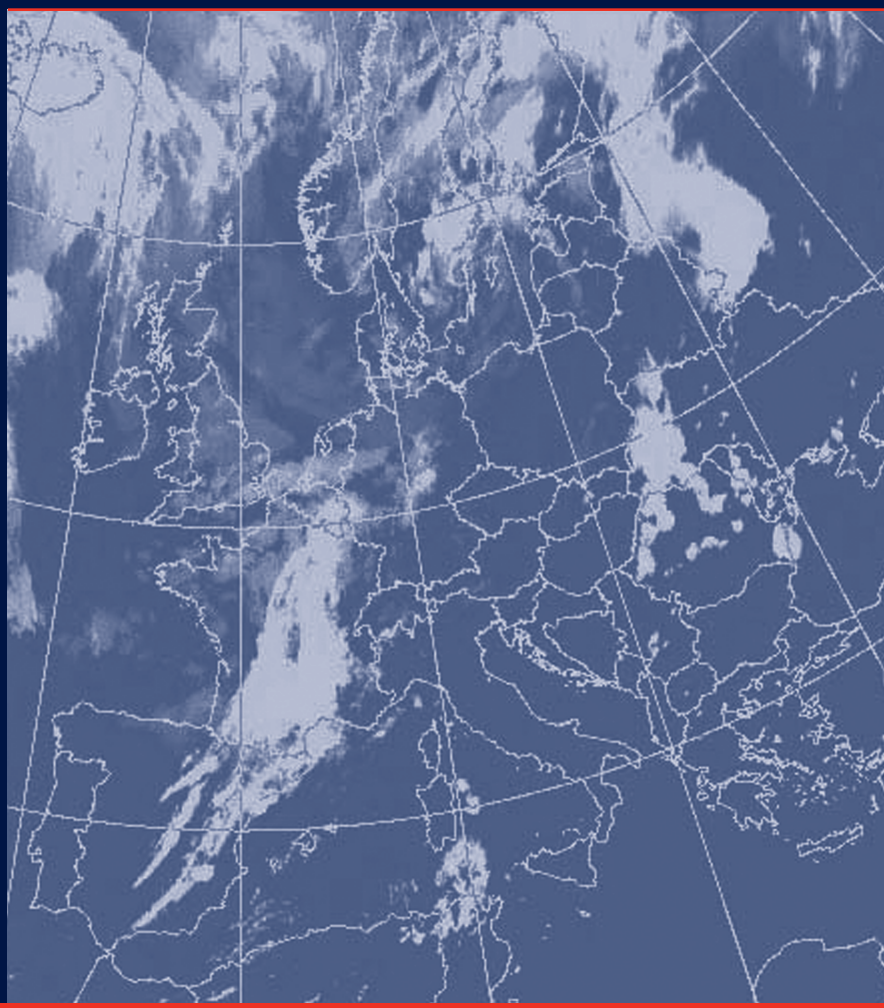
VOL.26 ■ SUPPLEMENT NO. 2 ■ OCTOBER 2018
ISSN 1062-7987

EUROPEAN REVIEW

CROSSING OVER TO THE FUTURE: INTERDISCIPLINARITY IN RESEARCH AND HIGHER EDUCATION

PAPERS FROM THE ACADEMIA EUROPAEA SYMPOSIUM STOCKHOLM, 2017

FUNDED BY THE WENNER-GREN FOUNDATIONS



INTERDISCIPLINARY JOURNAL OF THE HUMANITIES AND SCIENCES OF THE ACADEMIA EUROPAEA: THE ACADEMY OF EUROPE

CAMBRIDGE UNIVERSITY PRESS
https://doi.org/10.1017/S1062798718000686 Published online by Cambridge University Press

EUROPEAN REVIEW

Published in Association with the Academia Europaea

EDITOR-IN-CHIEF

Professor Theo D'haen
English and Comparative Literature,
Leuven University, Blijde Inkomststraat 21-3311,
B-3000 Leuven, BELGIUM
e-mail: theo.dhaen@arts.kuleuven.be

EDITORIAL BOARD

FOUNDING EDITOR

Sir Arnold Burgen
8a Hills Avenue,
Cambridge CB1 7XA, UK
e-mail: asvb@cam.ac.uk

Professor Gian Vittorio Caprara
Universita degli studi di Roma, Dipartimento di Psicologia,
Facoltà di Medicina e Psicologia,
via dei Marsi 78, 00185 Rome, ITALY
e-mail: gianvittorio.caprara@uniroma1.it

