

**FOUNDATIONAL RESEARCH IN ACCOUNTING:
PROFESSIONAL MEMOIRS AND BEYOND**

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Foundational research in accounting: professional memoirs and beyond.

Mattessich, Richard - Accounting, autobiography, history, foundations, research.

First edition (1995), published by Chuo University Press,
Higashinakano 742-1/ Hachioji/ Tokyo 192-03/ Japan.
ISBN (Canada) Copyright 8 1995 Richard Mattessich

Second extended edition (until 2006), published by Asociación Española de Contabilidad y Administración de Empresas (AECA), Rafael Bergamín, 16-B, 28043 Madrid, in *DE COMPUTIS, Revista Española de Historia de la Contabilidad (Spanish Journal of Accounting History)*, no. 5, December 2006. ISSN: 1886-1881 Copyright 2006 Richard Mattessich and Asociación Española de Contabilidad y Administración de Empresas (AECA)

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In Memoriam of the Professors Shinzaburo Koshimura [1907-1988]
(former President of Yokohama National University);
Kenji Aizaki [1921-1998] (former Dean of the Faculty of Management, Yokohama National
University - previously at Chuo University); and
Fujio Harada [1931-2002] (former Dean of the Graduate School of Economics, Chuo University) -
all of whom promoted my ideas in Japan with great enthusiasm.

Also dedicated to
the following Japanese Professors still active:
Yuji Ijiri (R.T. Trueblood Professor, Carnegie Mellon University)
who shared some of my ideas, but went far beyond them;
Yoshiaki Koguchi (former Dean of the Economics Faculty and Vice-President of Chuo University),
who extended my ideas to environmental accounting;
Shizuki Saito (former Dean of the Faculty of Economics, Tokyo University),
who improved some of my set-theoretical formulations,
and became a prominent force in the accounting profession of Japan.

FOREWORD

Prof. Dr. Richard Mattessich is one of the most eminent founders of the modern conception of accounting theory. Therefore, a book containing his reminiscences has to be welcome. It reveals to us not only the landmarks of his scholarly career but also of some private events that formed his personality and influenced his professional activity. These Memoirs were published first in Japanese, and then in English in 1994/5 by Chuo University Press in Tokyo. Our second, extended edition contains further data until 2006.

Professor Mattesich has devoted his life to what he likes to call "foundational research" (*Grundlagenforschung*, in his mother tongue) in accounting. In the German language area this is a particularly favoured field; one where science and philosophy interact. This research requires a broad vision and a deep, penetrating intellect. The author of the Memoirs possesses both, as manifested in his academic activity.

After studying engineering, he obtained a degree in mechanical engineer and exercised this profession for several years. Mattessich then became interested in economics, business administration, including accounting, and graduated as a *Diplomkaufmann* (equivalent to an MBA). He had opportunity to work as a front-engineer and cost accountant during the war, and at the very end of it, after having resumed his studies, he obtained a degree of doctor of economic science.

After some activity as a research fellow at the Austrian Institute of Economics, five years of teaching experience in St. Gallen (Switzerland) and one year in the actuarial and auditing Departments of the Prudential Assurance Co. of Montreal as well as teaching at McGill University, he obtained in 1953 a university position at Mt. Allison University (New Brunswick, Canada). In 1956 he published his first English paper. It examined the relationship between accounting and economics and the need for a common basis of both disciplines. A year later appeared "Towards a General and Axiomatic Foundation of Accountancy - With an Introduction to the Matrix Formulation of Accounting Systems". This article marked Mattessich's emersion into the foundational research of accounting; it had a wide and favourable response. It also influenced many other accounting scholars, opened new horizons to his academic career, and helped him in 1959 to attain a tenured Associate Professorship at the University of California at Berkeley.

Since this time, he continued his search in the scientific foundations to reveal the normative structure of accounting. The application of mathematics and modern computer technologies was only a part of this programme. These studies resulted in his *Accounting and Analytical Methods* (1964) that was translated into German, Japanese and, more recently, Spanish. The companion volume of this work, *Simulation of the Firm through a Budget Computer Program* (1964) anticipated (for mainframe computers) the best-selling spreadsheet programmes (for PCs) by almost twenty years.

After leaving Berkeley in 1967, Mattessich pursued his philosophic interests, and established at the University of British Columbia a couple of seminars in research methodology for his doctoral students. The outcome was his book *Instrumental Reasoning and Systems Methodology* (1978). His continuing accounting research found many recognitions, among them the "1972 Award for Notable Contribution to Accounting Literature" of the American Institute of Certified Public Accountants" (in cooperation with the American Accounting Association), and in 1991 the "Haim Falk Award for Distinguished Contribution to Accounting Thought" of the Canadian Academic Accounting Association, as well as memberships in two nation academies (Italy and Austria), a distinguished Life Membership and the "Hourglass Award" of the Academy of Accounting Historians, and, later, two honorary doctoral degrees from Spain (Complutense, Madrid; and Universidad de Málaga), and one from France (Montesquieu, Bordeaux)

In later years professor Mattessich's intellectual curiosity turned to accounting history. Here his primary interest is the history of modern accounting thought and its underlying research activity. But throughout the 1980s and 1990s he was fascinated by the research of the archaeologist Denise Schmandt-Besserat on prehistoric writing, counting and record keeping. He devoted a series of articles to the interpretation of her discoveries from an accountant's perspective as well as to other papers on ancient accounting. Most of this was reprinted in his book on *The Beginnings of Accounting and Accounting Thought* (2000).

The preceding paragraphs are merely intended to whet the reader's appetite to open the subsequent pages. There, he or she will encounter the rich experience of the eventful academic life of the author, interspersed with personal issues, thoughts and events, that interact with each other. Professor Mattessich's productive personality is revealed by his many-sided interests in science, philosophy, music, architecture, painting, literature, the fine arts in general, and his thirst for knowing new countries and cultures. In these Memoirs all those facets are revealed. And we can vouch for his kind heart and good nature, his great sense of friendship, and his capacity to relate to people. From this work may arise a better understanding of his personality and scholarly activity. Indeed, towards end -by answering some fundamentally important questions- Mattessich reflects on his belief system that sustained him during all of his life,

I want to finish this Foreword by thanking professor Richard Mattessich for having given the opportunity to De Computis and its readers to enjoy the stimulating story of his life -or, at least, of some decisive glimpses of it.

Esteban Hernández Esteve

PREFACE TO THE FIRST EDITION

It was with particular pleasure that, several years ago, I accepted the invitation of Chuo University to write a professional, biographical essay about my own experience with accounting. My relation with this university is a long-standing one. Shortly after two of my books, *Accounting and Analytical Methods* and *Simulation of the Firm Through a Budget Computer Program*, were published in the USA in 1964, Professor Kenji Aizaki (then at Chuo University) and his former student, Professor Fujio Harada, and later other scholars from Chuo University, began actively promoting my ideas in Japan. And after a two volume Japanese translation of the first of these books was published in 1972 and 1975 (through the mediation of Professor Shinzaburo Koshimura, then President of Yokohama National University), my research found fertile ground in Japan through continuing efforts of three generations of accounting academics from Chuo University. I suppose it is thanks to these endeavours that my efforts became so well known in Japan, and that during some three decades many Japanese accounting professors contacted me either personally or by correspondence. Then from 1988 to 1990 Prof. Yoshiaki Koguchi, again from Chuo University, came as a visiting scholar to the University of British Columbia, audited some of my classes, and became a good friend and collaborator, which further strengthened my ties to this university.

Thus it is with deep gratitude to Chuo University that I accepted the task of sharing with you my background and some insight into the forces that motivated me to devote my life to what I should like to call "foundational research" in accounting. These memoirs were originally published in a somewhat abbreviated form in Japanese - in five installments in *Chuo Hyoron*: the first three of which appeared in 1992 (vol. 44, nos. 1-3, pp. 199-203, 149-159, 112-120) while the last two were published in 1993 (vol. 45, nos. 1 and 2, pp. 124-134 and 136-148). They are predominantly, though not exclusively, *professional* memoirs; and I have tried to follow Professor Koguchi's request of emphasizing, among other things, my contact and correspondence with colleagues from accounting, economics, and philosophy. Occasionally, the text may give the impression of a diary (with dates, names, etc.), but I have tried to interlace the mere cataloguing of events with personal views, evaluations and reactions. Most of the publications mentioned are quoted in the text - except for my own publications, the details of which are contained at the end of this book in a special bibliography. For a quick overview, I have added, immediately following his Preface, a Summary of my main professional data.

I hope that these Memoirs offer not only some glimpses of my professional and personal life, but also convey to posterity the academic flavour of our discipline during the second half of the 20th century. I recently read with great interest *Twentieth Century Accounting Thinkers*, ed. by J. Richard Edwards (London: Routledge, 1994). That book too is concerned with the life and work of *individual* scholars (with the exception of two papers, each discussing several persons); there, one can gather from most of these papers much background knowledge about other academic

personalities and the entire ambiance of a specific period. May the present Memoirs convey something similar about our exciting century and some of its endeavours in furthering academic accounting. Though, due to space limitation, I did not incorporate here my reaction to the portentous historical events that occurred during my lifetime. Apart from a few remarks about WW-II, I made no attempts to comment on the development of nuclear energy, television, jet planes, space flights, silicon chips and the miniaturization of computers, electronic super-highways, genetic engineering or on the many scientific discoveries (be they in the natural or social sciences). Nor will I enter into the cultural or political developments which occurred during that time. Although these events affected me profoundly in thought and feeling, to express my reactions to them would easily have doubled the volume of this book. Furthermore, I apologize for omitting in the text (except in special cases) personal addresses such as Mr., Mrs. or titles, as Dr., Prof., etc.

Finally, I should like to express my thanks to the editors of *Chuo Hyoron* and Chuo University Press. This also extends to Professor Fujio Harada and other professors of this university for their unrelenting support and interest in my work, above all to my friend Professor Yoshiaki Koguchi for translating so competently (as I was assured by other Japanese professors) these memoirs into Japanese, for arranging their publication in English, and for reading the final manuscript. For such reading I am also obliged to Mrs. Nancy Hill of UBC's Faculty of Commerce and Business Administration. Further thanks go to the Social Sciences Research Council of Canada for supporting this research as well as most of my research activity for over 25 years. I should like to express special gratitude to our Dean, Professor Michael Goldberg, the Executive Committee and the members of the Faculty of Commerce and Business Administration of the University of British Columbia. All these persons or institutions encouraged my activity, not only by providing me with a study and research facilities after I received emeritus status. Above all, at UBC I enjoyed a most pleasant and cordial working atmosphere. The last but not least thanks go to my wife, Hermi Mattessich, whose moral support and direct help continued with this work as it did with all the others.

R.M.

PREFACE TO THE SECOND EDITION

The first edition of this book has been out of print for several years, but thanks to endeavours of Prof. Esteban Hernández Esteve of the Universidad Autónoma de Madrid, editor of the free electronic journal *De Computis* (dealing with the history of accounting), a second and expanded edition has been made possible. The expansion refers - apart from minor grammatical and stylistic changes - mainly to the extension of the “Summary of Main Professional Data” (now pp. VII to XI) and a new Section on ‘Major Profiles of R.M. (on p. XII)’, as well as an extension of “Research and Publications of Richard Mattessich (in chronological order)” (now from p. 156 onwards to the very end). However, the text itself has *not* been extended from 1995 to 2006 (to do so may be a future project for a third edition) - but I did added two Appendices. Appendix A offers some photographs, spanning over eighty years (from 1924 to 2006), while Appendix B is a small selection of my modest poetic and aphoristic experiments. Furthermore, the format of the book has slightly been changed, and page numbers are different from the first edition. Finally, I should like to express my gratitude to Prof. Esteban Hernández Esteve and the other editors of *De Computis* for making this book freely available to a wider audience.

R.M.

RICHARD (VICTOR ALVARUS) MATTESSICH
Summary of Main Professional Data (up to 2006)

- 1940 Degree of Mechanical Engineer, Engineering College, Vienna IV.
1940-42 Engineer at the Deep-Drilling Firm, Latzel & Kutscha, Vienna XVIII. 1944
"Diplomkaufmann", Hochschule für Welthandel, Vienna XIX.
1944-45 Front Engineer and "Baukaufmann", in Salonika (Greece) and Construction Manager
(Vienna) of the Steel Construction Firm Waagner Biró, A.G., Vienna IV.
1945 Degree of Doctor of Economic Sciences (Dr.rer.pol.), Hochschule für
Welthandel, nowadays Economic University of Vienna.
1945-47 Research Fellow of the Austrian Institute of Economic Research, Vienna.
1947-52 Instructor in Commerce, Rosenberg College, St. Gallen (Switzerland).
1952-53 Employee (Actuarial and Auditing Departments) of the Prudential Assurance Co. of
England in Montreal (Quebec).
1953-59 Head, Department of Commerce, Mount Allison University, Sackville, N.B. (full
professor from 1956 onwards; 1958/59 on leave).
1958 Visiting Professor, University of California, Berkeley, USA.
1959-67 Tenured Associate Professor of Business Administration, University of California,
Berkeley (also teaching in the Dept. of Economics).
1959-67 Founding Member (together with C. West Churchman and others) and
Fact. Council of the Center for Res. in Managmt. Sc. (UC - Berkeley).
1961/62 Ford Foundation Fellow (USA).
1964-65 Member of the "Committee for Courses in Electronic Data Processing" of the
American Accounting Association.
1964 Publication of *Accounting and Analytical Methods - Measurement
and Projection of Income and Wealth in the Micro- and Macro-Economy* (D.R.
Irwin, Inc.); reprinted in the "Accounting Classics Series" (of Scholars Book Co.,
1979), and in the Book Series of "Outstanding Financial Reprints" (Ann Arbor, MI:
University Microfilms, 1977); German version (Düsseldorf: Bertelsmann
Universitätsverlag, 1970); Japanese version in 2 vols. (Tokyo: Dobunkan, Ltd.,
1979).
1964 Publication of *Simulation of the Firm Through a Budget Computer Program* (R.D.
Irwin, Inc.; reprinted in "Books on Demand", Ann Arbor, MI: University Microfilm,
1979).
1965 Visiting Professor, Free University Berlin.
1965/66 Visiting Professor, University St. Gallen, Switzerland.

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- 1966-67 Professor with Chair in Economics, Ruhr University Bochum (West Germany; double-professorship with U.C.-Berkeley).
1967-87 Professor of Commerce and Business Administration, University of British Columbia, Vancouver, B.C., Canada.
- 1967-74 Editor of Monograph and Reprint Series of the Faculty of Commerce and Business Administration, UBC.
- 1968-70 Member of the Committee for Distributing Scholarships and Research Grants, Canadian Institute of Chartered Accountants (Toronto, Ontario).
- 1969-70 Secretary-Treasurer of UBC-International House.
- 1969-70 Member of the Executive Committee of the Canadian Chapter of the American Accounting Association.
- 1970 Distinguished "Erskine Fellow" and Visiting Professor of the University of Canterbury, Christchurch (New Zealand).
- 1971-72 "Killam Senior Fellow" (UBC, Canada).
- 1970- Associate Editor of the *Journal of Business Administration* (UBC).
- 1971/73 Visiting Professor (Summer sessions) at the Austrian Academy of Management, Graz.
- 1972/73 "Award for Notable Contribution to Accounting Literature" of the American Institute of Certified Public Accountants in collaboration with the American Accounting Association.
- 1976-78 Founder and Director of the Institute of Industrial Administration and Methodology (with Professorial Chair) of the University of Technology of Vienna (double-professorship with UBC).
- 1976-79 Member of the "Executive Council" of the Association of University Instructors of Business Administration (Germany).
- 1978 Publication of *Instrumental Reasoning and Systems Methodology - An Epistemology of the Applied and Social Sciences* (Dordrecht, Holland: Theory and Decision Library, D. Reidel Publ. Co.; paperb. ed. 1980).
- 1978 Member of the 1978 Research Convocation of the Univ. of Alabama.
- 1978-88 Member of the Board of Nominations of the "Accounting Hall of Fame" (Ohio State University).
- 1979-80 Member of the Consultative Group on Management and Administrative Studies of the Social Sciences and Humanities Research Council of Canada (Ottawa).
- 1980 Elected Fellow of the Accademia Italiana di Economia Aziendale (one of the national academies of Italy).
- 1980-87 Distinguished Arthur Andersen & Co. Alumni Professor at UBC.
- 1981- Appointed to the Editorial Board of *Economia Aziendale*.
- 1981-82 Member of the Board of Governors of the School of Chartered Accountancy of the Institute of Chartered Accountants of British Columbia, Vancouver.

