

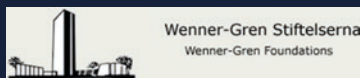
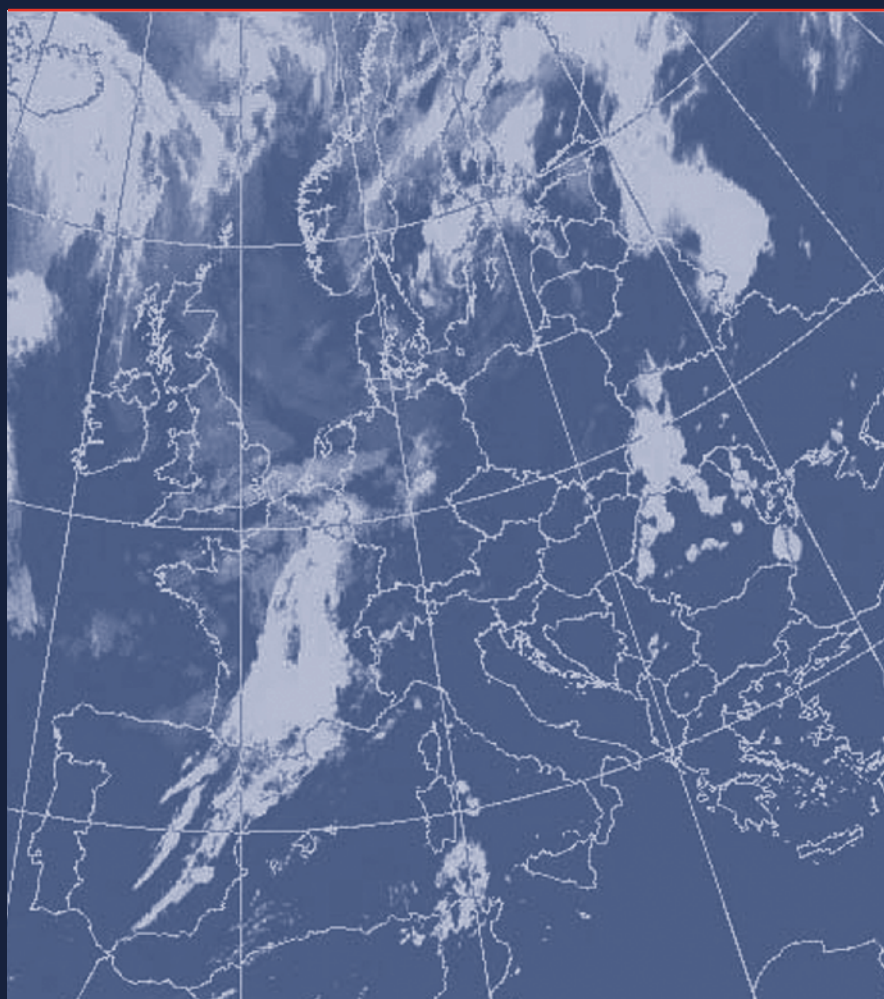
# EUROPEAN REVIEW

MIND THE GAP  
BRIDGING  
SECONDARY AND  
HIGHER EDUCATION

EDITED BY  
SVEND ERIK LARSEN

PAPERS FROM THE  
ACADEMIA EUROPAEA  
SYMPOSIUM  
STOCKHOLM, 2018

FUNDED BY THE  
WENNER-GREN  
FOUNDATIONS



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

**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: asb@cam.ac.uk

Professor Gian Vittorio Caprara  
Università 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 Cavailles, 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: uszstomp@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 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, Joint Research Centre, 76125 Karlsruhe, Germany,  
a.kellerbauer@cern.ch, a.kellerbauer@mpi-hd.mpg.de – YAE - Exact Sciences

Dr. Silvia Pellicer-Ortín, Dpto. de Filología Inglesa y Alemana - Facultad de  
Educación - 50009 robert.gerwarth@ucd.ie Universidad de Zaragoza, España,  
spellite@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  
5 times a year in, February, April, June, August, October and December.  
The subscription price of volume 28 (2020) (which includes postage) is  
£351 net (USA, Canada and Mexico US\$611) for institutions print and  
electronic, institutions electronic only £290/\$506; £40 net (USA, Canada  
and Mexico US\$73) for individuals ordering direct from the publisher  
and certifying that the journal is for their personal use. Single parts cost  
£67 (USA, Canada and Mexico US\$117) 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 Fulfillment 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, Philadelphia, 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* 2020

# The Wenner-Gren Foundations



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.

