

Otto Neurath's Economics in Context

edited by
**Elisabeth Nemeth, Stefan W. Schmitz
and Thomas Uebel**



**Vienna
Circle
Institute
Yearbook**

 **Springer**

OTTO NEURATH'S ECONOMICS IN CONTEXT

VIENNA CIRCLE INSTITUTE YEARBOOK [2007]

13

VIENNA CIRCLE INSTITUTE YEARBOOK [2007]

13

Institut 'Wiener Kreis'

Society for the Advancement of the Scientific World Conception

Series-Editor:

Friedrich Stadler

University of Vienna, Austria, and Institute Vienna Circle/Institut Wiener Kreis

Advisory Editorial Board:

Martin Carrier, *University of Bielefeld, Germany*
Richard Creath, *Arizona State University, USA*
Nancy Cartwright, *London School of Economics, UK*
Massimo Ferrari, *University of Torino, Italy*
Michael Friedman, *Stanford University, USA*
Maria Carla Galavotti, *University of Bologna, Italy*
Peter Galison, *Harvard University, USA*
Rainer Hegselmann, *University of Bayreuth, Germany*
Michael Heidelberger, *University of Tübingen, Germany*
Paul Hoyningen-Huene, *University of Hanover, Germany*
Don Howard, *University of Notre Dame, USA*
Clemens Jabloner, *Hans-Kelsen-Institut, Vienna, Austria*
Anne J. Kox, *University of Amsterdam, The Netherlands*
James G. Lennox, *University of Pittsburgh, USA*
Juha Manninen, *Helsinki Collegium for Advanced Studies, Finland*
Thomas Mormann, *University of San Sebastian, Spain*
Edgar Morscher, *University of Salzburg, Austria*
Kevin Mulligan, *Université de Genève, Switzerland*
Elisabeth Nemeth, *University of Vienna, Austria*
Ilkka Niiniluoto, *University of Helsinki, Finland*
Miklos Redei, *London School of Economics, UK*
Julian Nida-Rümelin, *University of Munich, Germany*
Alan Richardson, *University of British Columbia, CDN*
Gerhard Schurz, *University of Düsseldorf, Germany*
Peter Schuster, *University of Vienna, Austria*
Karl Sigmund, *University of Vienna, Austria*
Hans Sluga, *University of California at Berkeley, USA*
Elliott Sober, *University of Wisconsin, USA*
Antonia Soulez, *Université de Paris 8, France*
Wolfgang Spohn, *University of Konstanz, Germany*
Thomas E. Uebel, *University of Manchester, UK*
Pierre Wagner, *Université de Paris 1, Sorbonne, France*
Jan Woleński, *Jagiellonian University, Cracow, Poland*
Gereon Wolters, *University of Konstanz, Germany*
Anton Zeilinger, *University of Vienna, Austria*

Honorary Consulting Board:

Robert S. Cohen, *Boston University, USA*
Wilhelm K. Essler, *University of Frankfurt/M., Germany*
Kurt Rudolf Fischer, *University of Vienna, Austria*
Adolf Grünbaum, *University of Pittsburgh, USA*
Rudolf Haller, *University of Graz, Austria*
Gerald Holton, *Harvard University, USA*
Jaakko Hintikka, *Boston University, USA*
Allan S. Janik, *University of Innsbruck, Austria*
Andreas Kamlah, *University of Osnabrück, Germany*
Eckehart Köhler, *University of Vienna, Austria*
Elisabeth Leinfellner, *University of Vienna, Austria*
Werner Leinfellner, *Technical University, Vienna, Austria*
Brian McGuinness, *University of Siena, Italy*
Erhard Oeser, *University of Vienna, Austria*
Arne Naess, *University of Oslo*
Jan Šebestík, *CNRS Paris, France*
Christian Thiel, *University of Erlangen, Germany*
Walter Thirring, *University of Vienna, Austria*

Review Editor:

Michael Stöltzner, *University of Wuppertal, Germany*

Editorial Work/Layout/Production:

Robert Kaller
Camilla R. Nielsen

Editorial Address:

Institut Wiener Kreis
Universitätscampus, Hof 1
Spitalgasse 2-4, A-1090 Wien, Austria
Tel.: +431/4277 41231 (international)
or 01/4277 41231 (national)
Fax.: +431/4277 41297 (international)
or 01/4277 41297 (national)
Email: ivc@univie.ac.at
Homepage: www.univie.ac.at/ivc/

The titles published in this series are listed at the end of this volume.