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- 1982 Profiled (among twenty significant contributors to accounting thought in the English language area) in *The Development of Accounting Theory: Significant Contributors to Accounting Thought in the 20th Century* ed. by M. Gaffikin and M. Aitken (New York: Garland).
- 1982 Appointed to the International Editorial Board of "Philosophy and Methodology of the Social Sciences" of the Theory and Decision Library (Dordrecht-Holland and Boston, MA: Reidel Publ. Co).
- 1984 Elected Corresponding Member of the Austrian Academy of Sciences (Philosophic Section), Vienna I.
- 1984-90 Member of the Board of Directors of the Canadian Certified General Accountants' Research Foundation, Vancouver.
- 1984 Editor of *Modern Accounting Research: History, Survey, and Guide*, Vancouver, BC: Canadian Certified General Accountants' Research Foundation; reprinted in 1989 and 1992).
- 1986 Profiled in "The Contributions of Richard Mattessich" by Giuseppe Galassi in *Economia Aziendale* (August), pp. 149-177, and in *History of Accounting at Berkeley* by Maurice Moonitz (Berkeley: University of California), pp. 5, 56-58.
- 1987-90 On the Editorial Board of *The Accounting Historians Journal* (USA). 1988-Professor emeritus of UBC.
- 1988 Appointed by the President of the University of Alberta Edmonton) to be Chairman of the Unit Review Committee to review the Accounting Department of the University of Alberta.
- 1988 "Award for Best 1988 Paper", Annual Meeting, Canadian Academic Accounting Association.
- 1989 Appointed to the International Advisory Committee of *Praxiology* (formerly published by the Polish Academy of Sciences).
- 1990-93 Member of the International Editorial Board of *Teuken - Revista de Investigacion Contable* (Argentina).
- 1990- Member of the Editorial Board of *Accounting, Business, and Financial History* (U.K.).
- 1991 "Haim Falk Award for Distinguished Contribution to Accounting Thought" of the Canadian Academic Accounting Association (CAAA).
- 1991 Editor of *Accounting Research in the 1980s and Its Future Relevance* (Vancouver, BC: Canadian Certified General Accountants' Research Foundation).
- 1992 Honorary Life Membership in the Academy of Accounting Historians "in recognition of distinguished contributions to accounting history".
- 1992 Honorary Membership in the Pacioli Society of Japan.
- 1992-93 Publication of the Japanese version of "Foundational Research in Accounting: Professional Memoirs and Beyond" in *Chuo Hyoron*.
- 1993 Appointment to the International Board of Advisors of the Canadian Certified General Accountants' Research Foundation.

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- 1993 Appointed to the Editorial Board of the *Asian-Pacific Journal of Accounting* (Hong Kong).
- 1994 Presentation of an invited paper at the 650th Anniversary of the University of Pisa, in honour of Leonardo da Pisa Fibonacci.
- 1994 Plenary presentation of a paper at the 17th Congress of the European Accounting Association, in Venice, in honour of the 500th Anniversary of the publication of Luca Pacioli's *Summa*.
- 1994 "A Profile of Richard Mattessich (b. 1922)" by C. McWatters in *Accounting Thinkers*, ed. by J. Richard Edwards, pp. 19-40.
- 1995 Publication of *Critique of Accounting: Examination of the Foundations and Normative Structure of and Applied Discipline*, Westport, CT: Quorum Books.
- 1996 Elected to the Editorial Board of the *Accounting Historians Journal*.
- 1997 Awarded an Honorary Professorship from the Centro Universitario Francisco de Vitoria, Madrid
- 1997 Elected Honorary Member of the Italian Society of Accounting Historians.
- 1998 Received a Doctor honoris causa (economía y empresariales) from the University of Madrid (Complutense), Spain (presentation of a paper "Acerca de lo que he intentado hacer en mi labor de Investigación, dónde pude que haya acertado y dónde he fracasado", published in *Revista de Contabilidad* 1 (2): 113-127. For translations see below under "Journal publications": in English: *Asia-Pacific Journal of Accounting*, June 1999; in Italian: *Contabilitd e Cultura Aziendale*, January 2001.
- 2000 Plenary presentation of a paper "Hitos de la investigación en contabilidad - segunda mitad del siglo"), Encuentro de Asociación Española de Profesores Universitarios de Contabilidad (ASEPUC)", Las Palmas, Gran Canaria, Spain, May 26, 2000.
- 2000 Received honorary Insignia of the Asociación Española de Profesores Universitarios de Contabilidad (ASEPUC, May).
- 2000 Presentation of an invited paper, "Comienzos de contabilidad y de su reflexiones teoricos", June 14, at the University of Cantabria, Santander, Spain, 2000.
- 2000 Presentation of a joint paper (July 14) with Prof. Giuseppe Galassi--see below) of "History of the Spreadsheet: From Matrix Accounting to Budget Simulation and Computerization") at the 8th World Congress of Accounting Historians in Madrid.
- 2000 Participation (Nov. 10) on the Plenary Panel "Perspectives on Accounting Research" (by J. Demski, N. Dopuch, R. Mattessich, J. Ohlson and S. Zeff) at the celebration of the 50th Anniversary of the *Accounting Hall of Fame*, published in Daniel L. Jensen, ed., *Challenges and Achievements of Accounting During The Twentieth Century* (Columbus, OH: *Accounting Hall of Fame*, Ohio State University Press, 2001), pp. 64-83.
- 2000 Founding member (and on Editorial Board) of the *International Journal of Accounting Literature*, Rohtka, India).

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- 2001 Founding member (and on Editorial Board) of *Revista de Filosofía y Epistemología de las Ciencias Económicas* (Universidad de Buenos Aires, Argentina).
- 2001-2004 Appointed to the Editorial Board of the *British Accounting Review*.
- 2004 Recipient of the highest research award (the *Hourglass Award*) of the Academy of Accounting Historians (November).
- 2004 Appointed to the Editorial Board of *Revista Internacional Legis de "Contaduría y Auditoría"* (of Columbia and other Latin American countries).
- 2004 Appointed to the Board of Nominations of the *Accounting Hall of Fame* (Ohio State University – for first time appointment, see 1978-1988).
- 2004 Visiting Professor at the University of Málaga, Spain (October/November).
- 2004 Invitation to give the "Inaugural Presentation" at the International Conference GAT III on General Accounting Theory—Towards Balanced Development, in Kraków (Poland), May 28-May 31, 2005.
- 2006 Received a Doctor honoris causa (économie) from the University of Montesquieu, Bordeaux IV (France) May 5, 2006 (presentation of a paper "La diversité des courants de recherche en comptabilité, évaluation et représentation")
- 2006 Received a Doctor honoris causa (economía y empresariales) from the University of Málaga, Spain May 18, 2006 (presentation of a paper "¿Qué le ha sucedido a la Contabilidad?). The entire investiture (including the speeches by various persons) has been filmed professionally by the Technological Production Centre of the University of Málaga, and is available from it by specifying either PAL format for European or NTSC format for American DVD systems).

Major Profiles of R.M. (1994 to 2006 – apart from *Who's Who in America*, and similar reference works):

- 1994 "A Profile of Richard Mattessich" by Cheryl McWatters in J. Richard Edwards, ed., *Twentieth Century Accounting Thinkers*, pp. 19-40.
- 1995 "Review of *Foundational Research in Accounting--Professional Memoirs and Beyond*", by Yuji Ijiri, *The Accounting Review*, pp. 435-436.
- 1995 *The Accounting Theory of Richard Mattessich in the Light of Main Directions of Methodological Accounting Research* (in Polish) by Anna Szychta, *Lódz*: University of *Lódz*, 1995.
- 1996 "A Review [Article] of Richard Mattessich's *Foundational Research in Accounting - Professional Memoirs and Beyond*", by Micheal J. R. Gaffikin in *1, -Pacific Journal of Accounting* 3 (1, June 1996), pp. 99-108.
- 1996 "Richard V. Mattessich (1922-)" by George Murphy in M. Chatfield and Richard Vangermeersch, eds., *The History of Accounting--An International Encyclopedia*, pp. 404-406.
- 1995 "Richard Mattessich-*Foundational Research in Accounting--Professional Memoirs and Beyond*" A review by Alfred Wagenhofer, in *Journal für Betriebswirtschaft* 46 (4), pp. 220- 221.
- 1998- "Richard V. Mattessich" in *Who's Who in America* (regularly since 1908), New Providence, NJ: Marquis.
- 2000 "A Review Article of *Foundational Research in Accounting—Professional Memoirs and Beyond*" by Giuseppe Galassi in the *Indian Accounting Review* 4 (June).
- 2003 "Prólogo (on R. Mattessich)" by Leandro Cañibano Calvo, in R.M.: *La Representación Contable y el Modelo de Capas-Cebolla de la Realidad* (see below), pp. i-ii.
- 2005 "Richard Mattessich (1922-)" by Cheryl McWatters, in Bernard Colasse, ed. (2005) *Les Grands Auteurs en Comptabilité* (some 17 accounting scholars of the last 500 years from Pacioli to our times), Paris : Éditions EMS Management et Societé—Corlet Éditions .

CONTENTS

Preface to the First Edition	VI
Preface to the Second Extended Edition	VIII
Summary of Main Professional Data	IX
Contents	XV
Photograph of Richard Mattessich (as in first edition)	XVII
1. Early Impressions, Education, Practical Experience	1
2. Front Engineer and Cost Accountant in Salonika, Construction Manager in Vienna	6
3. Research in Austria and Teaching in Switzerland	11
4. A New Life in the New World	17
5. Tenure at the University of California at Berkeley	24
6. International Reaction to and Influence of <i>Accounting and Analytical Methods</i>	36
7. Spreading my Wings and Casting an Anchor in Vancouver	50
8. Visit to Japan and the Pacific Rim	55
9. The Golden Age of UBC's Faculty of Commerce and Business Administration	60
10. Philosophy and Foundational Accounting Research	63
11. Interlude in Vienna	68
12. Financial Crisis at UBC and Anti-Intellectualism in Government and Business	72
13. New Impetus to Research	87
14. Hong Kong, Tokyo and Kyoto Revisited	97
15. Recent Highlights: Pisa and Venice	106
16. Thoughts on <i>Twentieth Century Accounting Thinkers</i>	111
17. Remarks on the <i>Critique of Accounting</i>	116
18. What I Can Believe and What I Cannot	123
19. Research and Publications of Richard Mattessich	134

Appendix A – A Tribute to Jerry (G.A.) Feltham, On Occasion of his Retirement Party (Vancouver 2003)	157
Appendix B – R.M from 1924-2006, in Pictures	159
Appendix C - A Selection of Aphoristic and Poetic Experiments by R.M	166



Richard Mattessich

VLADIMIR: To have lived is not enough for them.

ESTRAGON: They have to talk about it.

Samuel Beckett, *Waiting for Godot*, Act II (1954).

1. EARLY IMPRESSIONS, EDUCATION, PRACTICAL EXPERIENCE

I must have been at the tender age of seven or eight years when, one day snooping among my late grandfather's dusty old boxes, I came across a large strange book. When I turned its cover, I saw, written in beautiful large calligraphy, a phrase that I slowly deciphered as saying "Mit Gott" ("With God"). The subsequent pages were full of horizontal lines filled with writing accompanied by a monetary amount on each line. But what fascinated me beyond everything else were the strong *diagonal lines* that brought the end-figures of the left or right pages to an even keel. Many years later, I learned that in German this was called "die Buchhalter Nase", (the "bookkeeper's nose") and I still would not know how to properly translate this odd expression. At any rate, here I was with an utterly new experience, and it was this particularly mystifying diagonal configuration which left a lasting imprint on my memory - my grandfather, Eduard Pfaundler,¹ was "bureau chief" of the Anglo-Bank (nowadays, after several mergers, called Bank Austria-Creditanstalt) and participated actively on the Viennese stock exchange; thus he was well experienced in accounting and finance. And since my mother and I lived in Vienna in the home of my grandmother,² it was one of my late grandfather's discarded ledgers which left such an indelible impression upon me. Who would then have thought that this first encounter with bookkeeping was foreboding a life-time interest of mine in the academic and foundational aspects of accounting?

But few careers are direct ones, and neither was mine. After seriously reflecting whether I should become an artist (because of some talent in painting inherited from my mother), or go into chemistry which fascinated me at the time, I finally decided to study mechanical engineering. From the very beginning of those studies, and for the first time in my life, I brought home excellent

¹ The Pfaunders are an old-established Tyrolian family. I am proud to possess a chronicle and family tree (reaching back to the fifteenth century), which was compiled by a distant grand-uncle of mine, Leopold Pfaundler von Hadermur, a physicist who became Rektor (president) of the University of Innsbruck in 1880, and later served at the University of Graz. The chronicle gives evidence that in my branch of the Pfaundler family there were no less than eleven generations of customs officers, goldsmiths, innkeepers and others, all of whom must have had some competence in, or relation to, accounting.

² A few blocks from the Ringstraße, in the 7th district, Neubaugasse No.76, second floor, Apt. No. 15 - the place where my mother was born and lived all her life, except for a year or so in Trieste.

grades. And my mother -who was so full of love that she never scolded or reproached me on account of my previously poor study records - was overwhelmed with joy, and could hardly trust her eyes and ears. It was around this time, between the age of 14 to 16, that I began to be interested in the cultural activities of Vienna: Freud, Klimt, Schiele, Schönberg, and Mahler were still intensely debated; the ideas of the Vienna School of Economics and, above all, those of the Vienna School of Neopositivism were in the air, and many other things that could excite a young mind. Furthermore, it dawned upon me that *reason* is the most valuable tool we possess, but also that it must be cultivated, and be in harmony with emotions and, above all, not be abused. And so the twin-sisters of *art and science* became my "magic flute" that were to guide me through the trials and tribulations of the life to come. It was quite natural for me to decide at this early stage to devote my future to the search for knowledge and, if possible, to become in later years a lecturer at the University of Technology of Vienna (to aim for "professor" would then have been all too ambitious). However, for many years the goal of working for a university eluded me, and for a long time my youthful aspirations seemed to be nothing but a dream. Yet fate was ultimately kind to me, and not only did I attain tenured university positions in four different countries, but when I was almost fifty-four years old I even obtained a chair at this very university in Vienna (which, however, I abandoned two years later).

After receiving my engineering degree (it was a college degree, *not* a full-fledged university degree), and some practice as an engineer in Vienna, I discovered that many engineers are somewhat one-sided creatures. Certainly, a good background in business and economics is essential for a fuller view of life. So I decided to register, as a part-time student at the Hochschule für Welthandel (nowadays called Wirtschaftsuniversität Wien, i.e., Economic University of Vienna), though keeping my job at Latzel and Kutscha, Deep-Drilling Company in Vienna XVIII. I registered with the intention to widen my horizon rather than working towards a degree, but my interest, particularly in economics, grew steadily, and after two semesters I decided to register as a full-time student. Although I lived at home, I had to earn my living. During those years I successively had a considerable number of more or less odd part-time jobs: from travelling salesman (for various firms and products) to insurance agent, draughtsman, field surveyor, as well as stage-hand and electrician at the Viennese State Opera House.

The latter occupation was, obviously, the most exciting one during this time. Not only could I listen to grand music and make most interesting observations back-stage, I could even "rub shoulders" with such famous opera stars as Anny and Hilde Konetzni, Erna Berger, Max Lorenz, Anton Dermota as well as many others, and greatly enjoyed their marvellous voices. Indeed, my passion for opera and classical music - among which I particularly adore Mozart's operas and piano concerti - has never left me since. And I still believe that if anything on earth deserves the term "divine", it is Mozart's music. Although I love it, I have, in contrast to my wife, no gift for performing it. And the Bösendorfer grand piano in our living room in Vienna (later sold by my mother during

the depression years)³ was more an object of decoration than an instrument played upon.

Every opera-pro has lots of funny stories of mishaps to narrate, but since my own "operatic career" was short-lived, I can offer you only a single tale: After the first act of *Un Ballo in Maschera* by Verdi, it was my duty to remove a big candlestick almost double my own size. I shouldered this monster and headed for the shortest way to the storeroom without noticing that my burden intersected the cone of a big spotlight illuminating the sky from the rear of the stage which, for a moment, was adorned with the shadow of an enormous candle. But instantly I felt a big fist in my neck pulling me back, thus saving me and the performance from a complete disaster. Hence it was now time to move on to another job, and I became chief accountant of a wholesale trader (Karl Ladurner, Vienna IV) who imported fruits from South Tyrol (Italy) to Vienna. This not only offered an excellent opportunity to apply my newly acquired knowledge of financial accounting to actual practice, but also to provide me and those close to me with the most delicious fruits that were particularly rare in war-time Germany.

In spite of the horrible war, these times at the university were among my happiest years; I could finally quench my thirst for knowledge, and also made lasting friendships with some of my colleagues. On the other hand, these were certainly not carefree days but fraught with many difficulties. Only few textbooks were then available for purchase, and the university library holdings were insufficient and very cumbersome to access. The semesters were short, and often interrupted by all kinds of duties and later by constant bombing raids by day and particularly by night. If I envy the students of today, especially the doctoral students, it is for the much longer duration of their study and the great variety of courses and seminars available to them - how much I would have liked to have gained a more thorough background in mathematics. In other words, their education is incomparably richer than was ours fifty years ago. But although there can be no doubt that present-day students have the opportunity to acquire much more classroom knowledge than we have had, I often wonder whether their creativity and sound judgment do not occasionally suffer under this overload of information, some of which seems to be insufficiently digested.

As to my professors, the most vivid memories pivot around two economists, Robert Nöll von der Nahmer, a banker and showman, and Erich Preiser, a profound scholar. The former was, of course the more popular. But it was for this very reason that I chose the more serious-minded Preiser as my role model. Indeed, in the post-war II era, Erich Preiser and his former student, Willhelm Krelle, became two of the leading German economists, the former at the University of Munich, the latter at Bonn (after several years at the University of St. Gallen) respectively. In 1964 I devoted one of my books to Preiser and had a happy reunion with him in his home near Munich - alas, a year later he died of lung cancer. Krelle visited us during his stay in San Francisco in the

³ My mother was a sales representative who travelled for various firms in Austria as well as the German parts of Czechoslovakia (Sudentenland) and Italy (South Tyrol).

early 1960s, and we paid him a visit in 1965 in Bonn. A third professor of mine in economics - from whom I took an exciting course in the history of economic thought - was Reinhard Kamitz. Later, when I was with the Austrian Institute of Economic Research (with which he was loosely associated), I got to know him quite well. Although he was a capable scholar, he also was a shrewd politician and became one of the most effective Ministers of Finance of Austria, and subsequently President of the Austrian National Bank, until he suffered a paralysing stroke;⁴ later Stephan Koren, a colleague of mine from the above mentioned Institute, took over this powerful position.

