STATISTICIANS
OF THE
CENTURIES

Springer Science+Business Media, LLC

STATISTICIANS OF THE CENTURIES

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LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA

Statisticians of the centuries / C.C. Heyde, E. Seneta, editors.

p. cm.

Includes bibliographical references and index.

ISBN 978-0-387-95283-3 ISBN 978-1-4613-0179-0 (eBook)

DOI 10.1007/978-1-4613-0179-0

1. Statisticians—Biography. I. Heyde, C.C. (Christopher Charles), 1939–

II. Seneta, E. (Eugene), 1941–

QA276.156 .S73 2001

519.5'092'2–dc21

[B]

2001031422

Printed on acid-free paper.

© 2001 Springer Science+Business Media New York
Originally published by Springer-Verlag New York, Inc. in 2001
Softcover reprint of the hardcover 1st edition 2001

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Manufacturing supervised by Jerome Basma.
Book design by Steven Pisano.
Typeset by MacroTeX Book Publishing Services, Savoy, IL.

9 8 7 6 5 4 3 2 1

ISBN 978-0-387-95283-3

PREFACE

Statisticians of the Centuries aims to demonstrate the achievements of statistics to a broad audience, and to commemorate the work of celebrated statisticians. This is done through short biographies that put the statistical work in its historical and sociological context, emphasizing contributions to science and society in broad terms rather than narrow technical achievement. The discipline is treated from its earliest times and only individuals born prior to the 20th century are included.

The book emphasizes the historical and social context, as well as the motivation for the developments that ensued. Statistics is interpreted broadly, and it is notable that many of the most important practitioners were major contributors to, and may be best remembered for, their work in other areas. Such is the diversity of statistics that the individuals treated herein made contributions typically to more than one of a diverse collection of disciplines. Many were trained for other professions such as law, medicine, the military, teaching, or the church, or were from the aristocracy and of independent means. Their common characteristic was an interest in, and a capacity to use, quantitative methods on problems judged important in their times.

The volume arose through the initiative of the International Statistical Institute (ISI). Founded in 1885, the ISI is the principal representative association for international statistics. The initial proposal came from Japanese members of the ISI in early 1994, following the then recent death of the famous statistician W. Edwards Deming (1900-1993), who had played a particularly fruitful role in quality improvement, especially in Japan and the United States. It was felt to be an appropriate way to commemorate his contributions to science and to society, in the company of other famous statisticians with earlier birth dates. The ISI Council accepted the project as an important contribution towards illuminating the contributions of statistics in human affairs. Chris Heyde was commissioned to undertake the editing task of the volume, which has been envisaged as the first in a series. It forms part of a long-term ISI plan concerning public awareness of statistics.

≈ Preface ≈

In 1995, the Christiaan Huygens Committee on the History of Statistics was reconstituted with Professor Heyde as Chair, and members of the committee became actively involved in the *Centuries* project. Eugene Seneta joined in editing the volume and Pierre Crépel, Stephen Fienberg, and Joe Gani agreed to assist as Associate Editors. Extensive consultations within the statistical community, and with prominent members of ISI in particular, led to the names of the 103 individuals who are included in the volume. The biographies were contributed by 75 authors from across the world. Articles originally written in French were translated into English before editing. All edited articles were referred back to the individual authors.

In recent decades there have been several scholarly treatises on the history of statistics, including C.C. Heyde and E. Seneta (1977) *I.J. Bienaymé: Statistical Theory Anticipated*; K. Pearson (1978) *The History of Statistics in the 17th and 18th Centuries*; S.M. Stigler (1986) *History of Statistics: The Measurement of Uncertainty Before 1900*; T.M. Porter (1986) *The Rise of Statistical Thinking 1820-1900*; L. Daston (1988) *Classical Probability in the Enlightenment*; I. Hacking (1990) *The Taming of Chance*; A. Hald's two books (1990) *A History of Mathematical Statistics Before 1750* and (1998) *A History of Mathematical Statistics from 1750 to 1930*, and S.M. Stigler (1999) *Statistics on the Table: The History of Statistical Concepts and Methods*. They span the spectrum of historiographic writing in subject matter, but are primarily concerned with concepts rather than people. Closest to the current volume in nature is N.L. Johnson and S. Kotz (eds.) (1997) *Leading Personalities in Statistical Sciences from the Seventeenth Century to the Present*. This contains articles on nearly half the individuals treated here. We have aimed at more detail and greater international coverage under the constraint of statisticians born before the 20th century.

Articles have been given in chronological order of date of birth of statistician to assist readers in obtaining an overview of the development of the discipline. Then, with this constraint, an allocation into centuries has been based on a judgement of when the main work of the subjects was done. Internal linkage between chapters is indicated by a (q.v.) following a name.

This has been a large project involving many people and organizations, far too many to thank individually. The Editors thank them all, on behalf of the statistical profession, for their contributions, but especially the authors and those who provided photographs for inclusion.

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May 2001

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