Professor Giuseppe Longo
Centre Cavaillès, CNRS et Ecole Normale Supérieure,
29 Rue d'Ulm, 75005 Paris, FRANCE
e-mail: longo@di.ens.fr

Professor Stephan Leibfried
Center for Social Policy Research, University of Bremen,
Parkallee 39,28209 Bremen, GERMANY
e-mail: stlf@zes.uni-bremen.de

Professor Ole Petersen
Cardiff School of Biosciences,
Cardiff University, Biomedical Sciences Building,
Museum Avenue, Cardiff CF10 3AX, UK
e-mail: petersenoh@cardiff.ac.uk

Professor Juergen Renn
MPI fuer Wissenschaftsgeschichte Wilhelmstrasse 44,
Berlin 10117, GERMANY
e-mail: renn.office@mpiwg-berlin.mpg.de

Professor Piotr Sztompka
Institute of Sociology, Jagiellonian University,
Grodzka 52, 31-044 Cracow, POLAND
e-mail: ussztomp@cyf-kr.edu.pl Fax: (48)12-222129

Professor Denis Weaire
School of Physics, Trinity College
Dublin 2, IRELAND
e-mail: dweaire@tcd.ie

Professor Henk Wesseling
Wijttenbachweg 43, 2341 VX Oegstgeest,
THE NETHERLANDS
e-mail: h.l.wesseling@tele 2.nl

Professor Björn Wittrock
Swedish Collegium for Advanced Study,
Götavägen 4, Se-752 36 Uppsala, SWEDEN
e-mail: bjorn.wittrock@swedishcollegium.se

Professor Barbara Wright
Department of French,
Trinity College, Arts Building, Dublin 2, IRELAND
e-mail: bwright@tcd.ie

CONSULTING EDITORS

M Thierry de Montbrial, *Institut Français des Relations Internationales, France*
Professor Quentin Skinner, *Christ's College, Cambridge, UK*

ASSOCIATE EDITORS

Prof. Dr. Hagit Amirav, *Professor of Patristics and Late Antiquity, Vrije Universiteit Amsterdam, The Netherlands, h.amirav@vu.nl – YAE - Humanities*
Dr Manuel Fernández-Götz, *School of History, Classics and Archaeology, University of Edinburgh, m.fernandez-gotz@ed.ac.uk*
Prof. Dr. Robert Gerwarth, *Professor of Modern History at University College Dublin and Director of the Centre for War Studies, Dublin, Irish Republic, robert.gerwarth@ucd.ie – AE - Humanities*
Dr. Alban Kellerbauer, *Max Planck Institute for Nuclear Physics 69117 Heidelberg, Germany, a.kellerbauer@cern.ch, a.kellerbauer@mpi-hd.mpg.de – YAE - Exact Sciences*
Dr. Silvia Pellicer-Ortin, *Dpto. de Filología Inglesa y Alemana - Facultad de Educación - 50009 robert.gerwarth@ucd.ie Universidad de Zaragoza, España, spellice@unizar.es – YAE -Social Sciences*
Dr. Mangala Srinivas, *Dept. of Tumour Immunology, Radboud University Medical Center, Nijmegen, The Netherlands, Mangala.Srinivas@Radboudumc.nl – YAE - Life Sciences*
Dr. Erdem Yörük, *Dept. of Sociology, Koç University, and Department of Social Policy and Intervention, University of Oxford, eryoruk@ku.edu.tr*

Subscriptions

European Review (ISSN 1062-7987; electronic 1474-0575) is published quarterly in February, May, July and October. The subscription price of volume 26 (2018) (which includes postage) is £303 net (USA, Canada and Mexico US$528) for institutions print and electronic, institutions electronic only £251/$438; £38 net (USA, Canada and Mexico US$69) for individuals ordering direct from the publisher and certifying that the journal is for their personal use. Single parts cost £87 (USA, Canada and Mexico US$152) plus postage. Members of the Academia Europaea receive online access to the journal as part of their membership subscription.

Orders, which must be accompanied by payment, may be sent to any bookseller, subscription agent or direct to the publisher: Cambridge University Press, Journals Fulfilment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK; or in the USA, Canada and Mexico: Cambridge University Press, Journals Fulfillment Department, 32 Avenue of the Americas, New York, NY 10013, USA. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Japanese prices for institutions are available from Kinokuniya Company Ltd, PO Box 55, Chitose, Tokyo 156, Japan.