Although ethnically Austrian (through three of my grandparents), I still held Italian citizenship. Indeed, I was born in Trieste (on August 9th, 1922 and baptized as "Richardus Victorius Alvarus Mattessich"), where my father used to be officer (Primo Commissario al Bordo, i.e., First Purser) in the Italian merchant marine.⁵

But as I lived in Vienna since 1923, the Italians seemed to have overlooked me and never called me up for military service - I am eternally grateful to them for this oversight. Thus, I could, for the time being, pursue my university studies undisturbed. But in July 1943 part of Italy, under General Badoglio, renounced its alliance with Germany, and from this moment on I was constantly harassed, and had difficulties with the national-socialists' student agency. Because of my Italian citizenship, the Germans had no legal means for drafting me into military service but they refused to give me permission for completing my studies unless I agree "voluntarily" to join immediately after my final exams the dreaded *Waffen-SS* (Schutz Staffel) - this was the only German military organization that had a special division for accepting foreign citizens.⁶ Since I always shared Schopenhauer's antimilitarism, my ambitions were directed towards the struggle for truth, clarity and humanity, rather than to be a hero on the battlefield - although I believe that some ideas are worth fighting and even dying for, the "ideals" promoted by fanatical and corrupt politicians never were on my list. Even today my idols are Spinoza, Gandhi, and Albert Schweitzer rather than Caesar, Napoleon or Churchill. Apart from having always had strong pacifist leanings, I was opposed to this unjustifiable war, and belonged (since the age of ten) to the YMCA which, during the Nazi occupation of Austria, had to meet clandestinely under the cover of the Protestant Church (although I was Catholic until 1947). In recognition of this clandestine participation, I was elected to the Board of Directors of the Austrian YMCA

⁴ In the 1970's I got to know his son, who then was a professor of philosophy in Berlin and later joined the University of Graz; I met him at several philosophic meetings and conferences.

⁵ The Mattessichs were a Dalmatian clan of seafarers (originally from Luissin Piccolo, now Mal Losinj), and one of my grand-uncles was married to a daughter of the Cosulich family who owned a transatlantic Italian shipping line for which my father went to sea. But his father (my other grandfather) was a geometer and surveyor, and I suppose my interest in mathematics can be traced to him and our seafaring ancestors.

⁶ In this special division of the SS, the criteria for height and other personal qualifications were dropped in the desperate effort to obtain as much cannon fodder as possible.

immediately after the end of the war. Since I refused to join the Waffen-SS, I made the counter-proposal to join as a *front-engineer* (instead of soldier) the Organization Todt (OT), then headed by the still well-known Alfred Speer. During the time of those negotiations I was allowed to continue my studies on a *conditional* basis, and when my final examination (for Diplomkaufmann, approximately MBA) approached, I asked Georg Isele, legal counsellor of our university (who was my professor of law and thus knew me quite well) for advice. He suggested that under those circumstances the university could (without asking the political agencies) admit me to the exams, but again only on a *conditional* basis.

One day, shortly before the examinations began, I came home finding my mother dissolved in tears, pointing at my draft to the Waffen-SS quarters in Tulln, some 50 kilometres northwest of Vienna. Without any hesitation I set down and wrote a registered letter informing them that, as an Italian citizen who never volunteered, I regarded this draft an error as well as illegal and void. I also mentioned that I was already associated with the OT. This latter part was not quite correct, but soon afterwards I made it true by accepting a position with a large steel construction firm (Waagner & Biró, A.G., Vienna IV) to work for them in Greece as an OT-front-engineer and particularly as a "Baukaufmann" (construction cost accountant). Because of my bold defiance of the Waffen-SS, we expected the Gestapo (Secret State Police) every day at our doorsteps, but luckily they did not show up, and I proceeded with my exams which I passed with "ausgezeichnet" (*summa cum laude*) - only two other colleagues passed with equal standing among a total of 88 students. One of the two colleagues was Herta Stöckel who later married another colleague, Karl Sedelmaier, both of whom are still close friends of mine. The other colleague was Hans Seidl, who was to become a particularly prominent personality in Austria (see Chapter 3). Yet in spite of doing so well, I still did not receive my degree because the examination was entered on a *conditional* basis, and my last two semesters were not yet recognized by the political authorities. Meanwhile I was put into an OT-officer's uniform, and in this outfit I marched with great determination to the office of the political student agency. Lo and behold, my uniform performed a miracle, it impressed them so much that without much ado they certified the recognition of my last two semesters. Dear reader, you can hardly imagine how fast I ran to the university with this document in order to get my diploma.

2. FRONT ENGINEER AND COST ACCOUNTANT IN SALONIKA, CONSTRUCTION MANAGER IN VIENNA

Soon after these events I left, in the second week of August 1944, for the front. My destination was Salonika where the headquarters of the Construction Unit South East of Waagner-Biró A.G. was located. After an interesting stopover of several days in Belgrade, I continued my journey to Salonika (Thessaloniki). Arriving at the railway station of this truly Byzantine city, I was immediately engulfed by the fragrant atmosphere of Greece and began

searching for Aristotelous Street No.1 (or was it No. 2?). There, I was well received by my superior and future colleagues. To my particular enchantment, I found that the office had a balcony with the most beautiful view at the Gulf of Salonika from beyond of which Mount Olympus, then unencumbered by any smog, beckoned to me in all its mythological glory. My hotel was close by and, while unpacking, I began to contemplate how fortunate I was to be in the country that has once been the cradle of Western culture, and in the region where Alexander the Great imbibed knowledge from Aristotle. A spirit of adventure overcame me, and the longing to see some of the remnants of ancient Greece led me to forge plans for visiting Athens. But fate delayed the fulfilment of this wish, and no less than 23 years passed before it was granted to me.

The next morning, life took a more sobering turn and confronted me with my new tasks. The backlog of innumerable vouchers had to be mastered in order to determine the costs accumulated at various construction sites in Greece as well as Yugoslavia where our firm repaired and built bridges that previously (and, often enough, subsequently) were damaged or destroyed by partisans. Although I had some practical experience in financial accounting, cost accounting was a new challenge in spite of my fairly good theoretical grounding. Mine was an urgent task since our firm could not bill its services to the government (via the OT) before the pertinent costs were compiled, the overheads correctly allocated, and the invoices properly drafted. Another of my tasks was the periodic payroll for our Greek workmen. This constituted a particularly interesting problem as Greece was overwhelmed by the dynamics of so rampant an inflation, that a glass of wine, priced at one million drachmae in the morning, was already two millions in the evening - one reason more for many to drink two glasses of wine at dawn instead of one at dusk. An unrelenting upward spiral of prices necessitated weekly and occasionally bi-weekly wage adjustments that greatly exceeded the original weekly wage. All this gave much work, but it taught me that "accountability" is the major function of our discipline. Another consequence of this inflation was the emergence of a quite unexpected new currency: I mean, neither the strictly controlled and therefore stable Reichsmark, nor the gold coins, like the "Napoleons", used by the black market for bigger transactions, but little packages of cigarette paper that formed the most convenient and most stable currency at the time. Tobacco was relatively abundant in Greece, but to smoke it, people needed thin cigarette paper in which they would roll the tobacco. Since this paper was produced in Germany, it was easily accessible to us.

With youthful enthusiasm, I threw myself into my new work. In the spare time I enjoyed the southern milieu and scenic beauty of this fascinating country, paid visits to the Archaeological Museum and to such sites as the orthodox basilica of Saint Sophia as well as the church of Saint George where many beautiful mosaics, icons and other examples of Byzantine art could still be admired. For several weeks, I felt quite happy in this new and so very different environment. An additional joy was the special bookshop, available to the military and auxiliary-military forces (to which the OT belonged). The shelves were full with volumes no longer available at home; and I spent most of my money buying books which I later sent home by mail. Unfortunately, due to the

subsequent turmoil, this shipment never arrived at its intended destination.

But this time of novelty, relative tranquillity and enjoyment did not last long. The winds of war were soon felt even in our office. Apart from the constant shooting at night in the streets and outskirts of Salonika (between Greek partisans and German soldiers) - to which I had to get used from the very first night on - Marshal Tito's troops cut off the railway line in Serbia that connected us with the home country. And the Russian forces pressed on so rapidly in Bulgaria that they reached the Greek border and halted some fifty kilometres from Salonika. Not knowing that an agreement between the Allies prevented the Russians from entering Greece, we expected every day the Red Army to take the city. All our building sites had to be closed, and our German workers in their OT-uniforms were idle around our office. They drank all the schnapps and champagne that was suddenly made available in great quantity, so it would not fall into the hands of the Russians. Great turmoil ensued, and occasionally one or the other drunkard fired a pistol-shot right in our own midst. I was the only person in our office who still sat behind his desk working, if for no other reason than to get my thoughts off all that uncertainty and imminent danger. How little did I know that this persistence would pay off very handsomely. Indeed, it saved me from many months of direct combat with partisans and regular troops.

Weeks of waiting and tension followed. One rumour chased another only to be disconfirmed the next day. Finally, news arrived that SS-elite-troops had moved north from Lamia and Larissa, breaking through Tito's front and liberating the vital railway connection. Shortly afterwards came the command for our crew to form a single mobile construction unit and to advance immediately to Yugoslavia where further bridges had to be urgently repaired. But this joyous news was followed by a disappointment - at least so I thought at the time. The commander of our unit informed me that a colleague and I would have to remain in Salonika until the lines were completely restored, so that I could bring all cost accounting records safely to Waagner-Biró's headquarters for urgent billing. As millions (in German currency) were at stake, this order made sense; the question was merely whether the Russians would take Salonika before we could get out. The new construction unit was quickly formed and departed within days. And we two were left behind and waited: my colleague⁷ was chosen for reasons of poor health, and as to me, I was - more by accident than design - the only one who could make head and tail out of this jumble of vouchers, statistics, accounts and invoices. After all, no one else bothered to continue with his work through those past chaotic weeks.

Days of alternate hope and anxiety succeeded each other: rumours, false orders, their cancellations, and new rumours. This was compounded by the bureaucratic routines of handing over our office to the military authorities. When they finally arrived to inspect the office, they

⁷ I must confess, I do not recall his first name, but his family name was "Sedlmeier" or something similar; he must have been in his late forties and was from Alt-Aussee or Bad Aussee in Upper Austria.

discovered in a dustbin half a dozen or more egg-shaped grenades, apparently forgotten or dumped by our crew. This would have almost landed me in prison because those weapons could easily have fallen into the hands of the partisans through the janitor or other Greek personnel. The inspecting officer was unwilling to accept the arms; so I had to travel with them, on a crowded, decrepit, and heavily swaying streetcar to the other end of the city where I unloaded those hazardous "eggs" at the military police station. Another task was to pack and crate our documents. Before doing so, I took a precaution which later proved to be invaluable. In anticipation that some boxes might get lost during transportation, I selected a small number of key documents, and put them into a separate bag. This could help in an emergency to reconstruct most of the invoices from the basic data.

Those worries tried our patience and made us quite edgy. But finally the day of departure arrived; equipped with our crates, and each of us burdened with a huge canister of olive oil and a suitcase, mostly filled with tobacco for trade-in at home against food, we confidently embarked for the railway station. But there our confidence quickly turned to apprehension. The authorities made it perfectly clear that transportation space for military personnel was of highest priority, and that it was out of question to take the crates with us or to dispatch them. After long and futile negotiations there was no alternative but to create space by emptying the suitcase, giving most of the tobacco to the shoe-shiner boys hanging around the station, putting the emergency bag with the key documents into my suitcase, and abandoning the large wooden boxes to their own destiny. After having sacrificed our crates on the altar of inevitability, we waited for the train which took hours to come. Sheer endless waiting until a ramshackle locomotive with innumerable old boxcars steamed screechingly into the station. It made us wonder whether this could be our way to salvation. Renewed hour-long waiting; no permission to board. Finally, with the arrival of dusk the long column of fatigued soldiers and auxiliary personnel began to move. And so, slowly one by one, we were quartered in boxcars, like sardines in a tin - if you have read Pasternak's Nobel-prize-winning novel or saw the film-version of "Doctor Zhivago", you might remember the scenes of the Zhivagos' wearisome voyage to the Ural. Such was our situation, travelling in a boxcar from Salonika to Belgrade, a distance of merely 520 km as the crow flies, and yet an Odyssey that lasted no less than two weeks.

Once aboard, we hoped for a speedy departure - after all, this lifeline was still under constant attack and could be cut off any minute by enemy action. Indeed, suddenly the steam horse in front began to ache and churn, and the train moved - but only a few hundred meters. Soon we discovered that the locomotive had been disconnected (either it was needed elsewhere or spirited away in anticipation of the coming disaster). And that is how our journey homeward began: in our dreams. For meanwhile midnight had arrived, and most of us were overwhelmed by sleep, the sandman's mighty power.

An infernal symphony of sirens, exploding bombs, cries and, worst of all, a rain of fire awakened us. We jumped out of the boxcar and took cover in a ditch a few hundred feet east of the

railroad. Only now we grasped it - this was the first Russian air raid on Salonika. Soon our train too was attacked and spread with a carpet of phosphor cans. As far as we could make out from the distance, our boxcar (where the rest of my invoices and documents were left behind) was ablaze. In spite of all the horror, this was an unforgettable, I am tempted to say "aesthetic", sight: the magnificent play of flames contrasted against the dark of midnight reminding me, at first, of Nero's contemplation on Rome burning, and later, as we moved closer, of Dante's inferno. The noise of the attacking airplanes soon silenced, and we rushed to the train noticing that our boxcar, although not itself on fire, was in the midst between two cars aflame. Quickly we disengaged the burning cars and pushed them onto side-rails which radiated out from the network of the railroad station. It took hours until things settled down. Injured people had to be taken care of, and soldiers whose boxcars burned down, had to be relocated. If our "quarters" were already crammed before the fire, now they were definitely overcrowded.

And so it became dawn before our decimated train could begin its saturnine journey northwards. The subsequent fortnight was almost as adventurous as the first night. But since this is mainly a "professional" autobiography, I will spare you details and merely report that on October 3, 1944 we arrived with bullet-riddled luggage in Belgrade where we tried to get transportation to Vienna. Everything was in chaos since the Red Army was about to storm this city - something that was indeed accomplished within a few days. Yet we still hoped to escape. Although we held valid marching orders, and were even properly deloused, no military authority was willing to grant us the transportation that became scarcer by the minute. Wherever we went, the answer was "go ahead to Vienna, but do it on foot". Quite exhausted and in desperation we played our trump card. Some Greek tobacco was still left in our bags, and with it we bribed several soldiers guarding the barrier to the trains. This hurdle overcome, we quickly crossed the tracks and noticed a so-called officer sleeping-car labelled "Vienna". Overjoyed, in anticipation of finally being able to stretch our legs at night, we settled in the relative comfort of a bunk bed. Thank goodness, our ordeal of being forced to curl convolutetly on the floor of a crowded boxcar was over. Suddenly somebody shouted "Streife" (military police or MP). Hastily we hid the luggage, looked from which side the warning came, and crawled out of the car on the other side. Observing cautiously from outside the progress of the MP, we jumped into the carriage on the other end as soon as the air was safe. Two minutes later the whistle blew, the train was in motion, and we crossed a bridge over the Danube. Or was it over the Sava, which here has its confluence with the mightier Danube? I still don't know.

Night came, and dead-tired we fell asleep forthwith. Yet no dreams were granted us, for soon we woke up itching all over. The cone of a flashlight revealed that immense hordes of bedbugs had taken over the bunk, the car, and probably the entire train, which itself seemed to be moving by grace of those stinking little creatures - now all the delousing was in vain, and more urgently than ever we needed a thorough "debugging". Since the corridor had better air circulation and a somewhat lower representation of our reddish-brown cohabitants, we spent the rest of the

night squatting there instead of sleeping relaxed with outstretched legs on a bunk, as originally hoped for. But now the speed of the train was much faster than on the leg from Salonika to Belgrade, and in a surprisingly short time we crossed first the Hungarian and then the German border. This closed my experience in the War Theatre South East. Next day, late afternoon we arrived in Vienna where I took my mother quite by surprise. She had no idea that I had left Salonika. After months of worrying, she was outside of herself that I had returned home, and safe and sound at that.

The following months were extremely busy. During the day I undertook the toil of reconstructing the lost invoices in the offices of our firm, interspersed by occasional visits to the university. At night I continued with the writing of my doctoral dissertation. This was the time when the nightly air raids against Vienna were stepped up, and for the next four or five months during those raids I worked at night in our cellar (which served as an air raid shelter), pondering over my dissertation dealing with national income accounting and wealth statistics. It proved to be the best remedy to distract my thoughts from the cacophony of exploding bombs around us. The closest hit was on the north side of the block opposite of ours, heavily damaging an apartment house, and killing the cousin and uncle of my oldest friend, Kurt Fiedler.⁸ Yet our home luckily escaped unscathed. But it was around this time that my grandmother, to whom I was very much attached, died - she was over ninety years.⁹

In January or February of 1945 the rest of the crew of the Construction Unit South East finally arrived in Vienna. For months they retreated from the Russians in daily combat with them and the partisans - this was a hellish experience, considering that our crew were not trained soldiers but OT-personnel. Fate was kind to spare me this ordeal; and my Spanish-made Browning pistol had never been fired save for a few practice shots.

