

#### **GAMES**

The essays from prominent public intellectuals collected in this volume reflect an array of perspectives on the spectrum of conflict, competition, and cooperation, as well as a wealth of expertise on how games manifest in the world, how they operate, and how social animals behave inside them. They include previously unpublished material by former Cabinet minister Sayeeda Warsi, the philosopher A. C. Grayling, legal scholar Nicola Padfield, cycling coach David Brailsford, former military intelligence officer Frank Ledwidge, neuro-psychologist Barbara J. Sahakian, zoological ecologist Nicholas B. Davies, and the final work of the late Nobel laureate Thomas C. Schelling. This is a must-read for anyone interested in the history, nature, and dynamics of games.

DAVID BLAGDEN is Lecturer in International Security and Strategy at the University of Exeter and was previously the Adrian Research Fellow in International Politics at Darwin College, Cambridge. He is widely published in the scholarly and popular press, has served as a witness for several Parliamentary inquiries, and consults for numerous policy organisations. Dr Blagden has also won the Royal United Service Institute's Trench Gascoigne Prize for original writing on defence and security.

MARK DE ROND is Professor of Organisational Ethnography at Judge Business School, University of Cambridge, and a Fellow of Darwin College, Cambridge. A recurring feature in his work is the experience of being human in high-performing environments. His research has been widely reported in the press. His most recent fieldwork involved a world-first attempt to scull the navigable length of the River Amazon unsupported.



#### THE DARWIN COLLEGE LECTURES

These essays are developed from the 2016 Darwin College Lecture Series. Now in their thirty-third year, these popular Cambridge talks take a single theme each year. Internationally distinguished scholars, skilled as popularizers, address the theme from the point of view of eight different arts and sciences disciplines.

