, & Sherif 2016). In the case of the Nile Delta, the coastal and

estuarine landscapes are affected by land subsidence and SLR. Sušnik et al. (2015) note that for the Alexandria region of the Nile Delta, land subsidence alone is estimated at 0.4–2.0 mm per year and this is likely to cause increasing loss of low-lying coastal areas and will lead to seawater intrusion into coastal aquifers. They also suggest that an SLR of 0.5 m above land subsidence in the Nile Delta would affect approximately 3.8 million people and 1800 km² of agricultural land. This is also a major issue given that even though the Nile Delta aquifer is amongst the largest underground freshwater reservoirs in the world, seawater intrusion into the aquifer has already extended inland more than 100 km from the Mediterranean coast (Abd-Elhamid et al. 2016).

Another significant arm of the Mediterranean that represents a border between Europe and Asia, and hence the Middle East, is the Sea of Marmara, which is connected to the Aegean Sea by the Dardanelles strait, and to the Black Sea by the Bosphorus strait. These are known collectively as the Turkish Straits. These waterways have been regarded as a major physical and cultural border between East and West since antiquity, although the Sea of Marmara, which is a pull-apart basin, is currently an inland sea that lies entirely within the borders of Turkey. The surface salinity of the Sea of Marmara is slightly greater than that of the Black Sea but is lower than that of the Mediterranean. Geologically the region is extremely active with the North Anatolian Fault, the boundary between the Eurasian Plate and the Anatolian Plate, running under the Sea and then through northern Turkey before meeting the East Anatolian Fault in eastern Turkey and the Zagros system of faults in Iran (Rockwell 2013). Because the North Anatolian Fault runs through highly populated areas in Turkey, and especially the Istanbul metropolitan region, the fault poses a substantial seismic hazard and has an active earthquake history (Bohnhoff, Martínez-Garzón, Bulut, Stierle, & Ben-Zion 2016).

The Black Sea is also a maritime border of the Middle East. Unlike many of the other seas discussed in this chapter, the Black Sea has a positive water balance, that is, there is a greater outflow of water from the Black Sea into the Mediterranean than what flows into the Black Sea from the Mediterranean as part of the hydrological exchange between the two seas. The waters are also markedly different as the surface waters of the Black Sea are much less saline than those of the Mediterranean, thereby creating an anoxic layer of water that is depleted of dissolved oxygen with corresponding impacts on biological diversity.

In terms of geological time, the nature of the Black Sea is very much influenced by the interaction between the Eurasian, African and Arabian Plates and the smaller Anatolian Plate, and global sea levels. Geological uplift in Anatolia has, at times, isolated the Black Sea from the Mediterranean and beyond to the global ocean system, especially when combined with lower sea levels such as during ice ages and subsidence of the Black Sea basin (Nikishin, Korotaev, Ershov, & Brunet 2003). When cut off from the Mediterranean, the Black Sea becomes similar to the Caspian Sea, which is an endorheic basin (has no outflows) that borders Iran, and which became landlocked about 5.5 million years ago as a result of tectonic uplift and sea level decline. The last time the Black Sea was in this state was during the most recent Quaternary glaciation, when the Black Sea was a giant freshwater lake with levels more than 100 metres below its current outlet. Ryan et al. (1997) claimed that when the Mediterranean rose to the Bosphorus sill at 7,150 years Before Present, saltwater poured through this spillway to refill the lake and submerge, catastrophically, more than 100,000 km² of the exposed continental shelf. They also argue that the permanent drowning of such a vast terrestrial landscape may have possibly accelerated the dispersal of early neolithic foragers and farmers into the interior of Europe at that time. These sudden geological events also potentially provide the basis for the folk memory of ‘The Flood’ that underlies many of the religious and historical traditions in the Middle East (Finkel 2014).

The Anthropocene: Rethinking the physical geography of the Middle East?