The painstaking reconstruction of our invoices was extremely cumbersome; it almost took as much time as writing my dissertation. But by March both tasks were accomplished. All invoices were filed with the government, and so was my thesis with the university. It was high time, for the Russians were at the door steps of Vienna, and the rigorous doctoral examinations were partly made in the homes of professors who sought shelter there from the artillery fire. Some faculty members had already taken flight (usually high-ranking Nazis), and others had lost their nerves, regarding us as mad, and refused our petition. It was a most arduous task to ferret out alternative

⁸ Kurt Fiedler and I were of the same age and went together to kindergarten, elementary school, as well as university. Later he was for decades a member of the Austrian Parliament as well as Vice-President of the Vienna Chamber of Commerce, and, as far as I remember, even became a member of the Order of the British Empire. We maintained close contact with each other until his mysterious and tragic death in 1984.

⁹ While my other three grandparents (none of whom I have any memory) seem to have been the intellectual types, my grandmother (on my mother's side) was the practical one, and with much wit and great originality.

professors still in town. One of them, Professor Nusko, was a Major at the Military Police. We, i.e., four or five students, paid him a visit at the downtown barracks (the well known Rossauer Kaserne) begging him to take over our examination in economics. After great hesitation our plight moved him. He gave his consent, and examined us on things far removed from the thunder rolling in from the nearby front - and all this in a prison cell located in the basement of the barracks for want of better accommodation.

On April 6, 1945, when the Russian forces had already penetrated the outskirts of Vienna, I graduated to Dr.rer.pol. (Doctor of Economic Sciences) with magna cum laude ("good") under the drums of heavy artillery. And during the next two days the Red Army stormed our city. At first hardly anyone dared to venture outside. But the Russians broke open the doors to most stores in town, took the best morsels, and then let the mob loot the rest. Finally, one day I mustered enough courage to visit my girlfriend (who was a student at the well-known Music Academy) at the other end of town. I had to crawl down into the Arm of the Danube (Donaukanal) to cross it on the bits and pieces of the destroyed Schweden-bridge, had to step over dozens of corpses, and passed carcasses of charred horses, the smell of which still pesters my nose for the sheer thought of it. When I approached the Danube the white faces of hundreds of dead soldiers stared at me with a warning message from another world, and the mortar fire coming across the river was so heavy that I had to retreat without accomplishing my goal. Some days later I repeated that mission, this time successfully. And weeks later we got "engaged" in the teeth of all the misery of post-war famine and despair. But peace was finally here, and what was more important than that?

3. RESEARCH IN AUSTRIA AND TEACHING IN SWITZERLAND

Austria had regained its independence and again had its own government. Many bridges and steel constructions of public buildings were destroyed during the fight for Vienna. To maintain the infrastructure of Austria, all this had to be urgently repaired. Waagner-Biró was so much in demand that we did not know where to begin. But as to my invoices from Greece, all was for naught. They were billed to the former German Reich, and nobody had the faintest hope that those millions of Reichsmarks would ever be recovered. There was another problem. Our firm had hardly any construction managers left. Most of them were either Germans, who had to leave Austria, or they were Nazis, who had to be dismissed. Our general construction executive, Dr. Rescher (whom I visited 31 years later when he was CEO of the firm, and when I was a professor in Vienna) was quite impressed with my feat of finishing the doctorate under such difficult circumstances. As a result he offered me the position of manager in charge of several major construction sites. This was a tremendous advance for a lad of not even 23 years; it equalled the position of our commander under whom I served in Greece. Obviously, the experience abroad, as well as my two university degrees, were taken into consideration. But I was hesitant to accept and pointed out that I had only

a college degree in engineering and, what was worse, not even in civil or construction engineering. Furthermore, my experience with this firm was mainly confined to cost accounting. But he assured me that for this position the administrative qualifications were at least as important as those in engineering. And, as a major incentive, he offered to give me the best and most experienced of our foremen. This latter concession relieved me of some worries concerning the technical know-how, and so I consented reluctantly to what for others would have been a chance in a lifetime. If I was hesitant, it was neither because of laziness nor apprehension, but due to the inner certainty that, as exalted as my new position might be, I wanted to get something different out of life. Yet fate put me there, at least for the time being, and so I did the best I could.

There was much on my shoulders since my name appeared in all the contracts and insurance documents as the person responsible for any accident, theft or other mishap - and anyone who ever got involved in building bridges knows how accident-prone this kind of business is. My construction sites included the roof of the famous Wiener Musikvereinshaus (where 36 years later I saw and heard Leonard Bernstein conducting Mozart's symphony No. 39), the huge transmission antenna of Radio Vienna (now ORF) on the Bisam-mountain, some sections of the Reichsbrücke (the major bridge of Vienna crossing the Danube - which, by the way, collapsed in the summer of 1976, but due to foundational shifts, and not due to our minor repairs on the upper part of the bridge), and a few less conspicuous sites. The rapport with my foreman was excellent, and thanks to him there were no technical or field problems whatsoever. Although there was much administrative work, everything went smoothly except for one thing: the fact that I had to visit regularly all those sites by foot, since no other means of transportation was available at the time. Even a bicycle would have been a tremendous blessing. Yet all this would have been bearable, had it not been for the nutritional problem. Food was extremely scarce, and practically everyone, including myself, was greatly undernourished. In consequence, after four months of running from one site to the other, I got so exhausted that the day came when I felt that I could no longer go on. Rescher generously offered me a month of leave, which I gratefully accepted but without any guaranty, on my part, to return to this job.

During that leave I began what I always wanted to do, to publish economic articles. At first I did so in business magazines. But my eye was on a higher goal: the Austrian Institute of Economic Research. This institute was founded in the early thirties by the famous Friedrich von Hayek (who in 1974 received the Nobel Prize in economics, and whom I met in May 1975 when both of us were in Berkeley for a brief visit); but shortly afterwards, the no less renowned, Oskar Morgenstern took over as director.¹⁰ During the Nazi occupation, the Institute was lead by Ernst

¹⁰ I always had difficulty understanding why Oskar Morgenstern - whose book with John von Neumann, *Theory of Games and Economic Behaviour* (Princeton, NJ: Princeton University Press, 1944/47) proved to be of such immense influence on modern economics and decision theory - never received the Nobel Prize. But neither did James Joyce, nor Marcel Proust, the two greatest and most influential literary figures of our

Wagemann, the director of the German Institute of Economic Research (Konjunkturforschung) and President of the Bureau of Statistics of the German Reich in Berlin. A university acquaintance of mine knew Franz Nemschak, the director newly appointed in 1945, and gave me a letter of introduction. Armed with this, I presented myself to Nemschak. The institute was then located in the building of the Vienna Stock Exchange (where no trading took place, neither during the war nor for several years afterwards). My good study records and the fact that I had some publications, as well as the fortunate circumstance of an opening, coincided in my favour. I got the position of research fellow as of November 1, 1945, and thus my scientific career began.

This was the first of several lucky breaks which fate had in store for me. The work, my colleagues, the office bedecked with Persian carpets, a fine library with Miss Morgenstern (the sister of Oskar M.) in charge of it, in short the entire atmosphere was ideal. I considered myself the most fortunate of persons. Soon I was put in charge of "foreign trade and international economics", and had to write the pertinent sections for our monthly Bulletin. Several weeks later, one of my former university colleagues, Hans Seidl contacted me, and asked me whether I would recommend him for a position at our institute. Having been aware of his brilliance, I unhesitatingly recommended him. However, the director did not immediately employ him. After some weeks of prodding on my part, Nemschak commissioned him, as an external collaborator, to write an economic study of the precarious housing and apartment market in Vienna. This study was so brilliantly executed that Hans was immediately hired and soon became editor of the Institute's bulletins. Years later he was made co-director, received an honorary Professor title, and finally succeeded Nemschak as director of the Institute, and later was chosen by Chancellor Kreisky to become State Secretary of Finance. After a relatively short tenure in this position, Hans Seidl became Director of the Institute for Higher Studies (IHS) - also called Ford Institute, which was founded with Ford Foundation "seed money" around 1964 by Oskar Morgenstern (with whom I had a long chat in this Institute in 1965). In 1987/88 (after my "emeritation" at UBC) Hans Seidl made me the offer (a renewable 4-year contract) to join him at the IHS, and head the Department of Business Administration. It was a most difficult decision for me to make, since so many memories tied me to this unique city. But in the end I decided to stay in Vancouver, to devote the rest of my life to research and writing, unencumbered by any administrative or other bureaucratic constraints. I did not regret this, and must confess that the last seven years or more, pursuing research on the

century, nor did those of the past century, Henrik Ibsen and Leo Tolstoy. The latter was nominated for the 1907 Nobel Prize, but was rejected in favour of Rudyard Kipling. Such gross misjudgments certainly shake one's trust in the ability of committees to make proper decisions. Yet it is not the "official recognition" but the actual deed that really matters. Indeed, the slighting of those towering figures by various awarding committees has become a recognition greater than the Nobel Prize itself, because it vividly illustrates how far ahead of their time these men actually were.

foundations of accounting, have been most satisfactory and enjoyable.

But to turn again to the Austrian Institute of Economic Research, I should point out that, besides Hayek, Morgenstern, and Seidl (whose orientation was, of course, much more toward applied research), it brought forth a series of further eminent persons. For example, another Institute colleague, Stephen Koren, became university professor in Innsbruck, and later Federal Minister of Finance (which in Austria is above State Secretary of Finance), and in 1978 became President of the National Bank of Austria - thus holding one of the most powerful economic positions, and definitely the most lucrative one, in the bureaucracy of Austria. Another former Institute member is my friend Peter Holzer, Professor emeritus (Accounting) of the University of Illinois, and now Professor at our *alma mater* in Vienna.

The economic and nutritional situation of Austria, however, remained dismal and continued to do so for a decade or more, until the termination of the Russian occupation in 1955. In the face of this rather hopeless situation I became quite restless in spite of my enjoyable job. Furthermore, I discovered that my fiancée and I were quite incompatible, and I had to break off our engagement. Soon afterwards a former girlfriend of mine returned to Vienna, and it did not take long we decided to get married, but this time it was the lady who changed her mind. Thus I was ripe for a new surrounding, and fate offered me the opportunity to obtain that.

In the summer of 1947 the YMCA of Switzerland invited me and some colleagues to a summer camp in the Engadin valley, not far from San Moritz. I told my mother, Hans Seidl, as well as some friends, that I intended to stay in Switzerland. Everyone laughed at me. Of course, who, at this time of want and misery, would not prefer to live in Switzerland rather than in Austria? But for a foreigner the difficulties of getting a job and permission to work in Switzerland were practically insurmountable. Yet the father of Edi Straub, a Swiss friend of mine, who owned a firm producing and installing central heating plants, had pity on me. He offered me - to the astonishment of all my friends, but also to the regret of my mother - a position as draughtsman until something more suitable would come up. And it lasted only a few weeks until I found, through the mediation of another friend, Emil Buechi, a position as an Instructor of Commerce at the Rosenberg College in the beautiful city of St. Gallen between Lake Constance and the Säntis Mountains, not too far from the Austrian border. Franz Nemschak in Vienna, having been annoyed about my leaving the Institute, remarked to Hans Seidl that I had traded in a pot of lentils for a most promising career - he would have been correct, had I stayed all my life at the Rosenberg College.

In retrospect, I do not repent a single job decision I ever made. Sometimes these decisions were difficult ones or dragged out for a long time. Yet I always knew what I wanted, and later, when I heard for the first time the expression "identity crisis", I had difficulty grasping its meaning. It seems the younger generations suffer considerably under this particular phenomenon, whereas I suffered more under the limitations of my physical as well as psychic energies, and thus was always forced to economize them in a most careful way. While in the fall my energies usually

peaked, in spring they were at their lowest point. These limitations, and a highly sensitive nature, dominated much of my life style and forced me to renounce many plans or projects which I otherwise would have undertaken. It is the reason why I was often reluctant to undertake administrative tasks which would have absorbed those limited resources of energy, leaving nothing for research, my prime interest and ultimate hobby. I always needed much time for rest and contemplation. But though I am working relatively slowly, I work fairly efficiently, since I am not much prone to dillydally. Originally, I envied all the colleagues who bristled with energy but, as time went on, I discovered that in several of my friends and colleagues (not at UBC, but in the wider sense) those energies were portents of what turned out to be the active phase of a serious illness that ultimately consumed much more energies than it produced - in several cases this even had tragic results. Considering such an alternative, I began to appreciate my own limitations and noticed that careful husbandry of my endowments can achieve more than having excessive energies wastefully employed. This is best expressed in the ancient wisdom of India:

You must learn what kind of work to do, what kind of work to avoid, and how to reach a state of calm detachment from your work....He who sees the inaction that is in action, and the action that is in inaction, is wise indeed. (Bhagawad-Gita, Section IV).

In Switzerland a new and exciting time began. I made many acquaintances and some lasting friendships, and everyone was most kind and hospitable to me: the Angehrns, Buechis, Liechtis, Naefs, Tschumpers, and others will remain unforgettable. In this oldest of living democracies, I had the opportunity to learn the true meaning of this term. Teaching too was a novel experience, although I had done some tutoring while at the engineering college in Vienna. The Rosenberg College offered, among other schooling, the English and German matriculation, the Swiss and French Baccalaureate, as well as a Commerce Diploma and preparation for the entrance exams to the University (Handelshochschule) of St. Gallen which still specializes in the Economic and Social Sciences. One of my former Rosenberg-students, Hans Siegwart, became professor and later Rector (President) at this university. Long after my leaving Switzerland I maintained contact with the University of St. Gallen where, in 1965/66, I was a Visiting Professor.¹¹

Since most students as well as instructors resided in the college, every student was given a so-called "godfather" for advice. As I was from Vienna, and Christian Strauss (a student at the college and the younger grandson of Richard Strauss, the famous composer) hailed from the same

¹¹ In business administration my contact was mainly with the Professors Emil Gsell, Wilhelm Hill (who later joined the University of Basel), Hans Siegwart, and Hans Ulrich. In economics it was with Professor Hans Bachmann who, around the mid-1950s seems to have been a prominent economic advisor of the Japanese government (besides his position at the Handelshochschule St. Gallen).

city, I was appointed to be his "godfather". In 1948 or 1949, it happened that Richard Strauss himself visited our college, and I was introduced to him. He inquired about my subject-matter, and when he heard "commerce", he became lively and most interested, emphasizing that business is at least as important as art - indeed, he himself was not only an operatic genius but also a very astute businessman making a fortune through his own music publishing house. Subsequently, I was invited through Christian to a performance of Elektra in Zürich (if I remember correctly, it even was the premier performance in this city) in the personal box of Richard Strauss, who sat behind me. And every time when the lights went on, he discreetly withdrew into the background to avoid any ovations. This performance, in the presence of its composer, was a unique experience. But I must confess, the full meaning and greatness of this music became clear to me only many years later, after I had seen and heard most of his operas many times over. What would life be without art, its inspirations and consolation? But can any other art give more solace and pleasure than music?

Beside my main regular job at the college, I gave evening courses in accounting and other subjects at the "MIGROS School",¹² and also worked as a consultant, accountant and auditor. In this connection there is one experience which I should like to share with the reader. One day I was auditing the books of a beauty parlour, and the owner proudly presented me with the financial statements drafted by his uncle. I noticed that the item "Owner's Equity" was on the asset side of the balance sheet. When I told the owner that this betokens that all his investment is gone and a good deal of his borrowed money too, he stared at me in disbelief. Finally, he confessed that he never bothered much about accounting but just took cash out of the till as long as there was anything in it. Since the figures continued to grow in the Owner's Equity Account (though on the wrong side), he deemed himself most prosperous. Yet in the end he seemed to be quite happy about my portentous news because, as he said, "now I don't have to pay any income tax".

It was at this time that I bought many books and delved deeper into philosophy. Above all, I was fascinated by Spinoza's *Ethics* and its axiomatic approach - which means neither that I was unaware of his one-sided rationalism nor that I would adopt it uncritically. Although I had been familiar for a long time with Euclidian geometry, I had never read Euclid's *Elements*, and thus axiomatization did not mean much to me. But the reading of Spinoza changed all this and opened my eyes - of course, at this time I had no thoughts that I myself would one day dabble in axiomatizing accounting. Yet it was not only Spinoza's method which fascinated me, but also his life, and his pantheistic world view with the duality of nature as creator and as creation (*natura naturans* and *natura naturata* - a view shared by Goethe and Einstein), as well as the profundity of his thoughts. It was also during this time that - inspired by a colleague of mine who happened to be a quite original painter - I resumed painting and, among other things, copied famous masters from Vermeer

¹² Belonging to the well-known philanthropist Gottfried Duttweiler's MIGROS conglomerate.

van Delft to Van Gogh and Gauguin. Another pastime of mine became photography, developing and enlarging my own pictures. Indeed, once I won a silver cup, as first prize, in a photo competition. Two further hobbies became tennis and skiing.

One of the great advantages of working in Switzerland was the earning of hard currency which enabled me to travel around Europe and beyond. I made fascinating trips; one across France (Paris, Normandy, Brittany, Avignon and the Riviera); another through Italy (Bolzano, Milan, Genoa, Florence, Assisi, Perugia, Rome - at a time when only a handful of tourists were to be found in such sites as the Sistine Chapel - Naples, Capri, and Venice); a third journey to Algiers, where I made an unforgettable journey into the Sahara with a caravan and on back of a full-blooded Arabian horse; also trips to Germany, Holland and, of course, many visits to Vienna. One of those visits to my mother became the most important one ever. There, I met a young lady whom I invited to Richard Strauss' *Der Rosenkavalier* (with Hilde Konetzny as Marschallin), the most Viennese of all operas. It was an enchanting evening. My companion was delicate and beautiful, with an aura of noble grace and gentleness. It was love at first sight, love for a lifetime, nay for eternity. She was my beloved Hermi, the major inspiration for my future life and work. We were married a year later in St. Gallen on April 12, 1952, and no one should wonder why on our wedding anniversaries music from the *Rosenkavalier* is obligato.