## “HERCuLES” [*Higher Education, Research and Culture in European Societies*]

The Expert Group HERCuLES (Higher Education, Research and Culture in European Society) was formally established in 2004 by the Board of Trustees of the Academia Europaea with a mission to assist and advise the AE Board of Trustees on issues that are relevant to research and policy in European institutions of higher education and learning, and also to develop activities that relate to aspects and problems of the management, philosophy, and operational activities of those institutions. Even before the group’s formal establishment a number of symposia on these same topics had been organized.



The group consists of approximately 12 members, drawn from a variety of disciplines and nominated for a three-year period. The group has developed into one of the most active and dynamic groups within the Academia, especially through the preparation and organization, since 2005, of a series of international symposia that address important and topical issues and problems of higher education. These are summarized below. Moreover, the outcomes of the in-depth and critical analyses of these issues during the conferences have resulted in the publication of Proceedings. Through the dissemination of these Proceedings, we have made a contribution to the further discussion and reflection about the topics in academic circles, and by doing so potentially to the future development and shaping of higher education in Europe.

Occasionally, the conferences have also led to a formal statement about an issue that, after approval by the Board of Trustees, is published as an official standpoint of the Academia Europaea.

Through these activities, the HERCuLES Expert Group provides the AE with a powerful vehicle for promoting the international visibility of the Academia Europaea, and an important lever for the positioning of the Academia in the European higher education space.

## Current members of the group

**Coordinator:** Lars Engwall (Management Sciences, Uppsala University, Sweden, [lars.engwall@fek.uu.se](mailto:lars.engwall@fek.uu.se) (Chair from May 2017))

### Members:

- Wim Blockmans (Medieval Studies, University of Leiden, The Netherlands, [wimblockmans7@gmail.com](mailto:wimblockmans7@gmail.com))
- Sierd Cloetingh (Earth Sciences, AE President, Utrecht University, The Netherlands, [S.A.P.L.Cloetingh@uu.nl](mailto:S.A.P.L.Cloetingh@uu.nl))
- Theo D'haen (English Literature, KU Leuven, Belgium, [theo.dhaen@kuleuven.be](mailto:theo.dhaen@kuleuven.be))
- Filip Dochy (Learning and Development, KU Leuven, Belgium, [Filip.Dochy@ppw.kuleuven.be](mailto:Filip.Dochy@ppw.kuleuven.be))
- Kirsten Drotner (Media Studies, University of Southern Denmark, Odense, Denmark, [drotner@sdu.dk](mailto:drotner@sdu.dk))
- Jürgen Enders (Education Management, University of Bath, United Kingdom, [j.enders@bath.ac.uk](mailto:j.enders@bath.ac.uk))
- Marie Farge (Physics, École normale supérieure, CNRS, Paris, France, [marie.farge@ens.fr](mailto:marie.farge@ens.fr))
- Georg Krücken (Higher Education Research, INCHER, University of Kassel, Germany, [kruecken@incher.uni-kassel.de](mailto:kruecken@incher.uni-kassel.de))
- Michaela Matteoli (Pharmacology and Neuroscience, Humunitas University, Milan, Italy, [michela.matteoli@hunimed.eu](mailto:michela.matteoli@hunimed.eu))
- Christine Musselin (Sociology, SciencePo, Paris, France, [c.musselin@cs0.cnrs.fr](mailto:c.musselin@cs0.cnrs.fr))
- Peter Scott (Education, University College London, United Kingdom, [P.Scott@ioe.ac.uk](mailto:P.Scott@ioe.ac.uk))
- George Sharvashidze (Education Research, Tbilisi State University, Georgia, [rector@tsu.ge](mailto:rector@tsu.ge))
- Britt-Marie Sjöberg (Molecular Biology, Stockholm University and the Wenner-Gren Foundations, Sweden, [britt-marie.sjoberg@swgc.org](mailto:britt-marie.sjoberg@swgc.org))
- Marcel Swart (Chemistry, University of Girona, Former President of the Young Academy of Europe 2017, [marcel.swart@icloud.com](mailto:marcel.swart@icloud.com))

