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Jürgen Zimmermann (Eds.)

Perspectives on Operations Research

GABLER EDITION WISSENSCHAFT

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Essays in Honor of Klaus Neumann

Deutscher Universitäts-Verlag

Bibliografische Information Der Deutschen Bibliothek
Die Deutsche Bibliothek verzeichnet diese Publikation in der Deutschen
Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über
<<http://dnb.ddb.de>> abrufbar.

1. Auflage Februar 2006

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Lektorat: Ute Wrasmann / Sabine Schöller

Der Deutsche Universitäts-Verlag ist ein Unternehmen von
Springer Science+Business Media.

www.duv.de



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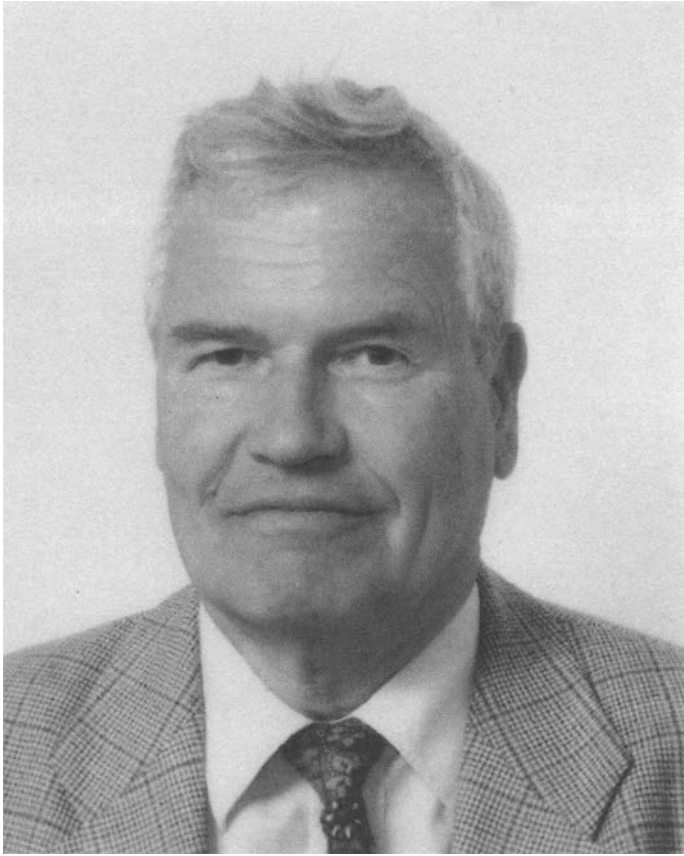
Umschlaggestaltung: Regine Zimmer, Dipl.-Designerin, Frankfurt/Main

Druck und Buchbinder: Rosch-Buch, Scheßlitz

Gedruckt auf säurefreiem und chlorfrei gebleichtem Papier

Printed in Germany

ISBN 3-8350-0234-1



Preface

This collection of essays is dedicated to Professor Klaus Neumann, Head and Chair of the Institute for Economic Theory and Operations Research WiOR at the University of Karlsruhe. On the occasion of his emeritation, disciples, colleagues, scientific companions, and friends coming from different fields have contributed their perspectives on Operations Research to form a broad view on the discipline. The papers are organized in four parts on optimization, OR in production and service management, OR in logistics, and interdisciplinary approaches. We thank all the authors for their participation in publishing this volume. Mrs. Ute Wrasmann from Deutscher Universitäts-Verlag deserves credit for her interest and assistance on this project. Finally, we would like to express our gratitude to PTV Planung Transport Verkehr AG in Karlsruhe and to numerous former WiOR colleagues for their financial support.

Klaus Neumann was born in Liegnitz (Silesia) in 1937. From 1955 to 1961 he studied mathematics at the Technical Universities of Dresden and Munich. His first paper on analog computers and dynamic programming was published less than two years later. In 1964 he obtained a Ph.D. in mathematics under the supervision of Josef Heinhold in Munich. After a two-year stay in industry, he returned to his alma mater, working on the fields of dynamic optimization and control theory. In 1968 he was conferred the *venia legendi* for mathematics from the Technical University of Munich with a habilitation thesis on optimization subject to nonholonomous constraints. The same year he moved to the University of Karlsruhe, where he took up the head of the computer center. Since 1970 he is full professor of Operations Research at the School of Economics and Business Engineering in Karlsruhe.

Klaus Neumann has strongly influenced the development of Operations Research in Germany over more than four decades. For generations of German-speaking students his seminal trilogy *Operations-Research-Verfahren* has been the OR textbook of choice. His books on Operations Research and Production and Operations Management published in the 1990s remain a major reference in the field. Scientific monographs on dy-

dynamic programming (1969), control theory (1969), stochastic project networks (1979 and 1990), and project scheduling (2003) are evidences of his fruitful research, which has repeatedly been supported by the German Research Foundation DFG and by industry. The main achievements of this research are outlined in the first chapter of this book. From 1970 to date Klaus Neumann has supervised more than 30 doctoral and habilitation candidates. He held visiting professorships at the Universities of California at Berkeley and Riverside, Stanford, Florida, Waikato at Hamilton, Kunming, and Beijing Institute of Technology. Since 1972 he has been editor of several scientific series and journals like *Mathematical Systems in Economics*, *Methods of Operations Research*, and *Mathematical Methods of Operations Research*. In addition, he has been chairman and (and still is) member of the program committee of numerous scientific conferences such as EURO WG PMS, IEPM, IKM, or MISTA.

All over the years, students and colleagues at WiOR have not only benefited from Klaus Neumann's comprehensive scientific knowledge and expertise. We all have been influenced by his cultivated personality and generosity. Memorable excursions, wine tastings, and exquisite dinner receptions at his home in Conweiler have set very high cultural standards at our institute. We wish Klaus all the best for the future.

Gießen, Clausthal-Zellerfeld, Bern
November 2005

Martin Morlock
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Norbert Trautmann
Jürgen Zimmermann

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