4. A NEW LIFE IN THE NEW WORLD

I lacked only four months to thirty, and it was time to find a position in which I did not have to apply every year to the authorities for a work-permit. So I emigrated a week after our wedding to Canada, and my wife followed three months later. In Montreal, Hermi and I both worked for over a year in the same office at the Prudential Assurance Co. of England; it was in the Actuarial Department (which, in a way, could be considered the cost accounting department of an insurance company); from there I later transferred to the Auditing Department. Evenings I began to assist teaching Chartered Accountants' courses at McGill University, where my main contact was Kenneth Byrd, an excellent teacher who decades later (after his retirement) visited us for a semester at UBC. This part-time activity reinforced my intention to return as soon as possible to academia. Indeed, I sent my *curriculum vitae* to every Canadian university then known to me. But it seemed that - in spite of excellent study records, several years of practice as an accountant and engineer, two years in a research position, and about five years of teaching experience - none of them seemed to want me. Yet one fateful day, when we returned from a movie, I found a note at our door asking me to phone Ian Flemmington in the Laurentian Hotel. He turned out to be the President of Mount Allison University (Mt.A.) and wanted to interview me as soon as possible. Although it was fairly late that evening, I took a taxi to the Laurentian Hotel (which no longer exists but was then situated opposite the majestic Sun Life Insurance Building) and presented myself. The interview was

thorough but most friendly, and when it was over, I practically had a university position in my pocket - this seems incredible today when everything on this continent is so bureaucratic, time consuming, and unnecessarily complicated. I learned that the position in economics, for which I originally applied, was already occupied, but that the university intended to open a new Department of Commerce, and that I was to head it. The crucial criteria were apparently not so much my European experience, but the fact that I taught part-time at McGill University and that my creed was Protestant (which, due to my affiliation with the YMCA, I had adopted six years before this meeting). The university belonged to the United Church of Canada, and Flemmington, who himself was a minister of the church, told me candidly that as a Catholic I would not have obtained this position¹³ - today such a hiring policy would hardly be imaginable. Although this was, and still is, a small university with only some 1200 students, I was perfectly satisfied and overjoyed about this lucky break. The rest of the night I studied in fascination the calendar of Mt.A., and was so excited that I could hardly find sleep.

Mount Allison University is in Sackville, N.B., on the border of Nova Scotia at the northernmost tip of the Bay of Fundy, famous for the highest tides in the world. We spent five very happy years in this place. There, I had the opportunity of building up and organizing a Commerce Department. Other faculty members of this department were Alden Leard and Wendell Meldrum.¹⁴ In the beginning my English was far from perfect and students as well as colleagues and superiors had to be most patient with me. The following incident gives evidence of this. Soon after my arrival in Sackville I was invited at the President's house (my wife was still in Montreal to settle the transport of our furniture). After dinner, when I was about to take my leave, I expressed my thanks to host and hostess with the following words: "thank you very much for your hostility". Everyone stared at me in horror until they broke out in unrestrained laughter, realizing that in all my "innocence" and ignorance of the word "hospitality", I took the phonetically next-best word, "hostility", which unfortunately meant the very opposite. Thus the people at Mt.A. and in Sackville in general, were very kind and friendly. The intimacy and great humanness of this place is best illustrated by another incident. Shortly after we brought my wife's mother to Canada (who became the ideal mother-in-law and who lived very happily for the next twenty four years in our home until she died at nearly ninety years¹⁵), President Flemmington phoned personally to invite her to a

¹³ Though at this time Mt.A. did have one Catholic faculty member. By coincidence she also was from Austria and happened to be the former governess of the children of Engelbert Dollfuß, the Chancellor of Austria who was assassinated by the Nazis in 1934 -- she then had to escape in 1938 with Mrs. Dollfuß and the children to England and later to Canada.

¹⁴ Before our arrival there was a "Secretarial School" at Mt.A. Its director was Alden Leard, who became an assistant professor in our new Commerce Department.

¹⁵ I also offered my own mother the possibility of living with us, but she could not bring herself to leave

reception in honour of a visit of Vincent Massey, then Governor General of Canada - show me another university where the president himself would take the trouble to invite your mother-in-law to meet the Governor General.

Furthermore, Mt.A. had an excellent Fine Arts Department as well as an Arts Association in which I took great interest, and which I headed as its President for several years until my departure from Sackville. We also had most friendly relations with its professors, Laurence Harris Jr. (the son of the renowned leader of the Group of Seven), and Alex Coleville, who was destined to become one of the leading artists of Canada and for many years Chancellor of Acadia University. Decades later I was invited by Alex and his wife Rhoda for a visit to their home in Wolfville, and in the Spring of 1990 we had a hearty reunion in Vancouver at an exhibit of some of Alex's paintings and sketches.

Although Mt.A. had several graduate programmes, in Business Administration we offered only the Bachelor of Commerce degree. I do not know what the situation is now, but I was much pleased when I learned that my former UBC colleague, Anthony Atkinson (who received the 1989 "CAAA Haim Falk Award for Distinguished Contribution to Accounting Thought" of the Canadian Academic Accounting Association, CAAA) joined for several years the Commerce Department of Mt.A, before returning to the University of Waterloo. As to myself, I taught not only accounting and other commerce subjects but also two subjects in the Economics Department: "International Trade" and "Development of Economic Thought". Meanwhile (i.e., in 1957), I also acquired the designation of "Certified Public Accountant" which ten years later was converted into that of a "Chartered Accountant". My first accounting article in English was "The Constellation of Accounting and Economics", published in 1956. Although I previously had publication experience, it was in German only. And since I did not have any formal schooling in English, my first English article was a big challenge which I might not have mastered, had it not been for the most generous and helpful advice of Frank P. Smith, then editor of *The Accounting Review* (TAR), who even placed this article on the very first pages of the October 1956 issue. The dedication, feeling of responsibility, and promptness which he, and years later Stephen Zeff, brought to their editorial jobs were magnificent (apart from Zeff's substantial contributions to accounting history). There is no comparison of these two editors with most (though not all) editors with which I had dealings during the last decade or so. It seems that the general decline in attitude and responsibility has also spread to this academic corner.

In this first English article (TAR 1956) I tried to address the need for a common basis of accounting and economics, and made suggestions (beyond those previously pronounced) how this could be accomplished. At this time J. P. Powelson, then with the International Monetary Fund (and author of such McGraw-Hill books as *Economic Accounting*, 1955, and *National Income and*

Vienna, so we visited her as often as possible.

Flow of Funds Accounting, 1960), as well as Raymond J. Chambers of the University of Sydney (Australia), were interested in similar endeavours. Both of them responded very favourably to the above mentioned article. Chambers wrote in his letter of December 12, 1957, on the former article as follows:

Your comments, and the affinity to which you refer and which I certainly sense, are very encouraging...You will understand, therefore, that I was very interested in your "Constellation" article...I hope you will not think me too presumptuous in suggesting that your approach and mine are complementary; I hope, too, that I am not oversimplifying if I suggest that your work concerns itself very much with accounting processes, whereas I am still only skirmishing with the concepts which those processes attempt to quantify.

I would certainly be happy to continue this correspondence as you suggest, and would be glad of your own critical observations on my occasional effusions.

It was thus that my somewhat intermittent, and later occasionally quite vehement, correspondence with Ray Chambers began. Powelson, if my recollection bears me out, I met first in 1956 at the Annual Meeting of the American Accounting Association (AAA) in Seattle, while Chambers and I did not meet personally before the 1960s when he visited Berkeley and was a guest at our table.

Also others, like William Schrader of Pennsylvania State University, responded to this paper as follows:

*I should like to compliment you for your writing "The Constellation of Accountancy and Economics" which I read with keen interest. It was so carefully reasoned that I wonder if it is part of a larger study. If it is, I hope that other parts will appear in **The Review**, or that I may otherwise encounter them...It would be pleasant if one of our conventions should permit me to meet you personally at some time.*

This "constellation article" was also widely quoted and discussed in a well known paper - "Accounting Rediscovered", *The Accounting Review* (April 1958), pp. 246-253 - by the eminent A.C. Littleton (with whom I carried on some friendly correspondence). Although the article in question had an unexpectedly good response (which was of utmost importance for encouraging such a novice as myself), my second English paper, "Towards a General and Axiomatic Foundation of Accountancy - With an Introduction to the Matrix Formulation of Accounting Systems", published in England (*Accounting Research*, October 1957, pp. 328-355), was much more influential and, above all, proved to be of far-reaching significance for my personal career. Powelson responded to a draft of this paper with the following words (in his letter of May 17, 1957):

*I am very enthusiastic over the work you have cut out for yourself in this manuscript (Towards a General and Axiomatic Foundation of Accountancy) and I would venture to say that this is only the beginning of some interesting research that you will no doubt carry on in subsequent publications...I found your explanations of matrix algebra to be extremely lucid and helpful. I was very much interested in your article on the "Constellation of Accountancy and Economics", appearing in the **Accounting Review** recently.*

And O. Aukrust, then Director of Research of the Central Bureau of Statistics of Norway, and author of *National Accounts* (1955) sent (in his letter of January 18, 1958) these words:

*I was much interested to notice your plea for an axiomatic foundation of accountancy in **Accounting Research**, October 1957...You might be interested to learn that some time ago I did some work along similar lines myself, on a much less general basis, in that I tried to work out an axiomatic foundation for the Norwegian national accounts. For your information I send you, under separate cover, a copy of the publication in question.*

An accounting professor publishing in *academic* journals was then something of a rarity in Canada. At this time most Canadian accounting academics published mainly in *professional* magazines. But only when I collected material for my essay on "Academic Accounting Research in Canada and Its Research Environment" (*Wako Keizai* February, 1990) did I become aware that during the entire 1950s Canadian professors published in *academic* accounting journals only 10 full-fledged articles of which I had authored three. Among these, the paper on axiomatization was crucial; without it, I would hardly have been invited as a Visiting Professor to Berkeley and later obtained a tenured Associate Professorship at the University of California.¹⁶ But this article could not have been written without another crucial event. This was my attending the Mathematical Summer Institute of Social Sciences, arranged with the help of the Ford Foundation at the University of Michigan, in Ann Arbor, during the summer of 1955 (after having made some interesting visits to New York and Washington, D.C.). It consisted of an intensive eight weeks of training in modern mathematical methods (preceded by an optional week of recapitulation in differential and integral calculus, which I also took).

This programme was rigorous and squeezed into nine weeks an amount of material that

¹⁶ See also Moonitz' *History of Accounting in Berkeley* (Berkeley, CA: Professional Accounting Program, 1986), p.56: "While there [at Mount Allison] he [Mattessich] published a penetrating article, 'Towards a General and Axiomatic Foundation of Accountancy' ... which brought him to the attention of many of us in North America".

used to be treated in two or more years of graduate studies: apart from higher calculus, it offered set theory and foundational mathematics, matrix algebra, linear and non-linear programming as well as probability theory. Nowadays such material is covered (on a lower level) in undergraduate courses, but in the early fifties this was hardly the case since its application to the social sciences was quite novel. There, I had the good fortune of having had such inspiring teachers as Gerald Debreu (who later became a colleague of mine in Berkeley, and who, in 1983, received the Nobel Prize in Economics), Harold W. Kuhn (Kuhn-Tucker Theorem), R. M. Thrall (who was the director of this programme), R.L. Davies and other prominent researchers in economics, mathematics as well as the social and administrative sciences. Having been made aware by Debreu of his effort to "axiomatize" value and equilibrium theory, and having been previously familiar with Leontief's input-output analysis, I subsequently conceived the following three programmatic ideas:

- (i) to create a more rigorous, analytical foundation of accounting by applying modern mathematics (mainly set-theory, matrix algebra, and model building) to it;
- (ii) to extract the basic assumptions of existing accounting systems; to formulate them axiomatically and derive some meaningful theorems;
- (iii) to generalize Leontief's specifically macro-oriented input-output matrix and to apply it to micro- and macro-accounting systems, and furthermore, to find practical applications in the area of budgeting and computerized simulation.

I soon realized that such an ambitious programme would require the writing of a couple of books - and this took years to accomplish. For the time being, I published the previously mentioned 1957 paper. Although I knew that I had an original piece at hand, the favourable response to this article took me pleasantly by surprise. It was widely quoted, translated into Spanish and Japanese as well as duplicated (first in mimeographed form at the University of Djakarta by Carl Devine, and finally reprinted in 1982 by Stephen Zeff in *The Accounting Postulates and Principles of the 1960s*, New York: Garland Publ., Inc., 1982). And, after some three decades or so, one still encounters occasional references to this paper.¹⁷

Among the *Canadian* professors who responded enthusiastically to those early papers, were

¹⁷ For example: see Yuji Ijiri *Momentum Accounting and Triple Entry Bookkeeping* (Sarasota, FA: AAA, 1989), B.E. Cushing "A Kuhnian Interpretation of the Historical Evolution of Accounting" *Accounting Historians Journal* (December 1989), pp.1-41, M.J.R. Gaffikin "Legacy of the Golden Age" *Abacus* (Spring 1988), pp. 16-36, Willett, "An Axiomatic Theory of Accounting Measurement", *Accounting and Business Research* (Spring, 1987), pp. 155-171, S.A. Leach "The Theory and Development of a Matrix-Based Accounting System" *Accounting and Business Research* (16/64, 1986), pp. 327-342, D.B. Thornton "R.V. Mattessich, *Modern Accounting Research: History, Survey and Guide*" (a Review Article) *Contemporary Accounting Research* (Fall 1985), pp. 124-142.

Gordon Huson (University of Western Ontario), Calvin Potter (McMaster University, later Concordia University), Gilbert R. Horne (University of Windsor), Kenneth F. Byrd (McGill University) and, above all, J.E. Smith (Queen's University, and later, University of Toronto), who in his letter of October 24, 1957 sent me such encouraging lines as these:

I have taken the time today to go through your paper ("Towards a General and Axiomatic Foundation of Accountancy") and have found the experience a rewarding one. I think you have put your case well, and have done a good deal for me in understanding the application of this idea of matrices (an unfamiliar, and therefore suspect, concept for a conservative accountant!). I am all in favour of liberalizing the subject of accounting and freeing it from the bonds of accounting for the individual firm which, I think, impose a needless restriction on the application of the discipline of accounting. Indeed, it seems to me that this is the very sort of thing that university accounting instructors ought to be concerned with - extending the boundaries of their subject. If all we do is teach a technique, the subject has I think a doubtful place in the Arts curriculum. A preoccupation with the firm alone introduces a bias in the emphasis we give our Commerce subjects which cuts much deeper, I fear, than many of us realize.

From the USA, my later friend, John T. Wheeler (Berkeley), sent me a letter at this time with the following "prophetic" words as his reaction to the 1957 axiomatization paper:

I believe that you have started on a very interesting approach to the theoretical formulation of accounting. The road is long and there will be many obstacles including both apathy and opposition. However, you will find supporters also...I am anxious to see you continue your work in this direction...the methodology is certainly appropriate and I would like to see the SSRC support further research in this direction...Good luck to you. I stand ready to help wherever I can.

Today, the major legacy of this article - apart from its axiomatization attempt and the application of matrix algebra - is the insight that the foundations of accounting need rigorous clarification. And although much has been done in this regard during the past three decades, this insight still holds. Too many experts deceive themselves by believing that the foundations of our discipline are firm and secure; and all too often they build the most sophisticated structures on unexplored and shaky ground (I have to say more about this in later chapters).

In the Summer of 1957 my wife and I visited England, Austria and Switzerland. In England I had my first chat, over tea, with William T. Baxter at the London School of Economics, and also paid a visit to Sewell Bray who, as founder and editor of *Accounting Research* (the precursor of *Accounting and Business Research*), was about to publish my 1957-article.

The visit to Vienna gave me an opportunity to meet Gottfried von Haberler (from Harvard University), whose famous book on *Prosperity and Depression* (1936/ 46) I had greatly admired since my studies in Vienna, and Gerhard Tintner, the renowned econometrician, who decades later became a colleague of mine at the University of Technology in Vienna. I also visited Leopold Illetschko and Willi Bouffier at my *alma mater*.

During our absence from Mt. A. an invitation arrived for a Visiting Professorship (for 1957/58) from the University of California in Berkeley. The letter was forwarded but did not reach me in Europe and literally crossed the Atlantic several times. By the time I received it in Sackville, it was too late to accept this flattering invitation. But I succeeded in arranging it for the subsequent academic year - contrary to Moonitz' *History of Accounting in Berkeley* (1986), p. 56, I arrived in Berkeley not in 1957 but in 1958, an error that probably occurred due to the original invitation for 1957. In 1958 I was approached by the University of the Punjab (Lahore) to act as a corresponding advisor in selecting an appropriate faculty member.