The concept of the Anthropocene as a distinct geological era is the notion that the impact of humans on the environment is now so great, and so distinct, as to constitute an identifiable geological period (Steffen, Grinevald, Crutzen, & McNeill 2011; Smith & Zeder 2013). The previous period, the Holocene, is the name given to the post-glacial period of the past 10,000–12,000 years. However, the Anthropocene can be distinguished by numerous factors including loss of biodiversity, ocean acidification, climate change and plastics in the environment. As Steffen, Crutzen, and McNeill (2007: 614) observe,

Human activities have become so pervasive and profound that they rival the great forces of Nature and are pushing the Earth into planetary terra incognita. The Earth is rapidly moving into a less biologically diverse, less forested, much warmer, and probably wetter and stormier state.

In the case of the biodiversity of the Mediterranean, for example, Blondel (2006) argued that high intraspecific adaptive variation arose from natural processes of the Pleistocene, mainly from a combination of periodic refugia formation and climate dynamics. During the Holocene, the main sources of disturbance came increasingly from humans, such as the introduction of new fire regimes, specifically from the coupled cultural and natural modifications of community and landscape structure. However, in the Anthropocene human interaction with ecosystems and landscapes have become even more pronounced—e.g. introduction of new agricultural practices, urbanisation, pollution, dam construction, and creation of conservation reserves, leading to further changes in landscape dynamics (e.g. Duser, Verstraeten, Notebaert, & Bakker 2011).

The Anthropocene forces students to reassess not only the role of tourism in global environmental change but also how we understand present day physical geographies, including those of MENA, given that much of the landscape and biodiversity has been strongly shaped by humans and now that even the very forces that help shape the landscape (Gössling & Hall 2006; Hall 2016), such as climate, are subject to anthropogenic change (see Hall, Chapter 16, this volume). The extreme diversity in space and time of both environments and human societies makes the structure and dynamics of coupled natural and human systems difficult to interpret (Harris 2012), especially when baseline conditions are difficult to assess (Tzedakis 2007). In the Middle East, the succession of peoples and societies that waxed and waned over several millennia has had great impacts on biota and ecosystems everywhere in the region (Blondel 2006; Grove & Rackham 2003). This has meant that a complex ‘coevolution’ has developed, which shapes the interactions between ecosystem components and human societies and the consequent landscape. This means, for example, that some seemingly ‘natural landscapes’ and ecosystems, many with high value from both a biodiversity and a tourism perspective, can only be maintained with human activities of particular kinds, often related to agricultural practices (Bugalho, Caldeira, Pereira, Aronson, & Pausas 2011; Geri, Amici, & Rocchini 2010; Keeley, Bond, Bradstock, Pausas, & Rundel 2012). Such a perspective also provides a substantial challenge to the two opposing schools of thought that traditionally have considered the consequences of human pressures on Mediterranean, North African and Middle Eastern ecosystems. First, the ‘ruined landscape’ or ‘lost Eden’ approach argues that human action resulted in a cumulative degradation and desertification of Mediterranean landscapes. In contrast, the second school argues that humans actually contributed to keeping Mediterranean landscapes diverse since the last glacial episode (Blondel 2006; Grove & Rackham 2003). Both approaches frame the environmental

imaginaries by which people, including tourists and marketers, perceive and portray many of the destinations of the Middle East and North Africa (Davis & Burke III 2011; Mikhail 2013).

These debates are not just academic, as they have enormous influence on the ways in which ecosystems and the physical geography of a place are managed, particularly in response to tourism (Antrop 2006), and other elements of change. Interestingly, even though there is clearly a long legacy of human and natural system co-evolution in the Middle East region, more recent changes are seen as a threat to existing qualities and thus the conservation of these becomes an aim in itself and a means to achieve sustainability. The protection of heritage values (both cultural and natural) of landscapes focuses upon the sustainability of existing values and is confronted with land-use intensification, urbanisation and tourist and recreational pressure (Antrop 2006). For example, large areas of the Tunisian coast have been affected by tourism-related developments. According to De Stefano (2004), tourist areas occupied by hotels and second homes occupy approximately 35 per cent of the total urbanised linear coastal space. She suggested that this tourism and second homes development would eventually occupy about 14 per cent of the entire coastline. This is significant for coastal environmental processes, as inappropriate siting of tourist infrastructures on foredunes is accelerating the process of beach erosion and altering the water dynamics of coastal areas (De Stefano 2004).