Elisabeth Nemeth • Stefan W. Schmitz
Thomas E. Uebel
Editors

Otto Neurath's Economics in Context

 Springer

Editors

Elisabeth Nemeth
University of Vienna
Austria

Stefan W. Schmitz
Institute Vienna Circle
Vienna, Austria

Thomas E. Uebel
University of Manchester
United Kingdom

Gedruckt mit Förderung des *Österreichischen Bundesministeriums für Wissenschaft und Forschung*

Printed with financial support of the *Austrian Ministry for Science and Research*
In co-operation with the *University of Vienna*

ISBN 978-1-4020-6904-8

e-ISBN 978-1-4020-6905-5

Library of Congress Control Number: 2007940849

© 2007 Springer Science + Business Media B.V.

No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work.

Printed on acid-free paper.

9 8 7 6 5 4 3 2 1

springer.com

Otto Neurath's Economics in Context

Elisabeth Nemeth, Stefan W. Schmitz, and Thomas E. Uebel

Promotional Text

Otto Neurath (1882–1945) was a highly unorthodox thinker both in philosophy and economics. He proposed a radically expanded scope of economic analysis that would facilitate a comparative and systematic study of the impact of a great variety of economic and political measures on a population's well-being. Neurath regarded the controversial and widely misunderstood concept of calculation in kind as an indispensable instrument for anyone (economist or politician) who sought to analyze economic relationships from a wider perspective than that of price formation under market conditions. What is the impact of alternative (economic, political or organizational) measures on living conditions? What are the appropriate methods to compare and to rationally choose among alternative measures? In Neurath's opinion, answers to these questions are crucial for every democratic government. The contributions to this sparkling new book conclude that Neurath touched on many of the most critical problems of economic theory during its formative years as a modern discipline; his economics provides insights into the foundational problems of modern economics and should encourage contemporary economic theorists to critically reflect their own hidden presumptions. Neurath's arguments continue to challenge the foundations of today's neo-liberal approach to political-economy. They have also been rediscovered by researchers in the fields of ecological economics and of sustainable development as visionary and original. His comprehensive theory of life conditions and life quality anticipated the questions development economists and the general public meet today.

Contents

Part I Neurath's Economics in Context

Introduction	3
Elisabeth Nemeth, Stefan W. Schmitz, and Thomas E. Uebel	
“Freeing up One’s Point of View”: Neurath’s Machian Heritage Compared with Schumpeter’s	13
Elisabeth Nemeth	
Otto Neurath as an Austrian Economist: Behind the Scenes of the Early Socialist Calculation Debate	37
Thomas E. Uebel	
Otto Neurath’s Concepts of Socialization and Economic Calculation and his Socialist Critics	61
Günther Chaloupek	
Pluralism and Economic Institutions	77
John F. O’Neill	
Neurath on Money: Some Reflections on Neurath’s Monetary Thought in the Historical Context of the Birth of Modern Monetary Economics	101
Peter Mooslechner	
A Similar Line of Thought in Neurath and Sen: Interpersonal Comparability	115
Ortrud Leßmann	

The War Economy and the War Museum: Otto Neurath and the Museum of War Economy in Leipzig, c. 1918	131
Nader Vossoughian	

Economy, Ideology and Culture: Otto Neurath's Approach to a Precarious Relationship	141
Günther Sandner	

Part II General Part

Report – Documentation

Consensus in Art and Science	159
Keith Lehrer	

Review Essays

Analyticity and the A Priori: Fifty Years of “Two Dogmas”	173
Paolo Parrini	

A Second Appraisal: New French Literature on Logical Empiricism	183
Christoph Limbeck-Lilienau	

Reviews

Moritz Schlick, <i>Über die Reflexion des Lichtes in einer inhomogenen Schicht and Raum und Zeit in den gegenwärtigen Physik</i> . Gesamtausgabe. Abt. I, Bd. II. Fynn Ole Engler and Matthias Neuber, eds. (Wien: Springer-Verlag, 2006). Ix + 412pp. \$98.27	197
Thomas Oberdan	

George A. Reisch, <i>How the Cold War Transformed Philosophy of Science. To the Icy Slopes of Logic</i> , Cambridge, NY: Cambridge University Press, 2005	202
Hans-Joachim Dahms	

Rudolf Carnap, <i>Scheinprobleme in der Philosophie und andere metaphysikkritische Schriften</i> , ed. by Thomas Mormann (2004). Michael Stöltzner and Thomas E. Uebel (eds.), <i>Wiener Kreis. Texte zur wissenschaftlichen Weltauffassung</i> , von Rudolf Carnap, Otto Neurath, Moritz Schlick, Philipp Frank, Hans Hahn, Karl Menger, Edgar Zilsel und Gustav Bergmann (2006)	209
Juha Manninen	