5. TENURE AT THE UNIVERSITY OF CALIFORNIA AT BERKELEY

In June 1958 we arrived in Berkeley, found an apartment directly bordering this beautiful campus, and a few days afterwards I began teaching at the Summer School, and later at the regular sessions. My original contacts with "Berkeley" were John Wheeler (who many years later visited our home in Vancouver), and Hector Arton, both of whom I met first at the AAA Meeting in Seattle (1956). But my closest contact soon became Maurice Moonitz, whom I regard to this very day as my mentor and true friend. Here was an upright man and first-rate scholar with a kind heart and a broad intellectual vision who was most sympathetic to my foundational research and axiomatization attempts. Indeed, he was sufficiently stimulated by it to apply himself the postulational approach a few years later when he took leave of absence for three years from Berkeley and accepted the position as Director of Accounting Research of the American Institute of Certified Public Accountants (AICPA). The result was his monograph on *The Basic Postulates of Accounting* (New York: AICPA, 1961) and a follow-up monograph - together with Bob Sprouse, another colleague of mine from Berkeley - *A Tentative Set of Broad Accounting Principles for Business Enterprises* (New York: AICPA, 1962) which was supposed to derive those principles from the postulates of the preceding monograph. One of the merits of these two AICPA publications was the broad attention it drew to the kind of foundational research which I felt to be my destiny. Furthermore, Maurice never failed to acknowledge the inspiration he received from my own efforts. As late as 1983 he wrote a letter (January 27th) to me reaffirming that "you and Chambers independently began exploring the problem of a comprehensive theory of accounting in the 1950s. Bob Sprouse and I came along a few years later, indebted to both of you in different ways, for showing us a new way to look at old problems; then many others came aboard". At any

rate, these two AICPA Accounting Research Studies, No. 1 (1961) and No. 3 (1962) drew a great amount of published and unpublished comments.¹⁸

But I am getting ahead of myself and should first report on our settling down in Berkeley. The late 1950s were a time of expansion for business schools. This was the time of the Cold War and competition between the USA and the USSR. The government of the former realized they could win the race in space and on earth only by pouring more funds into research and higher education. And this also affected business education (cf. the so-called Gordon Report, the Howard and Pierson Report). Carl Devine and I were invited simultaneously to Berkeley with the unannounced possibility of a tenure position. Carl and I both had philosophical leanings, and although he was more of a pragmatist while I tended, at this time, more towards neo-positivism, we became good friends. And in spite of the possibility that only one of us might obtain an offer, this competition never interfered with our friendship.

When the time came to negotiate, and I was approached by our Dean, Ewald Grether (who built up and headed this excellent School and Graduate School of Business Administration during some 25 years or so, and whom Kenneth Galbraith acknowledged as one of his teachers in economics¹⁹), I spontaneously expressed my willingness to accept a tenured *associate* professorship, in spite of the fact that my present position in Canada was that of full professor and department head. This strategy paid off, and I was accepted under those terms in spite of the fact that Carl Devine (who is some 11 or 12 years my senior) had a much better and more well-established scholarly reputation. In subsequent years Carl was employed by the University of California for its Indonesian project and taught several years at the University of Indonesia in Djakarta, but returned to Berkeley in 1964 for two years or so as a Visiting Professor before his permanent return to Florida. Years later he joined us at UBC for a year as Visiting Professor. In the 1980s several of us wrote letters to the AAA, strongly supporting Carl Devine's nomination for the Outstanding Educator's Award as well as that for the AICPA/AAA Award for Notable Contribution to Accounting Literature (he received both awards).

¹⁸ All or most of this material was edited by Stephen Zeff (*The Accounting Postulates and Principles Controversy*, Garland Publishing, Inc. New York: 1982) together with the AICPA-ARS Nos. 1 and 3, as well as such precursors as Chambers' "Detail for a Blueprint", *The Accounting Review*, April 1957, pp.206-215) and my paper "Towards a General and Axiomatic Foundation of Accountancy", *Accounting Research*, October 1957, pp.328-355). Towards the end of Zeff's book there is also a two-page Memo from myself to Maurice Moonitz (of December 30, 1963) commenting on Ray Chambers' critique of the Sprouse and Moonitz (1962) study which was presented at the Second Conference of the Australasian Association of University Teachers of Accounting (Canberra 1964).

¹⁹ J.K. Galbraith, *Economics, Peace and Laughter* ed. by A.D. Williams (Boston, MA: Houghton Mifflin Co., 1971), p. 349.

The accounting division at Berkeley has a prominent tradition that goes back to H. R. Hatfield who started at the University of California in 1904 and became full professor in 1909 when his book *Modern Accounting* was published.²⁰ During my tenure there the regular accounting faculty consisted of Len Doyle, Maurice Moonitz, Larry Vance, Bill Vatter and John Wheeler as full professors; Hector Anton and myself as associate professors; as well as Alan Cerf, Bob Sprouse, and George Staubus, as assistant professors, later (during my stay in Berkeley) joined by Wayne Boutell, Tom Dyckman and John Tracy.

Decades later I dedicated my book *Modern Accounting Research: History, Survey, and Guide* (Vancouver: Canada CGA-Research Foundation, 1984/89/92) to Maurice Moonitz and the Berkeley School of Accounting (listing 18 past or present faculty members and 26 former students). Nowhere did I learn more from some of my colleagues than in Berkeley, particularly from West Churchman. The students too were a great source of satisfaction; among those who subsequently made a special name for themselves in accounting were John Butterworth (who also was an assistant of mine, and much later, one of my best colleagues and friends at UBC), Jerry (G.A.) Feltham (who audited my doctoral seminar in Berkeley and whose doctoral seminar at UBC I audited precisely 20 years later), Jim Ohlson (who was an undergraduate student of mine), as well as such graduate students as Bill (W.J) Bruns, Lloyd Heath, Carol Inberg, Vernon Kam, Ted Mock, Ted Morehouse, and others. I must also mention two of my MBA students: Paul Zitlau (a former engineer) and Tom Schneider (a former physicist) who greatly helped me in writing the computer program for the simulation book (while I concentrated on the basic ideas, the model building and the writing of the text). In September 1963, a year or more after Schneider's and Zitlau's graduation, I presented in New York at the convention of The Institute of Management Science a paper on "Financial Planning and Control Through a Budgeting Computer Program". This gave me occasion to meet again Paul and Tom, who by this time had already found work in the eastern USA. It was our last opportunity to discuss the simulation book manuscript (and various problems that emerged in its course) before final publication.

For the first time I was in a high-powered university environment where stimulating and often hot discussions were a weekly and often daily routine. John Wheeler, Hector Anton and I became the accounting representatives in the newly founded Center of Management Science in which Fred Balderston, Austin Hogarth, Tom Marschak, Roy Radner, and, above all West Churchman played leading roles. The latter was a trained and most astute philosopher who did not deem it beneath his dignity to become a professor of business administration. Among his many books is *Prediction and Optimal Decision - Philosophical Issues of a Science of Value* (Englewood

²⁰ Moonitz' *History of Accounting in Berkeley* (Berkeley: U.C.-Professional Accounting Program, 1986) offers an excellent overview of the eminent scholars (their profiles and contributions to our discipline) who emanated from this one campus of the University of California.

Cliffs, N.J.: Prentice Hall, Inc., 1961) in which he confesses that "in a very general sense we are talking about managerial accounting in this book" (p. 67). Although West was always somewhat secluded and aloof, I greatly admired him and benefitted a lot from his discussions and publications on accounting, operations research and the holistic thinking of the systems approach. Indeed, it was his example that inspired me a decade later to introduce two doctoral seminars in Research Methodology in our faculty at UBC. These became my most favourite courses, and out of which my book *Instrumental Reasoning and Systems Methodology* (Dordrecht-Holland: D. Reidel Publications Co., 1978/80) emerged. I was particularly pleased that this book appeared in the prestigious Theory and Decision Series where a few years before Jacob Marschak's renowned two volumes *Economic Information, Decision, and Prediction*, 1974, were published, as well as the well known *Essays on Ethics* (1976) by John Harsanyi. The latter was a former colleague of mine from Berkeley who visited us once with his family in Vancouver; in 1994 he received (jointly with John Nash and Reinhard Selten) the Nobel Prize in Economics.

In addition to my accounting courses in Berkeley's School and Graduate School of Business Administration, I also was invited to teach on a permanent basis two courses²¹ in the Economics Department which then was headed by Andreas Papandreou who, decades later, was to become Prime Minister of Greece and, in 1993 or so, President of the European Union. Around 1960, I was invited by our Department of Economics in Berkeley to a joint dinner with the Economics Department of Stanford University. My neighbour at this dinner was a lively scholar with an electrifying personality, whose conversation I enjoyed enormously. He turned out to be Kenneth Arrow, whose *Social Choice and Individual Values*, 1951, I knew quite well, and who in 1972 shared with Sir John Hicks the Nobel Prize in Economics. During the early sixties I also heard three other (future) Nobel laureates talk in Berkeley but had no opportunity for a personal conversation. These were Wassily Leontief, Milton Friedman and Paul Samuelson - the latter I heard speaking a second time, decades later, at UBC. But why do I put so much emphasis on Nobel laureates? Because they are not only the "saints of science", but to listen or even talk to them has always been a fascinating experience.

As to my research activity during the early years in Berkeley, I published a series of articles in *The Accounting Review (TAR)*, *The California Management Review*, and some German journals. But I also got acquainted with computer simulation in general, and soon the idea popped into my mind of applying it to accounting for the purpose of simulating financial activities. It was obvious to me that this idea would enable accountants to revise their budgets not only at nominal costs but, above all, without any significant delays; it also would offer a host of other possibilities. In 1960 I presented a paper on "The Significance of Mathematics in the Accounting Curriculum" at the

²¹ A graduate seminar in National Income Analysis and an undergraduate course in Economic Accounting (the latter course I abandoned after a few years).

Annual Meeting of the AAA in Columbus (Ohio). And when my paper "Budgeting Models and System Simulation" was published (in TAR 1961), it was the very first publication in this particular area and became, together with my subsequent book, the foundation out of which decades later the financial spreadsheets arose. This has been acknowledged in various places, for example, by Dan Thornton, when he says: "Whether his [Mattessich's] predictions will come true or not is an empirical question for future researchers to resolve. I would venture a guess that a reader of Mattessich's "Budget Models and System Simulation" (1961) could scarcely have imagined, twenty years later, the many practitioners (and even undergraduate students!) using microcomputers and doing just what he advocated with "Lotus 1-2-3" - from Thornton's book review article: "Richard V. Mattessich (ed.) *Modern Accounting Research: History, Survey, and Guide*" in *Contemporary Accounting Research*, Fall 1985 p. 137; or by the former editor of UBC's Commerce Alumni journal, who expressed a similar thought:

*He [Mattessich] also pioneered financial spreadsheet analysis and simulation, and did the basic research on which such best selling microcomputer programmes, as Visi-Calc, Super-Calc, Lotus-1-2-3, etc., are based. His book, **Simulation of the Firm through a Budget Computer Program** (1964), contains the following basic ideas, decades later revived in those microcomputer programmes: the use of matrices or spreadsheets, the simulation of financial events, and most important, the support of individual figures by entire formulas behind each entry. (Hugh Legg, *Viewpoints*, Spring 1988, p.15).*

Among these ideas (of the 1961 paper and my subsequent simulation publications) the most important one is the use of mathematically formulated hypotheses behind the entries or individual cells in the matrix (spreadsheet) - in other words: an accounting entry need not consist of a numerical figure but may be an entire formula. Today - when these "formulas" appear either on the top or bottom of the spreadsheet screen - this idea seems to be quite self-evident. But in 1961 this was certainly not the case, as the resistance to my paper by some of my colleagues vividly illustrates. But it is an old wisdom that the most important new thoughts are self-evident ones, which other persons, being conditioned by their past routine, fail to see. Indeed, not all of my Berkeley colleagues saw the portentous possibilities of this article, and Len Doyle, a senior colleague of mine, even expressed his attitude towards this paper as "wholesale rejection". From this moment onwards, I was resolved to listen to others' objections, but with caution, and exercise as much self-criticism as possible; but once convinced of the potential of an idea, to remain adamant in the face of outside criticism. Never before did I become so clearly aware that there are many more clever people in academia than wise ones. I also realized that original ideas, sound judgment, and a broad vision were my best chances for succeeding in an academic environment. I have always been used to harvest the most precious nuggets of my thoughts between 4 and 6 in the morning, as an

intermezzo of what usually has been a long night of restful sleep. I certainly would *not* have been able to compete on the basis of exceptional training, a fabulous memory, outstanding technical know-how, or the relentless energies with which most of my colleagues were so well endowed.

My main research goal, however, was much more comprehensive than mere financial simulation and computerization of spread sheets. It focused on the writing of *Accounting and Analytical Methods - Measurement and Projection of Income and Wealth in the Micro- and Macro-Economy* (Homewood, IL: R.D. Irwin, 1964) to which the computer simulation book was only a companion volume. Only in this way I was able to put financial simulation and many other accounting notions on a firm theoretical basis. In 1960 I attended a two week computer seminar at our sister institution, the University of California at Los Angeles. The acting director of the Western Data Processing Center at UCLA was Clay Sprowls whom I showed the draft of my article on budget simulation that was to be published the following year. Sprowls became interested in this subject and wrote a relatively simple budget computer programme which was incorporated (I think as an Appendix) in J.F. Western's textbook *Managerial Investment* (New York: Rinehart and Winston, 1962). This programme I included (for the sake of comparison with my own, more detailed one) in Appendix 3 of *Simulation of the Firm Through a Budget Computer Program* (1964/79).

In December of 1961 I presented - at the invitation of Tulane University - a series of lectures in New Orleans, a city with a special ambiance. Afterwards Hermi and I proceeded to Mexico City - where among many other experiences, we enjoyed a concert conducted by Igor Stravinsky. Then we went to Cuernavaca, later to Taxco to celebrate "Posada", and finally to tropical Acapulco where we stayed for a few days before returning to Berkeley - again an unforgettable journey. During the subsequent summer the Second Congress of the International Association of Economics convened at the University of Vienna (September 1962), and before going there we made our first visit to Spain and saw Madrid, Seville and, above all, Granada with its impressive Alhambra. At this congress in Vienna there were no less than ten members present from the University of California. Since Clark Kerr, our president, also participated, I had the opportunity to get to know him personally. Although he was, officially, still a member of our School and Graduate School of Business Administration, as president he was so remote that I never had occasion to meet him in Berkeley (there, I only met the Chancellor of the Berkeley Campus, Glen Seaborg, Nobel laureate of Chemistry, 1951, who in 1961 became the powerful chairman of the U.S. Atomic Energy Commission). When we returned from Vienna by way of Frankfurt a.M., we ran into Andreas Papandreou at the airport, who just returned from his first assignment in Greece. We had joining seats on the airplane, and for many hours had a long chat about his, at this time, less than satisfactory experience in Greece.

Before writing my first two books I endeavoured to improve my mathematical background. A Ford Foundation Fellowship enabled me in 1961/62 to deepen my scanty mathematics by

auditing advanced courses in set-theory and the foundations of mathematics as well as probability theory and statistics. But at an age of almost 40 this was an arduous task, and I became painfully aware that the acquisition of serious mathematical knowledge and, even more so mathematical creativity, are a young man's business. Beside these studies, I worked on the two above-mentioned books which were completed in 1963 and published a year later. The idea behind *Accounting and Analytical Methods* was not so much to develop an exhaustive theory of accounting, than to clarify its foundation, and to sketch a framework for later development and interpretation. A further objective, as the title of the book implied, was to put accounting on a more rigorous mathematical basis, to integrate micro- and macro-accounting, and to make accounting more goal-oriented. Indeed, from about this time until today, mathematics has played a much more prominent role in our discipline - though I cannot claim to have anticipated the application of such forthcoming analytical avenues of accounting as information economics, agency-contract theory and related areas. It was left to John Butterworth, Jerry Feltham, Ted Mock (all of whom attended my doctoral seminar in the spring of 1965), Jim Ohlson and other young scholars, to pioneer in those important areas of analytical accounting. In October of 1962 I presented a paper at the International Conference for Accounting Education in Urbana, where I had a happy reunion with Peter Holzer and Hanns-Martin Schoenfeld, as well as Norton Bedford and Vernon Zimmerman, all of whom I knew from previous meetings. Later I was invited to give a paper on "Budgeting in the Computer Age" at the 13th Annual Meeting of the Budget Executives' Institute in the St. Francis Hotel of San Francisco. The following year, in 1964, I offered another paper at the AAA Meeting in Bloomington (Indiana).

Accounting and Analytical Methods had excellent reviews in such professional journals as *The Canadian Chartered Accountant* (May 1965), *The Federal Accountant* (Spring 1965), and *The Journal of Accountancy* (September 1965), pp. 91-93, which speaks of "significant pioneering effort to take an interdisciplinary approach to the application of economics, management sciences and EDP to the study of accounting", and reasserts that "a very significant contribution has been made in developing a framework for integrating the various quantitative measurement theories and methodologies". On the academic side, Neil Churchill (then of Carnegie Tech., and later of Harvard) wrote a lengthy review in one of the most prestigious journals, containing the following words:

What has been absent have been studies encompassing all of the problem areas or attempting to integrate one with another. Professor Mattessich's book is one of the first attempts at such an integration....The writing of such a book is one step toward an analytical foundation for accounting. The reading and subsequent discussions evoked through such a work are another - and in the long run, perhaps the more valuable - contribution. (Journal of Business, October 1966, pp. 538, 540).

And Yuji Ijiri's review in the *American Statistical Association Journal* (March 1966), pp. 292-293, says that "this book will present an excellent introduction to the new area into which accounting of the future should be developed...The author's broad familiarity with the literature in accounting as well as management science and economics has made, I believe, such a presentation very valuable". Also reviews in prestigious economic journals, like *Econometrica*, were quite favourable:

In every field of endeavour, there arises from time to time a need to co-ordinate new developments of related areas with the subject matter under investigation. To accomplish this task, a scholar must not only be fully conversant with all these fields; he must also possess the ability to integrate diverse factors into something new, thus forming the foundation for future research.