Subjects covered in the series include

#### 2016 GAMES

eds. David Blagden and Mark de Rond pb 9781108447324

#### 2015 DEVELOPMENT

eds. Torsten Krude and Sara T. Baker pb 9781108447379

#### 2014 PLAGUES

eds. Jonathan L. Heeney and Sven Friedemann pb 9781316644768

#### 2013 FORESIGHT

eds. Lawrence W. Sherman and David Allan Feller pb 9781107512368

#### 2012 LIFE

eds. William Brown and Andrew Fabian pb 9781107612556

#### 2011 BEAUTY

eds. Lauren Arrington, Zoe Leinhardt and Philip Dawid pb 9781107693432

#### 2010 RISK

eds. Layla Skinns, Michael Scott and Tony Cox pb 9780521171977

#### 2009 DARWIN

eds. William Brown and Andrew C. Fabian pb 9780521131957

#### 2008 SERENDIPITY

eds. Mark de Rond and Iain Morley pb 9780521181815

#### 2007 IDENTITY

eds. Giselle Walker and Elisabeth Leedham-Green pb 9780521897266



2006 SURVIVAL

ed. Emily Shuckburgh pb 9780521710206

2005 CONFLICT

eds. Martin Jones and Andrew Fabian hb 9780521839600

2004 EVIDENCE

eds. Andrew Bell, John Swenson-Wright and Karin Tybjerg pb $9780521710190\,$ 

2003 DNA: CHANGING SCIENCE AND SOCIETY

ed. Torsten Krude hb 9780521823784

2002 POWER

eds. Alan Blackwell and David MacKay hb 9780521823777

2001 SPACE

eds. François Penz, Gregory Radick and Robert Howell hb 9780521823760

2000 TIME

ed. Katinka Ridderbos hb 9780521782937

1999 THE BODY

eds. Sean Sweeney and Ian Hodder hb 9780521782920

1998 STRUCTURE

eds. Wendy Pullan and Harshad Bhadeshia bb 9780521782586

1997 SOUND

eds. Patricia Kruth and Henry Stobart pb 9780521033831

1996 MEMORY

eds. Patricia Fara and Karalyn Patterson pb 9780521032186

1995 EVOLUTION

ed. A. C. Fabian pb 9780521032179



#### 1994 THE CHANGING WORLD

eds. Patricia Fara, Peter Gathercole and Ronald Laskey pb 9780521283281

#### 1993 COLOUR: ART AND SCIENCE

eds. Trevor Lamb and Janine Bourriau pb 9780521499637

ps 5100021100001

### 1992 WHAT IS INTELLIGENCE?

ed. Jean Khalfa pb 9780521566858

#### 1991 PREDICTING THE FUTURE

eds. Leo Howe and Alan Wain

pb 9780521619745

#### 1990 UNDERSTANDING CATASTROPHE

ed. Janine Bourriau pb 9780521032193

#### 1989 WAYS OF COMMUNICATING

ed. D. H. Mellor pb 9780521019040

#### 1987 THE FRAGILE ENVIRONMENT

eds. L. E. Friday and R. A. Laskey

pb 9780521422666

### 1986 ORIGINS

ed. A. C. Fabian pb 9780521018197



# Games

# Conflict, Competition, and Cooperation

Edited by

David Blagden

University of Exeter

Mark de Rond

University of Cambridge

with

Janet Gibson





# **CAMBRIDGE**UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, vic 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi-110025, India

79 Anson Road, #06-04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781108447324

DOI: 10.1017/9781108565738

© Darwin College 2019

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2019

Printed and bound in Great Britain by Clays Ltd, Elcograf S.p.A

 $A\ catalogue\ record\ for\ this\ publication\ is\ available\ from\ the\ British\ Library.$ 

ISBN 978-1-108-44732-4 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



In memory of
Thomas C. Schelling,



# **Contents**

	List of Figures	page xi
	Notes on Contributors	xiii
	Acknowledgements	xvii
	Introduction	
	Games: The Spectrum of Conflict, Competition, and Cooperation	1
	DAVID BLAGDEN AND MARK DE ROND	
1.	Personal Principles in the Political Game SAYEEDA WARSI	8
2.	The Game of Crime and Punishment NICOLA PADFIELD	25
3.	Wittgenstein's Games A. C. GRAYLING	41
4.	Games in Sports DAVID BRAILSFORD	61
5.	Losing the 'New Great Game' FRANK LEDWIDGE	80
6.	Games for the Brain BARBARA J. SAHAKIAN, LAURE-SOPHIE CAMILLA D'ANGELO, AND GEORGE SAVULICH	101

ix



#### Contents

7.	Games Animals Play NICHOLAS B. DAVIES	120
	Afterword	
	The Game Theory of Conflict: The Prisoners' Dilemma – An Unsympathetic Critique	145
	THOMAS C. SCHELLING	140
	Index	151



# **Figures**

1.1.	The rise of the SpAd – fiction and fact.	page 14
1.2.	The Prisoners' Dilemma.	17
1.3.	Political approaches to Muslim community engagement.	21
1.4.	The resignation.	22
1.5.	A principled position.	24
6.1.	Mental capital over the course of life. Synthetic view of the	
	mental capital trajectory and factors that may act upon it.	103
6.2.	'Wizard'. Images from 'Wizard', an example of gamified	
	cognitive training of episodic memory.	114
6.3.	Effects of 'Wizard' on cognition and functioning in schizophren	ia. 115
6.4.	Effects of cognitive training (gameplay) on cognition and	
	functioning in rugby players.	117
7.1.	Charmers and cheats: a calling male natterjack toad with a	
	satellite male waiting silently nearby. Satellites attempt to	
	intercept females attracted to calling males.	122
7.2.	(a) The three male colour morphs of the side-blotched lizard:	
	orange, blue, and yellow. Each has a different mating strategy	7.
	(b) They play an evolutionary game of 'Rock-	
	Paper–Scissors' represented by this triangle. Shaded areas	
	indicate the zones where each morph has the highest fitness.	124
7.3.	Sperm competition games: a dominant male mountain gorilla	
	(a) defends a harem where he can monopolise matings with his	is
	females, whereas male chimpanzees (b) live in multi-male gro	ups
	where a female often mates with many males. (c) Primate test	is
	size reflects differences in the intensity of sperm competition.	127
7.4.	Dunnock mating games. (a) A female dunnock soliciting to a	
	beta male, while the alpha male flies in to interrupt them.	
	(b) Sexual conflict gives rise to various mating systems.	