The physical geography of MENA therefore also needs to be understood in terms of the future landscape that is emerging as a result of various economic and cultural pressures, such as tourism, and their interplay with the physical environment and the forces that shape that environment. From such a perspective, seeing the physical geography of the Middle East needs to be understood not just in passive terms—that is, how the physical geography affects tourism, but also in the reverse, such as how does tourism contribute to the region's physical geography, for example, by particular forms of coastal development, but also what sort of physical geography do we actually want in the future?

Conclusion

This chapter has provided an introduction to the physical geography of the Middle East and North Africa region. The first section of the chapter has done so in more traditional terms with respect to the extremely significant tectonic structure of the region as well as the associated marine and river systems. The second section of the chapter is more challenging and moves beyond the descriptive to try and illustrate the way in which the physical geography of the Anthropocene is a result of the interaction of cultural and natural systems in which tourism is now deeply embedded. The components and dynamics of biodiversity and landscape in the Middle East therefore cannot be understood without taking into account the history of human-induced changes with positive and negative feedback cycles between cultural practices and natural systems (Blondel 2006; see also Antrop 2006). While the underlying geological forces are unchanged, the surface geography of the region is therefore now substantially influenced by humans and, as noted, even the character of forces that shape the landscape such as climate and water are now substantially affected by anthropogenic activity.

Tourism is a part of these processes. The physical environment of MENA has proven attractive to tourists for much of the past 200 years with the climate and waters providing opportunities for the development of very specific tourist products, such as spa tourism at the Dead Sea, desert safaris, as well as more generic products such as sunbathing and beaches. Yet tourism is now also affecting the physical geography of many locations both directly in terms of tourism developments, tourism-related urbanisation and the idealisation of certain landscapes, as well as indirectly via its pollution and emissions. The challenge for tourism therefore is not

just to understand present-day physical geographies of the Middle East but to image what will be desirable for the future.