*This aim has been accomplished in the book under review as far as the field of accounting is concerned. Here it is envisaged as a **model for the quantitative description and projection of income and wealth which is based on eighteen assumptions** that are equally valid for micro-and macro- accounting systems. These assumptions are carefully elaborated and supplemented (in Appendix A) by a set-theoretical axiomatization. The interpretation of accounting on one side as a "quantitative description" enables the application of many conceptual insights of modern measurement theory; on the other side, as a "model" it facilitates the correlation with management science, linear programming and system simulation...*

*Without question, here is an outstanding study which goes a long way in meeting the prerequisites outlined earlier. It should be read carefully by everybody concerned with this important and highly complex field whose impact appears to be increasing all the time. (Ernest H. Weinwurm, *Econometrica*, April 1966, pp.526-527).*

A comprehensive (ca. 3600 words) review, thorough, and occasionally critical, referring to both volumes, by W.W. Cooper appeared in *The Accounting Review* (January 1966), pp. 201-205:

*Over the past decade or so, Mattessich's writings have come to occupy an increasingly influential position as part of the accounting literature. An example is his 1957 *Accounting Research* article which served as one source for recent AICPA publications directed toward an axiomatic approach to accounting postulates. Other equally important examples would include Mattessich's explorations in computer simulation approaches to business budgeting, his experiments in accounting uses of matrix algebra, and his inquiries into relations between management science and accounting with special reference to the education of accountants.*

Many of these writings are reproduced or extended in the present volume. Thus, in a sense, this book represents a culmination of this previous research and publication. It also represents a platform from which further contributions in this same vein may be essayed. The principles that guide this work seem to be directing Mattessich mainly toward the recent developments in fields like management science and economics, as these are first assessed by reference to a broad familiarity with the history of accounting in many countries and then brought to bear for their potential value to accounting theory and practice. Although these explorations are extended into many facets of accounting, it should be understood that the emphasis is usually on accounting at a fundamental level with other issues - e.g., Lifo, direct costing, etc. - being accorded only minor or secondary roles even when they appear to be of great contemporary interest.

In this book, as in his other work, Mattessich has perceived that conceptual clarification as well as increased power can be secured by a recourse to new methodologies....Evidently the author's execution is not up to what might even now be accomplished in terms of Mattessich's concepts and objectives. This is a criticism, but it should not be supposed that it is directed to the main ideas and the main course that Mattessich pursues. On the contrary, we recommend this book to all who are concerned with exploring, repairing, and extending ideas, practices, and principles that are fundamental to accounting. Such persons will find that this book is seminal and important.

Bill Cooper, who then was (and possibly still is) one of the best mathematicians among accountants, obviously caught the technical and other weaknesses of AAM; yet I found his review fair and most of his critical remarks justified. However, the situation was quite different with Ray Chambers' lengthy (ca. 7200 words) but scathing review article in the *Journal of Accounting Research* (Spring 1966), pp. 101-118. Only toward the end of this article are a few redeeming words, though even these are hardly undiluted:

Mattessich accepted a weighty brief. His acquaintance with the immediate and peripheral literature is extensive...."this book is plagued with all the shortcomings of a pioneering attempt" he warns the reader on his final page. This kind of modesty is commonly found only among those who, to their credit, have ventured beyond safe waters. The task of a synthesizer demands the temporary suspension of judgment over every field related to the synthesis, for only in such a fluid state is it likely that superficial distinctions will disappear and that critical differences will emerge. That the work has many vestiges of the author's commitment to a number of positions well-established in the literature is evidence of the difficulty of breaking with old habits, even when one sets out to be an iconoclast. Chambers (1966), pp.

117-118.

I would not be surprised if some of the reviews of my forthcoming book (*Critique of Accounting - Examining the Foundations and Normative Structure of an Applied Discipline*, Quorum Books, 1995) would come to similar conclusions, as this book is no less iconoclastic than was AAM thirty years before. But as to the "shortcomings" to which I referred (when writing this closing passage of AAM), I had rather those in mind to which Bill Cooper referred, but hardly the ones which Chambers deemed to be in this book. Chambers' review not only reflected much misunderstanding but also a diametrically opposite point of view towards foundational issues. For those reasons I felt obliged to write a reply ("Accounting and Analytical Methods: A Comment on Chambers' Review"), published in the *Journal of Accounting Research* (Spring 1967), pp. 119-123. This begins with the following paragraphs:

The great Sphinx of Giza is more than evidence of the achievements of ancient Egypt; its mutilated face is symbolic of man's reaction to novel or foreign ways. Superstition and intolerance tempted a Mameluke ruler to order the destruction of this unique cultural monument in 1380. The Mamelukes' cannon shots partially destroyed the nose and the beard of the Sphinx but imparted a new meaning to it. For nearly six centuries the mysterious smile of this recumbent figure bears witness to people's behaviour towards things they refuse to comprehend. For this, the Mamelukes may even be praised. Similarly Chambers ought to be praised for finding my book worth bombarding with eighteen pages of piercing criticism. The reader may judge whether the reviewer's targets were rightly chosen.

Chambers asserts:

*But one of the most noticeable features of the definition and assumptions [of AAM] is the absence of definitions for a full series of necessary terms....we find no definition of **asset**, **equity**, **liability**, **financial position** [our bolds types]; no references to markets as determinants of "values" to be assigned; no reference to prices as the sources of "original valuations. (Ch. R.A., p. 107).*

The reader may compare the above with this passage in AAM which defines owners' equity: "The property claims [separately defined] of all owners of an entity toward this entity is called the owners' equity." (AAM, p.36). Furthermore, a mathematical definition of "equity" is offered in the set-theoretical Appendix A (AAM, p. 448) whereby the close relationship between Chapter 2 and Appendix A is emphasized....The concept of asset is defined twice, once under "Economic Objects"...The second time, the AICPA definition is repeated and accepted....A mathematical definition of "debt claim" is offered in Appendix A on p. 449 and the

definition of the AICPA's definition of "liability" is repeated on p. 286 of AAM. The term "financial position" is to be found under "Financial statements,"....A mathematical definition of "accounting statements" is given on p.450 of Appendix A. Reference to market value is made on pp. 164-183, 219-20, 224, and 225....Passages referring directly to the market as the determinant of value are found on pp. 145, 150-51....[Footnotes omitted]. Mattessich (1967), pp.119-120.

Apart from those glaring discrepancies, a complex work like AAM, obviously, can not be fully grasped at a first reading. And only after having seen this review, did I become aware that some accountants were not willing or able to grasp what I was trying to do. I will say more about this entire controversy in Chapter 6, which is concerned with the international reaction to and consequence of AAM and its companion volume. But in general AAM was frequently quoted; and in countries of the English tongue it was widely used in graduate courses and doctoral seminars. It certainly received much wider attention than its companion volume, though the latter must be considered an indispensable part of AAM. Indeed, from a *practical* point of view, the budget simulation book may, ultimately, have had more far-reaching consequences.

As to our nine years' abode in Berkeley, we immensely enjoyed the Bay area, which then was at its best. As soon as my permanent employment was arranged, we found a delightful California-style home, which we rented for more than eight years (on the corner of Spruce Street and Eunice, two blocks west of Berkeley's Rose Garden). The entire San Francisco Bay area and California in general then enjoyed great prosperity. We were so enthusiastic about it that, with the help of my wife, I shot two feature-length 16 mm films ("White City at the Golden Gate" and "California") which I later presented at the Free University of Berlin, at the University of St. Gallen and other places. We made several trips to the Los Angeles area where we visited a distant relative of mine and her husband. In Berkeley we had a fine circle of friends with whom we met frequently in a coffee house on Telegraph Street (the "Quartier Latin of Berkeley") or in the home of some of us.²² Other friends were Edward Feigenbaum and his wife, with both of whom we share an intense interest in classical music. Ed went in 1965 to Stanford University where he became an eminent scholar in artificial intelligence and the pioneer of expert systems. Indeed, another advantage of Berkeley was the vicinity of Stanford University with which we had close contact. My long-standing friendship with Yuji Ijiri, who was then an assistant professor at Stanford, stems from the early 1960s.

²² To this group belonged colleagues from different areas (Erika and Wulf Kunkel, who later became the director of Berkeley's Plasma Research Center - and both of whom visited our home in Vancouver in the 1970s - Mrs. and Harvey Leibenstein, from economics, who later went to Harvard University, Helen and Mike Conant, lawyer from Business Administration, who also visited us in Vancouver, and above all, Naomi and Tillo Kuhn, also from Business Administration, who became our closest friends).

The cultural environment of Berkeley too was much to our liking. The many performances at the San Francisco Opera House, and the opera, theatre plays and concerts in Berkeley's open air Greek Theatre and Hertz Hall will remain with us as unforgettable experiences. Yet there always is a fly in the ointment, and tensions arose with one of my colleagues, notorious for his aggressive behaviour. And when he was promoted to full professor while I was not (in spite of me having had the support of such eminent scholars as Moonitz, Churchman, Grether and others), I resolved to resign from the University of California. In this instance, I felt that seniority and politicking at the university level triumphed over originality.²³ Indeed, Mrs. Grether, the dean's wife, who in her kindness, wanted to give me valuable advice, once remarked how important it is to be active in the Faculty Club. She then closed with the words: "because it is there where your career is being made". My frank, or perhaps fresh, answer was "if this is the case, then there is something fundamentally wrong with the system". A lady of lesser stature would have taken offence to my response, but she understood very well what I meant, and had all the more respect for my courageous stand. The opportunity to hand in my resignation came during my sabbatical leave to Germany and Switzerland. Many colleagues wondered how one could give up a tenured position at such a renowned university. But in the end it is the reputation of the individual scholar, and not that of his university, which counts - or at least ought to count. The crucial criterion was to pursue my own ideas in peace, unmolested by jealousies and academic intrigues. For this very reason, I also abandoned later two positions in Europe, and ultimately remained faithful to the University of British Columbia where I found the ideal collegiate atmosphere.

In 1963 or 1964, the Annual AAA Meeting was held at Stanford University but organized jointly by their accounting division as well as ours at Berkeley. Oswald Nielson (Stanford) and Larry Vance (Berkeley) were the main organizers, but we all had to pitch in. It was an interesting and exciting meeting at which I had the opportunity to talk to the renowned Leonard Spacek, long-time managing partner of Arthur Anderson & Co. - a public accounting firm which I have always held to be one of the most progressive in the business. Sixteen years later I had the honour of holding the distinguished Arthur Anderson & Co. Alumni Chair at UBC. In 1964 Erwin Grochla from the University of Cologne (who later created my connection to the Ruhr University) visited us in Berkeley. Soon afterwards, I served as a member of the "Committee for Courses on Electronic Data Processing" of the AAA.

²³ As I was told, the School of Business Administration recommended twice my promotion to full professor, but, apparently, both times the university review board turned me down "for budgetary reasons". Since I have always done "my own thing" (even long before the hippy generation), I probably was too much of an individualist for some of my colleagues. However, as Gerald Debreu once said to me, if you can't be an individualist at a university, where can you be one? Yet all this ultimately turned out to be a blessing in disguise, since otherwise I would not have left for Vancouver where we have spent the longest and happiest time of our lives.

For the summer of 1965 I was invited by Erich Kosiol to be Visiting Professor at the Free University Berlin; and during the subsequent academic year I was Visiting Professor at the University of St. Gallen. The rest of the summer of 1965 we spent in Vienna visiting my mother. At this occasion I presented a paper on "Simulation Models for Budgeting" at the University of Vienna at the Meeting of The Institute of Management Science. There, I met Norbert Thumb of the University of Technology of Vienna, who ten years later was involved in my joining this university. I again visited Leopold Illetschko (of my *alma mater*), who introduced two of his assistants to me. The first was Peter Swoboda, who ultimately became Austria's leading professor of finance at the University of Graz, and 19 years later, as a member of the Austrian Academy of Sciences, he, together with Fritz Paschke (former President of the University of Technology in Vienna), recommended me for membership in this august body. The other of Illetschko's assistants was Herbert Kraus who also became a professor of the University of Graz and was later appointed director of the Austrian Academy of Management. From Vienna we travelled to Yugoslavia, visited my cousin Erwin and his family, then proceeded to Dubrovnik where we spent some time, saw many interesting places and, on our way back to Switzerland, visited my uncle and his wife in Trieste. While in St. Gallen, I received on January 27th, 1966 a telephone call with the infinitely sad news that my dear mother suddenly and quite unexpectedly had died - her grievous life and silent heroism would be worthy of a "Greek tragedy". We rushed to Vienna for the funeral, and my wife stayed on for some weeks while I returned to my duties at the University of St. Gallen.

In May of 1966 I received a letter (dated May 9, 1966) from the University of Oklahoma, inquiring whether I would be interested in the Deanship of the College of Business Administration of this university. Due to the fact that I just accepted a Chair at the University of Bochum, I declined on June 7, 1966.

6. INTERNATIONAL REACTION TO AND INFLUENCE OF ACCOUNTING AND ANALYTICAL METHODS (AAM)

Before talking about further events, let me say some additional words about AAM, the general background, and its companion volume. It is an old adage that the revolutionaries of one age are considered to be the reactionaries of the subsequent one. Although I still feel a revolutionary fervour in my veins, I have a hunch that many younger accountants, particularly the proponents of "positive accounting theory", might see me as the incarnation of reaction. There may be several reasons for this. One of them is my conviction that the very nature of many accounting issues is still so little understood that methodological, epistemological, and even ontological research have yet much to contribute to accounting.²⁴ To my mind, such philosophic concerns are

²⁴ For example, I consider the phenomena of *value* and *valuation* in economics and accounting almost as complex as the phenomenon of *time* in physics - and just as space-time is *multi-dimensional*, so is value. Let

no less important in accounting than the kind of empirical research presently carried out. While I have high regard for empirical research - the importance of which I have emphasized repeatedly (e.g., in AAM, pp. 10-12 and Chapter 12) - my adversaries seem to regard philosophical research as the epitome of everything bad and *obsolete* in academic accounting. Positive accounting theorists have embossed a psychologically most powerful word on their banner which makes them behave as though everything beyond PAT were *negative*. They certainly have cleverly chosen this effective, but ultimately explosive, terminology. It relegates such a strongly policy-oriented discipline as accounting to the pure sciences. This is not likely to be taken serious by other disciplines nor does it correspond to the realities of life. What PAT pursues is an "economics and sociology of accounting", but not accounting proper as an applied science. And as to philosophy, not even such a pure and well-established science as physics can afford to disregard this subject. How much more difficult would it be to do so for a young and, above all, purpose-oriented discipline which constantly is entangled in value judgments.

The other reason for the view expressed by "positive theorists" may possibly lie in their limited understanding of the evolution of accounting research. Perhaps only those who have personally experienced the break with the previous, predominantly descriptive approach, realize what a fundamental change occurred in accounting research in the 1950s and early 1960s. And I am happy to have had the good luck of having actively participated in this movement. It may well take another generation before the majority of accountants realize how exciting and critical the period from the late fifties to the seventies was for our discipline. No one should forget that every generation stands on the shoulders of the preceding one. But often the epigones refuse to honour the debt they owe to their predecessors. The following quote from Mouck not only touches on this insight but also hints at the harmful methodological intolerance of the new trend:

The scientific ideals introduced into accounting by Chambers, Mattessich, Devine and Sterling in the 1960s have been adopted by subsequent academic accountants who are less familiar (or in many cases, totally unfamiliar) with philosophy of science. This has resulted in accounting research that is largely characterized by a scientific attitude: "On the whole, our working image of science can be reduced to a single narrowly positivistic principle: truth is to be found only through application of empirical methods" [Subotnik, p. 97]....In short, what started as a move toward scientific accounting research, has largely degenerated to scientism and dogmatism. Many of the most prominent accounting researchers have

us not forget that it took many hundreds of years before such philosophically-oriented analytical scientists as Albert Einstein, Stephen Hawking (see his book *A Brief History of Time*, New York: Bantam, 1988) and others discovered elegant and surprising solutions to the problem of the space-time continuum.

*developed an attitude that theirs is the only legitimate form of research.*²⁵

The late fifties and sixties were concerned with conceptual clarification and, above all, the rigorous formulation of the very foundation on which accounting rests. For me it was mainly methodological and analytical research, and I have never claimed to be an *empirical* scholar. But ours was the preparatory phase for the empirical research that was to follow in the seventies and eighties. Indeed, the attempts of formulating accounting theory by means of a general and axiomatic framework was well accepted in mainstream accounting until the late 1970s. It still continues, though more on the periphery.²⁶ But what may be even more important, the early analytical research created the basis and an environment in which the somewhat different (often information economics oriented) analytical research of such scholars as Atkinson, Butterworth, Demski and Feltham, Hakansson, Ohlson, W.R. Scott and others have carried out, and, with the exception of Butterworth who unfortunately died in 1984, are still continuing.

The hallmark of AAM lies in its underlying questions. I was not so much interested in asking "what are the scientific laws of business accounting?" than in examining which assumptions have to be accepted before any accounting, whether it is micro- or macro-accounting, can be done. It also shows that these basic assumptions require specific purpose-oriented *interpretations*²⁷ - however, the latter were not developed in AAM, only illustrated as, for example, in budget simulation. But such an attitude does not necessarily mean to accept the status quo. The interpretations (and even the basic assumptions) are open to revision according to the information needs of future developments of accounting.²⁸

²⁵ From Tom Mouck, "The Irony of 'The Golden Age' of Accounting Methodology", *The Accounting Historians Journal* (December, 1989), pp. 96-97. The reference inside this quote refers to Dan Subotnik, "Wisdom or Widgets: Wither the School of 'Business'?" *Abacus* (24/2, 1988), pp. 95-106.