хi



## List of Figures

	(c) Polygynandry (two males sharing two females) as a stalemate	
	outcome of sexual conflict.	129
7.5.	A cuckoo egg (middle, left) in a reed warbler nest.	133
7.6.	The evolutionary battle between hosts and their 'cuckoos' can	
	lead to a signature–forgery arms race in egg markings.	138
7.7.	A game of safety in numbers: the spectacular, coordinated	
	movements of tens of thousands of starlings at winter roosts	
	is the outcome of local decisions by individuals	
	in the flock.	142



# **Notes on Contributors**

**David Blagden** is University Lecturer in International Security and Strategy at the University of Exeter, affiliated to the Strategy and Security Institute within the Department of Politics. He was previously the Adrian Research Fellow in International Politics at Darwin College, University of Cambridge, where he remains an Associate Member. He obtained his DPhil at the University of Oxford, and has published in journals such as *International Affairs, International Security*, and *International Studies Review*.

Mark de Rond is Professor of Organisational Ethnography at the University of Cambridge's Judge Business School and a Fellow of Darwin College. He is the author/editor of eight previous books and many journal articles on topics spanning the fields of organisational science, corporate strategy, management, and leadership. His ethnographic studies include long stints with British military medics in Afghanistan, elite rowers in Cambridge, biochemists in Oxford, and comedians in London; he has also rowed the navigable part of the Amazon. Mark gained his DPhil from the University of Oxford, and consults widely for a variety of private firms, public bodies, and media outlets.

\* \* \*

**David Brailsford** is Team Principal at Team Sky, the first professional cycling team to support a British rider to victory in the Tour de France. Since that win in 2012, Team Sky competitors have subsequently won the event five more times, making them the most successful Tour team since their formation under his leadership in 2010. He was previously Performance Manager for British Cycling, leading the team to top the cycling medal table at the Olympic Games both in 2008 and 2012, before leaving in 2014 to focus on Team Sky. Brailsford competed as a cyclist himself for four years in

xiii



Notes on Contributors

France in his youth, before taking a degree in sports science and psychology at the University of Liverpool. He was made an MBE in 2005, CBE in 2009, and knighted for services to cycling and the London 2012 Olympics in 2013.

Nicholas B. Davies is Professor of Behavioural Ecology in the Department of Zoology at the University of Cambridge and a Fellow of Pembroke College. He is also a Fellow of the Royal Society, and gave the institution's Croonian Lecture in 2015. He is the author of five books; his most recent, *Cuckoo: Cheating by Nature* (Bloomsbury, 2015), won the British Trust for Ornithology's annual best book prize. A past president of the International Society for Behavioural Ecology, he obtained his DPhil from the University of Oxford. He has won awards from the Zoological Society of London, the Cambridge Philosophical Society, the American Ornithologists' Union, and the Association for the Study of Animal Behaviour.

Laure-Sophie Camilla d'Angelo is an Analyst at RAND Europe, based in Cambridge, UK. She holds a PhD in Experimental Psychology from the University of Cambridge and a BSc in Pharmacology from University College London. She has published in journals such as *Behavioural Brain Research, CNS Spectrums*, and *The British Journal of Pharmacology*.

A. C. Grayling is Master of the New College of the Humanities and a Supernumerary Fellow of St Anne's College, University of Oxford. He completed his DPhil at the University of Oxford, and then was on the faculty of Birkbeck College, University of London, from 1991 to 2011. He is the author/editor of more than thirty books on various areas of philosophy, focusing on ethics, language, logic, and the history of ideas. A Fellow of the Royal Societies of Literature and Arts, Grayling is also a representative to the UN Human Rights Council, a past chairman of the Man Booker Prize judging panel, a former Honorary Secretary of the Aristotelian Society, and a Vice-President of the British Humanist Association.