Prices include delivery by air. Copies of the journal for subscribers in the USA, Canada and Mexico are sent by air to New York.

Application to mail at Periodicals Postage Rates is pending at New York, NY.

Please enquire about special rates for members of other learned societies, e-mail: journals@cambridge.org

Copying

This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organisations in the USA who are also registered with CCC may therefore copy material (beyond the limits permitted by sections 107 and 108 of U.S. Copyright law) subject to payment to CCC of the per-copy fee of $12.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 1062-7987/2017 $12.00.

ISI Tear Sheet Service, 3501 Market Street, Philadephia, PA 19104, USA, is authorised to supply single copies of separate articles for private use only.

Organisations authorised by the Copyright Licensing Agency may also copy material subject to the usual conditions.

For all other use, permission should be sought from Cambridge University Press.

For further information on *European Review* or other Press titles access journals.cambridge.org/erw or cambridge.org/.

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

Printed in the UK by Bell & Bain Ltd., Glasgow.

© Academia Europaea 2018

https://doi.org/10.1017/S1062798718000686 Published online by Cambridge University Press

The Wenner-Gren Foundations



Purpose

The Wenner-Gren Foundations (The Wenner-Gren Center Foundation for Scientific Research, The Axel Wenner-Gren Foundation for International Exchange of Scientists and The Foundation Wenner-Grenska Samfundet) support international scientific exchange through:

1. supplying guest apartments at the Wenner-Gren Center in Stockholm;
2. awarding fellowships to Swedish researchers who wish to go abroad, and to guest scientists who wish to visit Sweden;
3. supporting visits by foreign guest lecturers;
4. organizing international symposia;
5. in other ways supporting the exchange of knowledge across borders.

The WGF has a long and productive collaboration with the Academia Europaea stretching back several years. There have been a number of joint publications of earlier symposium volumes, as books:

2002 May, Stockholm
Excellence in Higher Education (Portland Press, vol 82, ISBN 9781855781528)

2005 November, Stockholm
The Formative Years of Scholars (Portland Press, vol 83, ISBN 9781855781641)

2007 November, Stockholm
The University in the Market (Portland Press, vol 84, ISBN 9781855781689)

2009 November, Stockholm:
From Information to Knowledge, from Knowledge to Wisdom: Challenges Facing Higher Education in the Digital Age (Portland Press, vol 85, ISBN 9781855781771)

2011 May, Stockholm
Trust in Universities (Portland Press, vol 86, ISBN 9781855781948)

2013 May, Stockholm
Bibliometrics: Use and Abuse in the Review of Research Performance (Portland Press, vol 87, ISBN 9781855781955)

Further information can be found at: https://www.swgc.org/welcome.aspx

https://doi.org/10.1017/S1062798718000686 Published online by Cambridge University Press

Higher Education, Research and CULture in European Society (HERCULES) group of the Academia Europaea

The group was formally established in 2004 to identify and deliver initiatives relevant to the practices of higher education, research and cultural scholarship at the European level. The focus is always on interdisciplinary topics of broad interest, including preparation of research policy and practice statements on behalf of the Council of the Academia Europaea.

Core members of the group at the time of the Wenner-Gren Stockholm Symposium included:

Coordinator: Lars Engwall (SW, Stockholm - Management Sciences)
Members: Wim Blockmans (NL, Wassenaar - History), Sierd Cloetingh (NL, Utrecht - Earth Sciences), Erik de Corte (BE, Leuven - Education), Theo D'haen (BE, Leuven - Literature), Jürgen Enders (UK, Bath - Education Management), Marie Farge (FR,, Paris, CNRS - Physics), Svend Erik Larsen (DK, Copenhagen - Literature), Christine Musselin (FR, Paris - Education), Peter Scott (UK, London - Education), Britt-Marie Sjöberg (SW, Stockholm - Wenner-Gren Foundation), Bert Weckhuysen (NL, Utrecht - Chemistry), Milena Zic Fuchs (HR, Zagreb - Linguistics), Marcel Swart (President of the Young Academy of Europe 2017), Georg Krücken (INCHER Kassel, Germany – Higher Education Research), Michaela Matteoli (IT, Milan, Pharmacology and Neuroscience), Filip Dochy (BE, Leuven – Education Research)

Online versions of previous publications from the HERCULES (Wenner-Gren) International series are available.