Jan Radler, <i>Victor Krafts konstruktiver Empirismus. Eine historische und philosophische Untersuchung</i> . Berlin: Logos, 2006.....	213
Tobias Fox	
Jutta Schickore and Friedrich Steinle (eds.), <i>Revisiting Discovery and Justification. Historical and Philosophical Perspectives on the Context Distinction</i> . Dordrecht: Springer, 2006.....	216
Thomas E. Uebel	
Galavotti, Maria Carla, <i>Philosophical Introduction to Probability</i> , Stanford: CSLI Publications, 2005. [=CSLI Lecture Notes Number 167]	221
Edwin Glassner	
Activities of the Institute Vienna Circle	225
Index.....	231

Part I
Neurath's Economics in Context

Introduction

Elisabeth Nemeth, Stefan W. Schmitz, and Thomas E. Uebel

After several decades of neglect, Otto Neurath's writings on the theory of science have come to be considered by many to be among the most interesting on the subject in the philosophical tradition of Logical Empiricism. His writings on economics, by contrast, have remained widely neglected.¹ That Neurath was a highly unorthodox thinker both in philosophy and economics suggests, however, that a new look at his economics might prove profitable.

Neurath proposed a radically expanded scope of economic analysis: he sought to develop methods that would facilitate a comparative and systematic study of the impact of a great variety of economic and political measures on the highly complex phenomenon of a population's well-being. As a doctoral student of Eduard Meyer and Gustav Schmoller in Berlin he shared the interest of the "Younger German School of Economics" in history and macro-economics. At the same time, he felt a close affinity to Josef Popper-Lynkeus's radical individualism. The individual's well-being constituted for him the ultimate foundation of economic analyses. Neurath also agreed with the "Austrian School of Economics" that some of the theories expounded by the "historical school" did not meet the standard of modern disciplines and he maintained that economics could only become a real field of study with the help of mathematical methods. Then, at the end of World War I, he became a prominent advocate of planned economies – and this coloured his reputation as an economist ever since.

That Neurath's economic contributions have begun to be discussed again seriously may even seem surprising, given his reputation, but there are at least three good reasons for the renewed interest.² First, Neurath's engagements with Mises and Hayek in the socialist calculation debate feature arguments that continue to challenge the foundations of today's neo-liberal approach to political-economy.

¹ We have looked at a rather arbitrarily composed sample of eight books on the history of economic thought: Backhouse (1993), Blaug (1996, 1997), Herz, Weinberger (2006), Kolb (1997), Priddat (2002), Srepanti and Zamagi (2005) and Stavenhagen (1969). Neurath is not mentioned in any of them.

² A selection of recent publications in economic journals and books that explicitly discuss Neurath's contribution to economics includes: Martinez-Alier (1987), Rosier (1987), Chaloupek (1990), O'Neill (1998), Leonard (1999), Uebel in Neurath (2004), Uebel (2005), Greenwood (2006) and Leßmann (2007).

A number of contributions to this book clarify and elucidate Neurath's original contributions to this issue and interrelate it with his studies on the war economy and on his visions for a socialistic economic order, the economy-in-kind (*Naturalwirtschaft*). In Neurath's view all "thinking in dichotomies" was the result of intellectual lassitude or "pugnacity among scientists". The radical thrust of his proposals can be traced back to his attempt to overcome traditional dichotomies by means of a profound reflection of the underlying foundational questions. This is also true for his idea of calculation-in-kind (*Naturalrechnung*) which was widely misunderstood already by his contemporaries. Neurath regarded it as an indispensable instrument for anyone (economist or politician) who sought to analyze economic relationships from a wider perspective than that of price formation under market conditions. Neurath was aware that every community, which refuses to let the living conditions of the population be determined exclusively by the logic of the market, is confronted with the following questions. What is the impact of alternative (economic, political or organisational) measures on living conditions? What are the appropriate methods to compare and to rationally choose among alternative measures? Importantly, for Neurath it was not the objective of economic theory to make the profoundly political choices with respect to the optimal economic policy – political decisions cannot be delegated to experts. It aims, however, at developing instruments and methods which can be used to analyse and compare the likely consequences of alternative political measures as well as to communicate the results to promote an informed discourse among those whose living conditions are affected by the measures, the general public. In Neurath's opinion, such instruments are crucial not only for socialist governments, but for every democratic one. In this sense, he considered "Planning for Freedom" (1945) as a necessary prerequisite for the further development of democracy.