Frank Ledwidge read law at the University of Oxford, then practised as a barrister in Liverpool. He subsequently served as a military intelligence officer on British operations in Bosnia, Kosovo, and Iraq, before working as a civilian justice adviser for UK Missions in Afghanistan and Libya. He holds a PhD from King's College London and now teaches for the University of Portsmouth at the RAF College. He is the author of Losing Small Wars: British Military Failure in Iraq and Afghanistan (Yale, 2011), Investment in Blood: The True Cost of Britain's Afghan War (Yale, 2013), Rebel Law: Insurgents, Courts

xiv



#### **Notes on Contributors**

and Justice in Modern Conflict (Hurst, 2017), and Aerial Warfare: The Battle for the Skies (Oxford, 2018).

Nicola Padfield is Master of Fitzwilliam College, Cambridge, and a Reader in Criminal and Penal Justice at the Law Faculty, University of Cambridge, where she has worked for more than 20 years. The author/editor of nine books, she has a broad research lens, engaged both in 'hard' law and in socio-legal—criminological research. Her particular recent focus has been on sentencing law and prison release/recall, an area in which she has contributed to many official reports and inquiries. A barrister by training, she has published widely on many aspects of criminal law, sentencing, and criminal justice. She sat as a Recorder (part-time judge) in the Crown Court from 2002 to 2014 and is a Bencher of the Middle Temple.

Barbara J. Sahakian is Professor of Clinical Neuropsychology at the University of Cambridge Department of Psychiatry and Behavioural and Clinical Neuroscience Institute. She is also an Honorary Clinical Psychologist at Addenbrooke's Hospital, Cambridge, and a Fellow of Clare Hall. She is a Fellow of the British Academy and the Academy of Medical Sciences. A past president of the International Neuroethics Society and the British Association of Psychopharmacology, she holds PhD and DSc degrees from Cambridge. She is also a member of the World Economic Forum on the Future of Neurotechnologies and Brain Science and of the Clinical Advisory Board of the Human Brain Project. She is Senior Consultant for Cambridge Cognition, and co-inventor of the widely used CANTAB cognitive function tests. She is also co-inventor of the University of Cambridge/PEAK Advanced Training Programme and Wizard Apprentice.

George Savulich is a Research Associate in the Department of Psychiatry and MRC/Wellcome Behavioural and Clinical Neuroscience Institute at the University of Cambridge, working with Barbara Sahakian. He holds a PhD from the Institute of Psychiatry, Psychology and Neuroscience (King's College London), and has published in journals such as *Translational Psychiatry* and the *International Journal of Neuropsychopharmacology*.

Thomas C. Schelling (1921–2016) was Distinguished Service Professor at the University of Maryland's Department of Economics and School of Public Policy (1990–2005). He obtained his PhD from Harvard University in 1951, and was subsequently on the faculties of Yale (1953–1957) and Harvard (1959–1990), spending the academic year 1958/1959 at the RAND



Notes on Contributors

Corporation. He had previously worked on the staff of the US Marshall Plan (1948–1950) and in the foreign policy team at the White House (1950–1953). Co-awarded the Nobel Memorial Prize for Economic Sciences in 2005, his major works include *The Strategy of Conflict* (Harvard, 1960), *Arms and Influence* (Yale, 1966), and *Micromotives and Macrobehavior* (Norton, 1978).

Sayeeda Warsi is a former UK Cabinet minister. She served as Minister without Portfolio (2010–2012), then as both Senior Minister of State for Foreign and Commonwealth Affairs and Minister of State for Faith and Communities (2012–2014), before resigning from the Government over British policy during the August 2014 Israel–Gaza conflict. She was also Co-Chair of the Conservative Party (2010–2012), becoming the first British-Asian to chair a major UK political party. A former solicitor with the Crown Prosecution Service, she was appointed a member of the House of Lords (as Baroness Warsi) in 2007 and a member of the Privy Council in 2010. She is now Pro Vice-Chancellor of the University of Bolton.



# Acknowledgements

This volume – and the 2016 lecture series organised by the University of Cambridge's Darwin College that it is based on – owe a great many debts to a great many people. First and foremost, Janet Gibson (College Registrar at Darwin) is the person who makes everything work: from event logistics to document management, from flagging deadlines to chasing drafts, none of it would have happened without Janet. We are therefore immensely grateful to her, as are all at Darwin whose academic endeavours she has helped over the years – which basically means every fellow and student of the College since she started in 2007.

