Arabic sciences and philosophy

A historical journal



Cambridge University Press

Arabic sciences and philosophy

Roshdi Rashed (Executive editor) CNRS, Paris - University of Tokyo Basim Musallam (Executive editor) University of Cambridge

Ahmed Hasnaoui (Managing editor)

CNRS. Paris

Aline Auger (Editorial secretary)

CNRS. Paris

Jean Jolivet ÉPHÉ, Paris Muhsin Mahdi Harvard University George Saliba Columbia University

ADVISORY EDITORIAL BOARD

André Allard FNRS, Belgium Hélène Bellosta CNRS. Paris Charles Burnett

Warburg Institute, London Charles Butterworth University of Maryland Menso Folkerts University of Munich Bernard R Goldstein University of Pittsburgh

Yale University Christian Houzel Université Paris 7 Edward S Kennedy Princeton, USA

Dimitri Gutas

David A King

Goethe-Universität, Frankfurt Geoffrey E R Lloyd

Darwin College, Cambridge Michael E Marmura University of Toronto David Pingree Brown University A I Sabra

Harvard University Nathan Sivin

University of Pennsylvania

Richard Sorabji King's College, London Fritz Zimmermann University of Oxford

Publié avec le concours du CNRS/Published with the support of CNRS

SUBSCRIPTIONS. Arabic sciences and philosophy (ISSN: 0957-4239) is published twice a year in March and September. Two parts form a volume. The subscription price of a volume which includes postage (excluding VAT) is £62.00 net (US \$96.00 in USA, Canada and Mexico) for institutions; £36.00 (US \$54.00) for individuals ordering direct from the publishers and certifying that the journal is for their personal use. Single parts are £32.00 net (US \$49.00 in USA, Canada and Mexico) plus postage. 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. Orders, which must be accompanied by payment, may be sent to any bookseller or subscription agent or to the publishers: Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, UK and in the USA, Canada and Mexico, The Journals Department, 40 West 20th Street, New York, NY 10011-4211, USA. Japanese prices for institutions are available from Kinokuniya Company Ltd. P.O. Box 55, Chitose, Tokyo 156, Japan. Prices include delivery by air.

COPYING. This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$9.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0957-4239/97 \$9.00+.10.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

ISI Tear Sheet Service, 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

For all other use, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

Advertising. Enquiries about advertising in this journal should be sent to the publishers.

Information on Arabic sciences and philosophy and all other Cambridge journals can be accessed via http://www.cup.cam.ac.uk/ and in North America via http://www.cup.org/.

© CAMBRIDGE UNIVERSITY PRESS 1997

Arabic Sciences and Philosophy Volume 7 Number 2 September 1997

CONTENTS

The Contributors	158
Abstracts	159
MAROUN AOUAD La doctrine rhétorique d'Ibn Riḍwān et la Didascalia in Rhetoricam Aristotelis ex glosa Alpharabii	163
BIJAN VAHABZADEH Al-Khayyām's Conception of Ratio and Proportionality	247
AMIRA ERAN Abraham ibn Daud's Definition of Substance and Accident	265
Essay-Review Travaux récents en histoire de l'astronomie arabe	202

Arabic Sciences and Philosophy, vol. 7 (1997) Copyright © 1997 Cambridge University Press

THE CONTRIBUTORS

DR MAROUN AOUAD Centre d'histoire des sciences et des philosophies arabes et médiévales, 7 rue Guy Môquet, B.P. n° 8, 94801 Villejuif Cedex, France

DR AHMAD S. DALLAL Department of Near Eastern Languages and Civilizations, Yale University, P.O. Box 208236, New Haven, CT 06520, U.S.A.

DR AMIRA ERAN 52 Gomeh St., Yavne, ISRAEL 81502

DR BIJAN VAHABZADEH Centre d'histoire des sciences et des philosophies arabes et médiévales, 7 rue Guy Môquet, B.P. n° 8, 94801 Villejuif Cedex, France