The second reason for the renewed interest in Neurath's economic writings lies in that some of his arguments in the socialisation debate have also been rediscovered by researchers in the fields of ecological economics and of sustainable development as visionary and original (e.g. Martinez-Alier, Munda, O'Neill 1998). A further third reason can be found in the fact that Neurath developed a comprehensive theory of life conditions and life quality. In doing so, he anticipated the questions which met with renewed interest at the end of the twentieth century among development economists and the general public, as exemplified by the approach taken in the United Nations Human Development Report.

The present book aims at clarifying which of Neurath's ideas remain of relevance today and how these are interrelated. The method chosen is to elucidate their biographical and general historical background and to put them into the framework of the academic and political controversies of their time. This contextual approach yields results that are not just of antiquarian interest. It also enables the reconstruction of the theoretical thrust and continuing practical relevance of a thinker whose ideas were obscured by the catastrophes of the twentieth century. Neurath wanted to demonstrate by his own work in economics that scientific thinking always offers a number of different alternatives and that one must proceed towards applications in full awareness of this fact. In this respect, Neurath's thought is unusually demanding.

With perplexity in political and intellectual life becoming ever more widespread as the twenty-first century progresses, it strikes us as very useful to step back and reconstruct a type of thinking in the social sciences that goes back to the discussion on the big conflicts of the twentieth century but which does not accept as inescapable the intellectual alternatives seemingly cemented in these conflicts.

The book is structured so that it first addresses the question why the study of Neurath's contributions to economics in the context of his time is a worthwhile endeavour today. After all, the overwhelming majority of today's economists regard his contributions as out-dated and largely irrelevant for the continuing development of their discipline.

In the opening essay, *Nemeth* answers this question by drawing on recent results of the modern philosophy of science. Neurath's economic writings are of interest precisely because of their context – the specific constellation of economic theory development up to the end of World War I. At that time the debate about the foundational problems was very lively and controversial. It was only in the 1920s and 1930s that some of the previously debated assumptions and paradigms began to form the academic consensus which is regarded today as the foundation of modern economics.³ During the time Neurath took part in the academic debate (until the end of World War I), these assumptions were still contested. His early economic papers therefore must be interpreted as one particular manifestation of a larger set of potential foundational problems and paradigms, most of which are no longer considered relevant by present-day economists. Nemeth then goes on to discuss one particular aspect of this contested terrain by focussing on Schumpeter and Neurath who both critically reflected the foundational problems of economics. Nemeth concludes that despite their common reference to Mach's theory of knowledge, they interpret Mach in different ways and arrive at different conclusions with respect to the foundational problems of economics.

Nemeth also provides evidence of a fundamental break in Neurath's academic biography at the end of World War I. He pursued a career as academic economist after his graduation but stopped doing so in 1919, when he turned towards political publications and activism. Neurath's engagement as socialisation commissioner in the Munich "Räterepublik" (Soviet Republic) in 1919 led to his expulsion from the University of Heidelberg where he received his habilitation (a junior professorship) in economic theory only in 1917. This put an end to his academic career before it fully began. As a political activist in the 1920s and 1930s, he rather aimed at integrating his economic ideas into the project of establishing a socialistic order of society. He argued that such an order can only be conceptualised as centrally planned economy in kind, a position that earned him fierce criticism from both sides of the political spectrum, from his socialist fellow-travellers as much as from his liberal opponents (anti-socialist). As already noted, until today Neurath's economic writings are predominantly associated with his concept of an economy-in-kind.

³ These paradigms emerged during the "Years of High Theory" and stressed individualism, subjectivism, and the analysis of equilibrium in competitive markets in micro-economics, and monetary and macro-economic dynamics in macro-economics (see Mooslechner in this volume).

The remaining contributions in this book are grouped to reflect both this break in Neurath's career as an economist and the predominance in how he is remembered of his radical stand in the calculation debate. Neurath's politico-economic writings after 1919 (i.e. the socialist calculation debate) are considered first, then Neurath's academic research before 1919 (i.e. monetary analysis and utility theory) is looked at, and finally at Neurath's political activities (i.e. the Museum of War economy and his work on ideology and culture). All these contributions are devoted to our main second topic: which of Neurath's economic arguments are of relevance today?