Other symposia have been published either in the *European Review* (see below) or as indicated.

Initiatives since 2000:

- 'Excellence in Higher Education' (with the Wenner-Gren Foundations and the International Academy of Education), 2002, Stockholm.

https://doi.org/10.1017/S1062798718000686 Published online by Cambridge University Press

- ‘Formative Years of Scholars’ (with the Wenner-Gren Foundations), 2005 Stockholm.
- ‘Quality Assessment in Institutions of Higher Education in Europe: Problems, Practices and Solutions’ (with the Compagnia di San Paolo), 2006, Pavia. ISBN978 1 855781719
- ‘The University in the Market’ (with the Wenner-Gren Foundations), 2007, Stockholm.
- ‘Diversification of Higher Education and the Academic Profession’ (with the Compagnia di San Paolo), 2009, Torino. *European Review* 18 Supplement 1 Open access
- ‘From Information to Knowledge, from Knowledge to Wisdom: Challenges Facing Higher Education in the Digital Age’ (with the Wenner-Gren Foundations), 2009, Stockholm.
- ‘Trust in Higher Education: Ethical and Quality Standards in Research and Teaching’ (with the Wenner-Gren Foundations), 2011, Stockholm.
- Bibliometrics: Use and Abuse in the Review of Research Performance’ (with the Wenner-Gren Foundations), 2013, Stockholm.
- ‘Migration and Mobility in Science: Impacts on Cultures and the Profession in Intitutions of Higher Education in Europe’ (with the Compagnia di San Paolo and Accademia dei Lincei), 2013, Rome. *European Review* 23 Supplement 1.
- ‘Humanities and Social Sciences, Globalization, and China’ (a bilateral event with Tsinghua University, Beijing, and sponsored by the Riksbanken Jubileumsfonds, Stockholm), 2014, Beijing. *European Review* 24.2.
- ‘Conflicts and Dialogues between Science and Humanities’ (a bilateral event with Shanghai Jiao Tong University, Shanghai), 2015. *European Review* 26.2.
- ‘University Governance: Impeding or Facilitating Creativity?’ (with the Volkswagen Stiftung and INCHER-Kassel), 2016, Hannover. *European Review* 26.1 Supplement. Open Access.

Pre-2000 linked events

- ‘Goals and Purposes of Higher Education in the 21st Century’ (with the Wenner-Gren Foundations), 1994, Stockholm.
- ‘New Challenges for the Academic Profession’ (with the Erasmus University, Rotterdam, and the Center for Higher Education Policy Studies, Twente University), 1996, Rotterdam.
- ‘Interdisciplinarity and the Organisation of Knowledge in Europe’, 1997, Cambridge.
- ‘The Universal Importance of Fundamental Science’, 1999, Budapest.
- ‘High Bandwidth for European Education and Research’ (with HiBeer and The European Science Foundation), 1999, Uxbridge.
- ‘The “Virtual University”’ (with the Wenner-Gren Foundations), 1999, Stockholm.

https://doi.org/10.1017/S1062798718000686 Published online by Cambridge University Press

European Review

Volume 26 Supplement 2 October 2018

Crossing over to the Future: Interdisciplinarity in Research and Higher Education

Papers from the Academia Europaea Symposium Stockholm, 2017
Supported by the Wenner-Gren Foundations and Academia Europaea

Preface
Crossing over to the Future: Interdisciplinarity in Research and Higher Education
Milena Žic Fuchs S1

Following Up on Interdisciplinary Encounters: Benefits for Early Career Researchers
Helen Bridle S6

Interdisciplinary Research
Bruce Brown S21

Structural Conditions for Interdisciplinarity
Lars Engwall S30

Implementing Interdisciplinary Curricula: Some Philosophical and Practical Remarks
Carl Gombrich S41

The Perks and Perils of Interdisciplinary Research
Erin Leahey S55

The Order of Knowledge: From Disciplinarity to Transdisciplinarity and Back
Jürgen Mittelstrass S68

Interdisciplinarity as a State of Mind: How Can Individuals and Societies Reach It?
Amir Muzur S76

The *Other* Kind of Research: On the Ambivalent Ties between Disciplinary, Multi-, Inter- and Transdisciplinary Scholarship
Verena Winiwarter S85

https://doi.org/10.1017/S1062798718000686 Published online by Cambridge University Press