References

- Abd-Elhamid, H., Javadi, A., Abdelaty, I., & Sherif, M. (2016) 'Simulation of seawater intrusion in the Nile Delta aquifer under the conditions of climate change', *Hydrology Research*, 47(6): 1198–1210.
- Al Rabady, R. (2013) 'Creative cities through local heritage revival: A perspective from Jordan/Madaba', *International Journal of Heritage Studies*, 19(3): 288–303.
- Antrop, M. (2006) 'Sustainable landscapes: Contradiction, fiction or utopia?', *Landscape and Urban Planning*, 75(3): 187–197.
- Aouiche, I., Daoudi, L., Anthony, E.J., Sedrati, M., Harti, A., & Ziane, E. (2016) 'The impact of storms in the morphodynamic evolution of a human-impacted semi-sheltered beach (Agadir Bay, Morocco)', *Journal of African Earth Sciences*, 115: 32–47.
- BBC News (2007) 'Volcano erupts on Red Sea Island', BBC News. Available online: http://news.bbc.co.uk/2/hi/middle_east/7021596.stm.
- Berberian, M. (2005) 'The 2003 Bam urban earthquake: A predictable seismotectonic pattern along the western margin of the rigid Lut block, southeast Iran', *Earthquake Spectra*, 21(S1): 35–99.
- Blanc, P.L. (2012) 'The opening of the Plio-Quaternary Gibraltar Strait: Assessing the size of a cataclysm', *Geodinamica Acta*, 15(5–6): 303–317.
- Blondel, J. (2006) 'The "design" of Mediterranean landscapes: A millennial story of humans and ecological systems during the historic period', *Human Ecology*, 34(5): 713–729.
- Bohnhoff, M., Martínez-Garzón, P., Bulut, F., Stierle, E., & Ben-Zion, Y. (2016) 'Maximum earthquake magnitudes along different sections of the North Anatolian fault zone', *Tectonophysics*, 674: 147–165.
- Bugallo, M.N., Caldeira, M.C., Pereira, J.S., Aronson, J., & Pausas, J.G. (2011) 'Mediterranean cork oak savannas require human use to sustain biodiversity and ecosystem services', *Frontiers in Ecology and the Environment*, 9(5): 278–286.
- Cook, K.H., & Vizzy, E.K. (2015) 'Detection and analysis of an amplified warming of the Sahara Desert', *Journal of Climate*, 28(16): 6560–6580.
- D'Amato, G., Baena-Cagnani, C.E., Cecchi, L., Annesi-Maesano, I., Nunes, C., Ansotegui, I., D'Amato, M., Liccardi, G., Sofia, M., & Canonica, W.G. (2013) 'Climate change, air pollution and extreme events leading to increasing prevalence of allergic respiratory diseases', *Multidisciplinary Respiratory Medicine*, 8(1): 12.
- Davis, D.K., & Burke III, E. (2011) *Environmental Imaginaries of the Middle East and North Africa*. Athens, OH: Ohio University Press.
- De Stefano, L. (2004) *Freshwater and Tourism in the Mediterranean*. Rome: WWF Mediterranean Programme.
- Drake, C. (1997) 'Water resource conflicts in the Middle East', *Journal of Geography*, 96(1): 4–12.
- Dusar, B., Verstraeten, G., Notebaert, B., & Bakker, J. (2011) 'Holocene environmental change and its impact on sediment dynamics in the Eastern Mediterranean', *Earth-Science Reviews*, 108(3): 137–157.
- Emberling, G. (2010) *The Geography of the Middle East, Teaching the Middle East a Resource for Educators*. Chicago: The Oriental Institute, The University of Chicago. Available online: <http://teachmiddleeast.lib.uchicago.edu/foundations/geography/essay/essay-01.html>.
- Finkel, I. (2014) *The Ark before Noah: Decoding the Story of the Flood*. London: Hachette UK.
- Fisher, W.B. (2013) *The Middle East: A Physical, Social and Regional Geography*. Abingdon: Routledge.
- Furby, K.A., Bouwmeester, J., & Berumen, M. (2013) 'Susceptibility of central Red Sea corals during a major bleaching event', *Coral Reefs*, 32(2): 505–513.
- Gaina, C., Torsvik, T.H., van Hinsbergen, D.J., Medvedev, S., Werner, S.C., & Labails, C. (2013) 'The African Plate: A history of oceanic crust accretion and subduction since the Jurassic', *Tectonophysics*, 604: 4–25.
- Galil, B.S. (2007) 'Loss or gain? Invasive aliens and biodiversity in the Mediterranean Sea', *Marine Pollution Bulletin*, 55(7): 314–322.
- García-Castellanos, D., Estrada, F., Jiménez-Munt, I., Gorini, C., Fernández, M., Vergés, J., & De Vicente, R. (2009) 'Catastrophic flood of the Mediterranean after the Messinian salinity crisis', *Nature*, 462(7274): 778–781.
- Gargani, J., & Rigollet, C. (2007) 'Mediterranean Sea level variations during the Messinian salinity crisis', *Geophysical Research Letters*, 34(10): L10405.