Uebel scrutinises the concept of "in-kind-calculability" and shows that it possesses three interpretations: very weak in-kind calculability (i.e. an economy in-kind does exist in certain sectors of the economy where other than monetary profitability criteria are used for planning decisions), weak in-kind calculability (i.e. an economy in-kind exists in sectors where markets alone do not achieve the efficient allocation of resources and other than monetary profitability criteria must be used for planning decisions), and strong in-kind calculability (i.e. an economy in kind exists only where an economy operates without markets altogether). Arguments in support of all three interpretations can be found in Neurath's writings and he emphasised different ones at different stages of his lifetime. Uebel then argues that Neurath did not possess a valid argument for the non-necessity of monetary calculation, but one that only demonstrates the indispensability of in-kind calculation and the insufficiency of monetary calculation and he refers to this argument as an "ecological argument ... against the exclusive role of money-calculation in economic matters." Uebel emphasises the necessity to differentiate between an economy-in-kind (as a model of a socialist economic order) and calculability-in-kind (as a conceptual framework for a theoretical research programme). While Neurath seemed to have dropped the idea of an economy in kind at later stages of his life, he adhered to the concept of in-kind calculability as indispensable instrument in comparative economic research. In addition, Uebel uncovers a number of *prima facie* surprising commonalities between Neurath and the Austrian School of Economics, in particular the strict dichotomy between a monetary market economy, on the one hand, and an economy-in-kind, on the other: "The Austrian position on this issue was 'either-or': either a free market with money or central planning without money. Call this the 'Austrian exclusive disjunction.' It is upon this that not only Mises and later Hayek built their alternatives of freedom or serfdom, but Neurath likewise rested his proposals for marketless socialism on it."

Chaloupek confronts Neurath's concept of an economy-in-kind with the critique that was put forth by contemporary socialist theorists (e.g. Helene Bauer, Otto Leichter). Neurath emphasised – in both his political activities in the Munich "Räterepublik" and in his theoretical articles – that a socialist economic order should be established in one step as "total socialization". By contrast, "the leading social-democratic politicians ... and also most theoreticians of socialization were advocates of 'Teilsozialisierung' (partial socialization)" and consequently of a gradual process of the transformation of society. Most socialist theoreticians regarded Neurath's concept of an economy in kind as politically infeasible and economically unrealistic. They warned of the problem of bureaucratization which

they saw as a problem for socialism in general but considered completely unmanageable in Neurath's economy in kind. Chaloupek points out that "Neurath's critique of the capitalist money accounting system anticipates the critique of the SNA (System of National Accounts) developed during the 1960s and 1970s which became one of the theoretical foundations of the environmental movement." Finally he shows that Neurath was not aware of the leading contribution in the academic literature of his time that dealt with the issues he emphasised, namely A. C. Pigou's *The Economics of Welfare* of 1920. It also stressed the welfare effects of market imperfections (i.e. negative externalities) of capitalist systems and the importance of the distribution of income and of material well-being on social welfare.

O'Neill investigates an important politico-economic aspect of Neurath's concept of economic planning which is surprisingly topical, namely, his emphasis on pluralism. Hayek's critique of Neurath's economy in-kind – that a centrally planned economy in-kind would inevitably lead to totalitarianism – is chosen as starting point for the analysis. O'Neill demonstrates that Neurath was strongly committed to a pluralist alternative to totalitarianism. His research agenda on the establishment of a socialist order of society included the research question: what institutional structures allow for and are conducive to pluralism? Neurath's thinking is fundamentally pluralistic in a number of dimensions: pluralism of normative practice, of language, of welfare, institutional pluralism, belief pluralism and decision pluralism. O'Neill argues that belief pluralism in various forms stands at the centre of the debate between Hayek and Neurath. After providing a brief overview of Hayek's criticism, he then goes on to demonstrate that Neurath's concept of an economy in kind does not have the technocratic implications Hayek attributes to them. Rather Neurath's concept is pluralistic along two dimensions, in the future possibilities of social development and in the search for institutional conditions for pluralism in an envisaged socialistic order of society. While Hayek's solution to the coordination problem in a pluralistic society with dispersed knowledge is a non-discursive one (all information is communicated via relative prices), Neurath's solution has a discursive character (Actors derive at common decisions through a discourse based on a social lingua franca.). O'Neill then discusses Neurath's thoughts concerning the characteristics of such a social lingua franca and the characteristics of the proposed discursive institutions for the coordination of action. In addition, Neurath maintains that the coordination problem does not only arise in societies but also in complex organisations. Based on this observation, he criticises Hayek on the point that the latter reduces the set of institutional forms that can address the problem of coordination to the market. Finally, Neurath's analysis of the coordination problem in science is briefly discussed. O'Neill concludes that pluralism in a number of dimensions was a cornerstone of Neurath's concept of a socialistic order and that he was convinced that a plurality of institutional forms prevails in modern societies to address the coordination problem.

Mooslechner investigates Neurath's monetary thought. It has received surprisingly little attention so far, given that a proponent of an economy in kind and of in-kind calculation could be expected to embrace a very critical position towards money.