Espen Koht also deserves a special mention. As Darwin's IT Manager, Espen was instrumental in ensuring that the series was advertised via every available channel, that speakers' audio-visual requirements were met, that the lectures themselves were filmed to a high standard and subsequently made available for download, and that countless other behind-the-scenes tech-support functions were discharged to an exemplary standard.

The senior leadership of the College were invaluable supporters of the series and, therefore, this volume too. The current Master, Mary Fowler, backed the project to the hilt, as well as hosting and introducing our distinguished contributors at a level befitting their professional standing. And Mary's predecessor, Willy Brown, also played an active supporting role: not only did he bring both of us to Darwin as fellows during his tenure, a singular honour in itself, but also he continued to help in numerous seen and unseen ways, including via the hosting/introducing of speakers when the current Master was travelling. Andy Fabian, meanwhile – as Chair of the College's Education and Research Committee and

xvii



#### Acknowledgements

inaugurator of the first annual thematic lecture series at Darwin back in 1986 – was a backer and supportive presence throughout.

Numerous other staff and students of the College and University helped with the organisation of the series in an array of capacities – lecture ushers, student hosts, camera crew, facilities support, and more besides. Our sincere thanks therefore go to Stephanie Ashenden, Sue Beckwith (and team), Cavan Bennett, Katia Bowers, Jamie Brittain, Michelle Cain, Darragh Coffey, Tony Cox, Erin Cullen, Amélie Deblauwe, Joe Delaney, John Dix, Matthew Edwards, Chiara Giorio, Angela Goncalves, Michael Gormer, Stefan Graf, Alex Grzankowski, Meredith Hadfield, Hatem Hatem, Ivan Higney (and team), Katja Hofmann, Andy Howells, Angela Ibler, Dan Jones, Markus Kalberer, Marion Kieffer, Nicolas Köhler, Torsten Krude, Noelle L'Hommedieu, Tiancheng Li, Inès Lion, Paula MacGregor, Emile Marin, Hannah McCarthy, Ian McConnell, Tim Milner, Russell Norman, Michael O'Neill, Stephen Owen, Nitzan Peri-Rotem, Jamie Pilmer, James Poskett, Nebojša Radić, Sam Roberts, Florian Roessler, Derek Scott (and team), Utkarsh Sharma, K. C. Sivaramakrishnan, Shahin Tavakoli, Matt Turpie (and team), Jenneke van der Wal, Jackie Walpole, Ben Watkinson-Powell, Julius Weitzdörfer, Chester White, Roger Whitehead, Joseph Wu, and Amani Zalzali. Our sincere apologies to anyone who has escaped our list (or whose name we have misspelt!). We also thank Steven Holt for his thorough copyediting, Christopher Davis for his swift indexing, and Geetha Williams' team at MPS for their attentive production.

The team at Cambridge University Press have been a supportive, constructive, and – most crucially – patient source of assistance throughout the editing process. We therefore thank Clare Dennison, Thomas Harris, Esther Miguéliz Obanos, Lucy Rhymer, and all CUP colleagues for their forbearance: we are glad to be able to reward it by eventually delivering this assemblage of fascinating essays by eminent authors.

Both editors thank their families for all the support that brought them to the point of being in the privileged position of convening a distinguished guest lecture series at the University of Cambridge. David Blagden also particularly thanks Helena Mills for editorial assistance and critical feedback on several chapters, as well as Michael Clark, Samantha Nicholls, and Patrick Porter for facilitating – in various ways – a weekly commute between Exeter and Cambridge during the time of the series itself.

xviii



### Acknowledgements

Finally, we thank the chapter contributors themselves. All are distinguished professionals with unique expertise and demanding schedules, so we are grateful to them for investing time and effort both in the original lectures and in the subsequent book chapters. One of them is singled out for particular recognition, however, as you will see from this book's dedication and introduction.