- Geri, F., Amici, V., & Rocchini, D. (2010) 'Human activity impact on the heterogeneity of a Mediterranean landscape', *Applied Geography*, 30(3): 370–379.
- Golani, D. (1998) 'Impact of Red Sea fish migrants through the Suez Canal on the aquatic environment of the Eastern Mediterranean', in J. Albert, M. Bernhardtsson, & R. Kenna (eds), *Transformations of Middle Eastern Natural Environments: Legacies and Lessons* (pp. 375–387). New Haven, CT: Yale University.
- Gomez, F., Beauchamp, W., & Barazangi, M. (2000) 'Role of the Atlas Mountains (northwest Africa) within the African–Eurasian plate-boundary zone', *Geology*, 28(9): 775–778.
- Goren, M., Galil, B.S., Diamant, A., & Stern, N. (2016) 'Invading up the food web? Invasive fish in the southeastern Mediterranean Sea', *Marine Biology*, 163(8): 180.
- Gössling, S., & Hall, C.M. (eds) (2006) *Tourism and Global Environmental Change*. London: Routledge.
- Grove, A.T., & Rackham, O. (2003) *The Nature of Mediterranean Europe: An Ecological History*. New Haven, CT: Yale University Press.
- Gupta, A.K., Yuvaraja, A., Prakasam, M., Clemens, S.C., & Velu, A. (2015) 'Evolution of the South Asian monsoon wind system since the late Middle Miocene', *Palaeogeography, Palaeoclimatology, Palaeoecology*, 438: 160–167.
- Hall, C.M. (2001) 'Trends in coastal and marine tourism: The end of the last frontier?' *Ocean and Coastal Management*, 44: 601–618.
- Hall, C.M. (2016) 'Loving nature to death: Tourism consumption, biodiversity loss and the Anthropocene', in M. Gren, & E.H. Huijbens (eds), *Tourism and the Anthropocene* (pp. 52–73). Abingdon: Routledge.
- Harris, S.E. (2012) 'Cyprus as a degraded landscape or resilient environment in the wake of colonial intrusion', *Proceedings of the National Academy of Sciences*, 109(10): 3670–3675.
- Keeley, J.E., Bond, W.J., Bradstock, R.A., Pausas, J.G., & Rundel, P.W. (2012) *Fire in Mediterranean Ecosystems: Ecology, Evolution and Management*. Cambridge: Cambridge University Press.
- Lambeck, K. (1996) 'Shoreline reconstructions for the Persian Gulf since the last glacial maximum', *Earth and Planetary Science Letters*, 142(1–2): 43–57.
- Lew, A.A., Hall, C.M., & Timothy, D.J. (2015) *World Regional Geography: Human Mobilities, Tourism Destinations, Sustainable Environments*, 2nd edn. Dubuque, IA: Kendall-Hunt.
- Marcos, M., & Tsimplis, M.N. (2008) 'Comparison of results of AOGCMs in the Mediterranean Sea during the 21st century', *Journal of Geophysical Research: Oceans*, 113(C12): 1–21.
- Martínez-García, P., Comas, M., Soto, J.I., Loneragan, L., & Watts, A.B. (2013) 'Strike-slip tectonics and basin inversion in the Western Mediterranean: The Post-Messinian evolution of the Alboran Sea', *Basin Research*, 25(4): 361–387.
- Mikhail, A. (ed.) (2013) *Water on Sand: Environmental Histories of the Middle East and North Africa*. Oxford: Oxford University Press.
- Nematollahi, O., Hoghooghi, H., Rasti, M., & Sedaghat, A. (2016) 'Energy demands and renewable energy resources in the Middle East', *Renewable and Sustainable Energy Reviews*, 54: 1172–1181.
- Nikishin, A.M., Korotaev, M.V., Ershov, A.V., & Brunet, M.F. (2003) 'The Black Sea basin: Tectonic history and Neogene–Quaternary rapid subsidence modelling', *Sedimentary Geology*, 156: 149–168.
- Nilforoushan, F., Masson, F., Vernant, P., Vigny, C., Martinod, J., Abbassi, M., Nankali, H., Hatzfeld, D., Bayer, R., Tavakoli, F., Ashtiani, A., Doerflinger, E., Daignières, M., Collard, P., & Chéry, J. (2003) 'GPS network monitors the Arabia-Eurasia collision deformation in Iran', *Journal of Geodesy*, 77(7–8): 411–422.
- Pappé, I. (2014) *The Modern Middle East: A Social and Cultural History*. Abingdon: Routledge.
- Riegl, B., Berumen, M., & Bruckner, A. (2013) 'Coral population trajectories, increased disturbance and management intervention: A sensitivity analysis', *Ecology and Evolution*, 3(4): 1050–1064.
- Rockwell, T. (2013) 'North Anatolian Fault', in P.T. Bobrowsky (ed.), *Encyclopedia of Natural Hazards* (pp. 738–739). Dordrecht: Springer.
- Ryan, W.B., Pitman, W.C., Major, C.O., Shimkus, K., Moskalenko, V., Jones, G.A., Dimitrov, P., Görür, N., Sakiņ, M., & Yüce, H. (1997) 'An abrupt drowning of the Black Sea shelf', *Marine Geology*, 138(1): 119–126.
- Smith, B.D., & Zeder, M.A. (2013) 'The onset of the Anthropocene', *Anthropocene*, 4: 8–13.
- Steffen, W., Crutzen, P.J., & McNeill, J.R. (2007) 'The Anthropocene: Are humans now overwhelming the great forces of nature', *AMBIO: A Journal of the Human Environment*, 36(8): 614–621.
- Steffen, W., Grinevald, J., Crutzen, P., & McNeill, J. (2011) 'The Anthropocene: Conceptual and historical perspectives', *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, 369(1938): 842–867.
- Sušnik, J., Vamvakieridou-Lyroudia, L.S., Gebert, N., Kloos, J., Renaud, F. La Jeunesse, I., Mabrouk, B., Savić, D.A., Kapelan, Z., Ludwig, R., Fischer, G., Roson, R., & Zografos, C. (2015) 'Interdisciplinary