- Bert Weckhuysen, (Chemistry, Utrecht University, The Netherlands, b.m.weckhuysen@uu.nl)
- Milena Žic Fuchs (Linguistics, University of Zagreb, Croatia, mziic-fuch@ffzg.hr)

## Symposia Since 2000

### With the Wenner-Gren Foundations [www.swgc.org/welcome.aspx](http://www.swgc.org/welcome.aspx)

Published proceedings of the Wenner-Gren Foundations international symposia: online versions of publications from the HERCuLES Wenner-Gren International series can be accessed via [https://portlandpress.com/pages/wenner\\_gren\\_international\\_series](https://portlandpress.com/pages/wenner_gren_international_series)

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

2015 May, Stockholm, *From Books to MOOCs? Emerging Models of Learning and Teaching in Higher Education*, Portland Press, vol 88, ISBN 9781855782006

2017, May, Stockholm, *Crossing Over to the Future: Interdisciplinarity in Research and Higher Education*. Published in October 2018, *European Review*. Vol. 26 S2 Open Access. ISSN 1062-7987 Open Access: <https://www.cambridge.org/core/journals/european-review/issue/crossing-over-to-the-future-interdisciplinarity-in-research-and-higher-education/F0FD4D5DB-39D9E50F79328D4C333D2DA>

### With the Compagnia di San Paolo [www.compagniadisanpaolo.it](http://www.compagniadisanpaolo.it)

2006 March, Pavia, *Quality Assessment in Institutions of Higher Education in Europe: Problems, Practices and Solutions*, Portland Press, ISBN 9781855781719

Online versions of publications with regard to the events below can be accessed via <https://www.cambridge.org/core/journals/european-review>

2009 March, Turin, With the **Compagnia di San Paolo** and **Accademia Nazionale dei Lincei**, *Diversification of Higher Education and the Academic Profession*. *European Review*, vol 18.s1, open access <https://www.cambridge.org/core/journals/european-review/issue/diversification-of-higher-education-and-theacademic-profession-papers-from-the-hercules-symposium-turin-italy-2009-supported-by-the-fondazionecompagnia-di-san-paolo/DE146C4AAE-466D80F2A3ABA286C35CBA> OPEN ACCESS

2013 November, Rome, *Migration and Mobility in Science: Impacts on Cultures and the Profession in Institutions of Higher Education in Europe*. *European Review*, vol 23.s1 <https://www.cambridge.org/core/journals/european-review/issue/mobility-and-migration-in-science/A4AB80EFD0AF-6277373D6AD263388068> OPEN ACCESS

### With **Tsinghua University**, Beijing

2014 May, with Tsinghua University, Beijing, Sponsored by the Riksbankens Jubileumsfond, Stockholm, *A Bilateral Event Position of the Humanities and Social Sciences (in a Global Context)*. *European Review*, vol 23. Number 2 <https://www.cambridge.org/core/journals/european-review/issue/A3C1064826758F4FC406787B882FD192>

### With the **Volkswagen Stiftung** and **INCHER-Kassel**

2016 September, Hannover, *University Governance: Impeding or Facilitating Creativity*. Published in February 2018, *European Review*. Vol. 26.S1 Open Access. See: <https://www.cambridge.org/core/journals/european-review/issue/university-governance-and-creativity/7181A1DDB7D1C17C2AC3FBF88ACD BE4E>

### **Pre-2000 events**

1996 May, Rotterdam, New Challenges for the Academic Profession

1997 September, Cambridge, Interdisciplinarity and the Organisation of Knowledge in Europe

1999 June, Budapest, The Universal Importance of Fundamental Science

1999 October, Stockholm, *The Virtual University*, Portland Press, vol 79, ISBN 9781855781450

1999 November, Uxbridge, with the ESF HiBEER – High Bandwidth for European Education and Research