- assessment of sea-level rise and climate change impacts on the lower Nile Delta, Egypt', *Science of the Total Environment*, 503–504: 279–288.
- Tal, A. (2002) *Pollution in a Promised Land: An Environmental History of Israel*. Berkeley, CA: University of California Press.
- Tzedakis, P.C. (2007) 'Seven ambiguities in the Mediterranean palaeoenvironmental narrative', *Quaternary Science Reviews*, 26: 2042–2066.
- World Bank (2013) 'Red Sea—Dead Sea Water Conveyance Study Program Overview—Updated January 2013'. Available online: http://siteresources.worldbank.org/EXTREDSEADEADSEA/Resources/Overview_RDS_Jan_2013.pdf?resourceurlname=Overview_RDS_Jan_2013.pdf%26.

3

THE MIDDLE EAST AND NORTH AFRICA

A dynamic cultural realm

Dallen J. Timothy

Introduction

The Middle East and North Africa (MENA) is a vast region of many natural and cultural landscapes. It is a realm united (and divided) by physical geography, anthropogenic imprints and living cultures. It is one of the major clusters of humankind on earth and home to two ancient culture hearths (the Nile Valley and the Fertile Crescent/Mesopotamia), from which many innovations diffused to other areas of the world, including certain agricultural systems and products, written language, the lunar calendar, and the wheel. The Arabian Peninsula and the Levant later became a hearth for the diffusion of religion (Islam, Judaism and Christianity), which has touched every corner of the globe. As the previous chapter denoted, MENA is also home to an immensely diverse natural environment and varied ecosystems that make the area resilient, unique, and attractive for tourism.

This chapter describes elements of the cultural geography of MENA that have a salient bearing on the development of tourism. It briefly examines the peoples, cultures, and heritages that characterise the region and assesses the cultural and natural assets that together provide the foundations of a flourishing tourism system.

Influential empires

Throughout history, MENA has been affected tremendously by internal and external forces. It is home to some of the oldest human civilisations, particularly in the Nile Valley and along the Tigris and Euphrates Rivers which, as noted earlier, spurred the development of many innovations that the world enjoys today. Some of the earliest evidence of nomadic peoples settling into sedentary communities dates from the Levant approximately 12,000 BCE and are believed to have derived from a steady food supply and ample water. Verifiable towns and cities have been excavated from the Neolithic period around 10,000 years BCE. Some of the earliest cities were Memphis (Egypt), Uruk (in present-day Iraq), and Jericho (Palestine), which were home to sizeable populations (Anderson 2000). Today, the remnants of many Neolithic cities and towns dot the ancient landscapes of MENA.