²⁶ For example: Willett, R.J., "An Axiomatic Theory of Accounting Measurement, Parts I and II", *Accounting and Business Research* (Spring 1987), pp. 155-171 and (Winter, 1988), pp. 79-91, respectively; *idem*. "The Measurement of Theoretic and Statistical Foundations of the Transaction Theory of Accounting Numbers" (Aberystwyth: University College of Wales, Working Paper, 1989). And Balzer, Wolfgang and Richard Mattessich, "The Axiomatic Basis of Accounting: A Structuralist Reconstruction", *Theory and Decision* (30, 1991), pp. 213-243. For more details on other publications of accounting axiomatization, see the latter paper.

²⁷ My later paper "Methodological Preconditions and Problems of a General Theory of Accounting", *The Accounting Research* (July, 1972), pp. 469-487, examining the question of interpretation more closely, received in 1973 the international "Award for Notable Contribution to the Accounting Literature" of the American Institute of Certified Public Accountants conjointly with the American Accounting Association.

²⁸ The following paragraphs are partly based on my article "On the Evolution of Theory Construction in Accounting: A Personal Account" *Accounting and Business Research* Vol. 10 (Special Accounting History

But to return to Chambers (1966) review article of AAM (see preceding chapter), he also claimed (on p. 103) that "Mattessich's definition [of accounting] lacks the exigencies of men." For me those exigencies rest in the *alternative* norms, value judgments and purposes for which my theory provided a place - in contrast to other accounting theories which offered no such range of alternatives. Chambers (1966), p.104, also argued that: "In his [Mattessich's] attempt to avoid every suspicion of teleological argument, Mattessich appears to have deliberately avoided laying a foundation for much of his subsequent discussion of purposes and their pursuits." But I have never denied (or attempted to do so) that my approach is directed toward teleological arguments. On the contrary, the very essence of my methodology is teleological (i.e., purpose-oriented). This is precisely what the *placeholder* assumptions, *pragmatic* hypotheses and subsequent interpretations were all about. Yet the distinction between scientific hypotheses and pragmatic (or instrumental) hypotheses, so crucial for understanding my approach, was called "empty" by Chambers (1966), p.115. However, it is striking that this particular topic - further elaborated and analysed in my paper "Methodological Preconditions and Problems of a General Theory of Accounting" (TAR, July 1972, pp. 469-487) - received the 1972 Accounting Literature Award previously mentioned.

Furthermore, Chambers' review article contains an entire section entitled "Anti-Legalism", accusing me of practicing it. But I merely pleaded in favour of a separate accounting model for legalistic issues, just as I pleaded for separate models of managerial issues, financial issues, and so on. Is this anti-legalism? It is interesting to note that, twenty-six years later, Simon Archer (in his paper "On the Methodology of a Conceptual Framework for Financial Accounting - Part I: An Historical and Jurisprudential Analysis" in *Accounting, Business and Financial History*, September 1992, on p. 205) seems to claim the opposite of Chambers' assertion; namely that my approach "has affinities with the insistence of Hans Kelsen (a leading figure in analytical jurisprudence) on the logical need for a 'basic norm' in any legal system from which the system's normative or purposive properties are ultimately derivable...". However, the roots of the entire controversy may lie much deeper, as the following passages (from my reply, as well as Chambers' review) may indicate: Finally a word on valuation. Chambers raises the following objections:

Difficulties begin when it is asserted that these valuations 'are based on a preference order among those objects'; for it is hard to imagine how a preference ordering can yield a value in a monetary scale..." (Ch. R.A., p.110).

This passage leaves me stunned. Is it possible that Professor Chambers does not

Issue, 1980) pp. 158-173: reprinted in *Modern Accounting Research: History, Survey, and Guide* ed. by R. Mattessich (Vancouver, B.C.: Canadian Certified General Accountants Research Foundation, 1984/89), pp. 27-45.

*realize what is **ultimately** meant if a commodity is evaluated at, let us say, \$ 500? At bottom it means that in a specific context the evaluator **prefers** this asset over another evaluated at less than \$ 500, but **prefers** a third one at more than \$ 500 over the first asset. (Mattessich 1967, p.123).*

Chambers even criticizes my definition of income (as "the flow of goods and services, within a well-defined period between the production side and the consumption side of an entity", p. 21 of AAM) with the following words: "First, it seems difficult to envisage two 'sides' of an entity, such that a flow of goods and services between them can constitute income in any ordinary sense. Income surely means inflow, not crossflow" Chambers (1966), p.106. Only somebody who did not want to accept that micro-economic entities have similar circular flows (though supplemented by additional inflows and outflows) as have macro-economic entities, could have spoken like that. In national income accounting, the measurement of income on three different thresholds (production, distribution and consumption) has been self-evident for many decades. And only the conservative outlook of some accountants (who deny the deep connection between micro- and macro-accounting) prevents them from seeing that something very similar happens in business accounting. It also should be evident that every flow across a certain threshold is an outflow on one side and an inflow on the other. Thus there is no absence of any inflow; on the contrary, production activity (in the widest sense, including services, etc.) is the very source of income, where it also is measured first. And Chambers says on the same page (p. 106) that my definition "does not refer to utilities, [and] to gains in monetary terms". But the goods and services flowing from the production (e.g., Work in Process) and consumption sectors ultimately represent utilities, and the outflow from the distribution sector usually engenders monetary gains.

And as to the argument that only people have *objectives*, while devices have *functions* (a point which Chambers raises again on p. 11 of his paper on "Positive Accounting Theory and the PA Cult" in *Abacus*, 29/1, 1993, 1-26), one must not overlook that the functions of most instruments (including accounting devices) are designed by persons with specific objectives in mind, hence are purpose-oriented. The next quote from Chambers (1966), p. 113, reveals probably the most fundamental difference between our views: "Mattessich comes to market price by way of the Edwards and Bell and the Sprouse and Moonitz study. But true to his disbelief in the possibility of there being one neutral and pertinent monetary measure, market price appears to rank equally with other traditional formulae." Here Chambers is perfectly correct. While he believes in the absolute *neutrality* of the current market price, the latter is for me no more than a measure to be assigned to one of many possible values. In some instances the current market price is the right measure, in others it is not. And, to my mind, it is one of the major but also most difficult tasks of academic accounting to find out which model fits which situation. One might even consider regarding the value notion as a multi-dimensional concept. Then the current market price would be

a measure of one of these dimensions but not of the others. In a certain way, the history of the economic sciences has been a continuing struggle between different theories of value. Be it between the labour value theory and the marginal theory in economics or, in accounting, between the acquisition cost theory, vs. current market value theory, vs. present value theory, etc. Is it not time to put a stop to these fruitless controversies, and realize that value is a multi-dimensional concept; one that needs a proper interpretation which can best be given by the context and purpose for which a specific value (or aspect of value) is to be assigned? There exists plenty of evidence that by the early 1980s a majority of accountants, academic or otherwise, did already lean towards such a pragmatic solution. As far as the problem of capital maintenance, for example, is concerned, this fact manifested itself in a well-known symposium on this topic (reprinted in *Maintenance of Capital: Financial Versus Physical Capital*, edited by Robert R. Sterling and Kenneth W. Lemke, 1982. Houston, TX: Scholars Book Co., 1982). The summary ("Financial Versus Physical Capital" by Lemke 1982, pp. 287-323) of this book, offers the following results:

If one had to categorize the Symposium authors and discussants, Sterling, Lee, Carsberg and probably Milburn would have to be described as unequivocal proponents of financial capital maintenance. Skinner and Ma come down more cautiously on the side of financial capital maintenance....For Skinner, financial capital maintenance is a pragmatic choice. In terms of an "ideal," he is more in sympathy with Livingstone-Weil, Revsine and Scott, who take a catholic type of stance - a "different concepts for different purposes" approach. Revsine, however, is unequivocal in his advocacy of physical capital maintenance for macro-economic decisions. Hanna and Butterworth might best be described as neutrals - they want to see more research done before a choice is made. However, Hanna does favour financial capital maintenance in conjunction with his expanded funds-flow statement, and, as we shall see, Butterworth's agency theory approach also seems to point in direction of financial capital maintenance. (Lemke 1982: 288-289).

Only about a third of the conference participants still clung to a single, "correct" capital maintenance method, while the others favoured a more or less pragmatic (or if you like, conditional-normative) solution. Should anyone object to this as a misreading, we ask the reader to look for himself into this excellent book and compare pertinent passages found by Butterworth, Hanna, Livingstone and Weil, Revsine, Skinner, and others.

Chambers and I also had very different notions of what the nature of accounting is or ought to be. Apart from the fact that he wanted budgeting, macro-accounting and similar issues to be banned from our discipline, he approached foundational issues from what one might regard a "behavioural" point of view, while I tried to clarify them by logical and mathematical rigour. But

when he believed that my approach is empty formalism without empirical substance, he was very much mistaken. What I was trying to induce, were the structures behind such *empirical* phenomena as economic transactions. And the best and most general conceptual representation of these structures was, and still is, by mathematical means. That such endeavours were not in vain, proved itself best on the practical side; as already hinted at, the simulation of budgeting and accounting matrix models led ultimately to a series of best-selling spread-sheet computer simulation models.

Other evidence from accounting practice that AAM has been seminal (as Cooper predicted in his review - see preceding chapter), can be found in the long-standing search of the Financial Accounting Standards Board (FASB) for a conceptual framework of accounting, as well as in the FASB's temporary (ca. five years) "legislation" for supplementary income statements with price-level adjusted values. Similar regulations were temporarily introduced in the UK and Canada. There can be little doubt that such regulations expressed the need of multiple accounting models. After all, the current entry-value models were *supplementary* to the traditional acquisition cost model, and Section 4510 of the CICA Handbook even offered for Canadian firms three alternative models (depending on specific needs) for the supplementary income statement. The fact that these quasi-legislations were later abandoned (in all these countries) under conservative trends and governments, is hardly a refutation of my methodology and theory. First, because such supplementary models are still *recommended* by the pertinent accounting bodies; and second, I never pleaded in AAM (or elsewhere) for legislating such a multi-model approach. On the contrary, I have always emphasized that accounting must offer models to choose from but not to be imposed (except for legalistic purposes, e.g., taxation). This is perhaps best formulated in my forthcoming *Critique of Accounting* (Chapter 10):

*The hallmark of any conditional-normative theory is the inclusion of the objective, as well as the instrumental hypotheses, **within** its theoretical frame. This makes the pertinent theory "conditional" in so far as the norms, to be **incorporated** and clearly revealed, constitute the conditions under which such a theory is valid. Academic accounting - like engineering, medicine, law, etc. - is obliged to provide a range of tools for practitioners to choose from, depending on preconceived and actual needs. The user rarely possesses the inferential means of connecting his own goal with the scientific propositions that enable him to attain his objective in an optimal or satisfactory way. One may say, **that actual practice expects the researchers at professional schools to offer different sets of ready-made tools for different purposes.** And rightly so, because it would be most inefficient to force practitioners to forge for themselves those tools from the material supplied by positive accounting theory. If this holds for medicine, engineering and other applied sciences, it holds no less for accounting. (Mattessich, in print).*

However, Chambers' review and criticism of AAM (in the *Journal of Accounting Research*, Spring 1966) can be much better understood in terms of his own, promiscuous postulational attempt: *Accounting, Evaluation and Economic Behaviour* (Chambers, 1966/75). Whereas I tried to infer inductively the basic assumptions from various extant micro- and macro-accounting systems (taking into consideration different preferences manifested by users and producers of those information systems) - thus respecting different needs and requirements - Chambers started from the preconceived objective that the major legitimate task of accounting is the representation of current *market prices* in financial reports and statements. Furthermore, according to Chambers, value as an expectation, cannot be measurement ('What is past and present may be able to be measured, but what is future can only be evaluated.' Chambers, 1966/ 75, p. 42). For me, however, valuation is ultimately based on the measurement of preferences and expectations. And nobody can deny that having a preference or an expectation are both *present*, not future, states of mind, even if these expectations concern anticipated events. Thus I regard the current market exit value merely as one among several alternatives, and not, like Chambers, as something absolute and sacrosanct.

Despite the attempt of several accounting history books to present the foundational research of Chambers and myself under a common label,²⁹ there are many more aspects of divergence between his views and mine (e.g., his exclusion versus my inclusion of budgeting and macro-accounting systems in the 'general' accounting theory), but the following are the most decisive: Chambers (1966/75) presents a vast number of postulates *and* definitions without clearly indicating which are which. The processes of inductive inferences leading to the postulates, and of the deductive inferences, leading to the many theorems thereby presented, cannot be traced. My own attempts to prove several of *his* theorems on the basis of the reference numbers given as hints by Chambers, were a complete failure - but this may be due to my own limitations. Furthermore, Chambers' theory is not an uninterpreted or semi-interpreted calculus. Theory and interpretation are completely fused, hence the range of application is by necessity fairly limited.

The third comprehensive book containing a major postulational attempt in accounting is Ijiri's *The Foundations of Accounting Measurement* (1967/78). He is the youngest of the three of us, and has thus had the benefit of the best mathematical training, well reflected in his work. The hallmark of Ijiri's theory is its orientation towards traditional *acquisition cost valuation* and his reliance on *valuation axioms* (control, quantities, and exchange) from which he deduces five simple valuation rules (extended to eight in Ijiri's new version: *Theory of Accounting Measurement*, 1975). Apart from the many valuable contributions made by Ijiri, I believe that his axiomatic basis is mainly limited to valuation aspects. Indeed, in this improved version he openly admits this by appropriately calling his postulational approach in Chapter 5 "The Axiomatic Structure of

²⁹ See for example Michael Chatfield, *A History of Accounting Thought*, 1st.ed., 1974, pp. 297-298, and Gary J. Previts and Barbara D. Merino, *A History of Accounting in America*, 1979, pp. 292-293.

Historical Cost Valuation". Nevertheless, from the point of view of theory construction, his excellent work is coherent and broad enough to be considered one of the most impressive contemporary accounting theories. Indeed, Ijiri's numerous publications and active participation in the American Accounting Association have had much greater influence on academic accounting in America and possibly elsewhere than had my own efforts. But, to my mind, his most original contribution is his *Momentum Accounting and Triple-Entry Bookkeeping* (AAA 1989).

Although AAM offered, among others, some methodological insights, a systematic *interpretation* of the general accounting theory requires further analytical as well as empirical research. By deliberately limiting those specific interpretations to mere illustrations, I admitted my ignorance about the means-end relations involved. By so doing, I was in full expectation of falling from grace with many experts. Socrates did not endear himself to his colleagues (the 'sophists') by telling them that he at least knows that he does not know. And instead of the hemlock, I was administered a good deal of disregard from some quarters.

On the one side, all these postulational and axiomatic attempts by Chambers, Ijiri, Moonitz and myself, as well as the Edwards and Bell study on current cost accounting, led during the sixties to a considerable number of further related publications by other individual scholars. Indeed, one still speaks of "a golden age of a priori research in accounting" when referring to this period. Especially favourable was the international response in Japan. Apart from Japanese translations (of the books by Chambers, 1966/75, Ijiri, 1967/78, and Mattessich, 1964/77) and the promulgation of my research (through Aizaki and Harada, and later Koguchi and Okamoto), it was in Japan that I encountered the first substantial evidence of my *set-theoretical* axiomatization (Appendix A of AAM) being comprehended and constructively improved upon. S. Saito ("Some Considerations on the Axiomatic Foundation of Accounting" *Kaikei*, (101, 1972, pp. 45-65), and "Further Considerations on the Axiomatic Formulation of Accounting: A Reply to R. Mattessich" *The Musashi University Journal* (21, 1973, pp. 95-107), now at the University of Tokyo, pointed at some weaknesses of this set-theoretical formulation to which I gratefully responded by further clarification and improvements.

In Italy, the leading expert, P. Onida of the University of Rome, published in Italian (*I moderni sviluppi della dottrina contabile nordamericana e gli studi economia aziendale*, 1970) and in English a monograph under the title *Modern Developments of the North American Accounting Doctrine and the Studies of Business Economics* (1974) in which the theories of Chambers, Ijiri and myself are compared and discussed. As Onida was very much disposed towards my position, but quite critical of that of Chambers, a further exchange (printed in Italian) between Chambers and Onida ensued. Giuseppe Galassi (who in 1975 spent a semester at UBC) pursued in his book on *Axiomatic Accounting Systems and Theoretical Deductive Systems* (1978, in Italian) ideas similar to my own, and fully acknowledged the influence of my research in accounting as well as in the philosophy of science on his book. Galassi later published an article on "The Contribution of

Richard Mattessich" in *Economia Aziendale* (August 1986), pp. 149-197.

In Germany - where an improved but abbreviated German version (Mattessich, 1970) of Parts I and II (but not Part III) of AAM was published - it was Erich Kosiol ("Zur Axiomatik der Theorie der pagatorischen Erfolgsrechnung" *Zeitschrift für Betriebswirtschaft*, 1970, and *Pagatorische Theory of Financial Income Determination*, 1978, pp. 182-207) and Marcel Schweitzer ("Axiomatik des Rechnungswesens", *Handwörterbuch des Rechnungswesens*, edited by E. Kosiol, 1970, pp. 83-90, and Schweitzer's *Struktur und Funktion der Bilanz*, 1972) who, under the influence of the Anglo-American trend in the sixties, began to develop their own postulates of accounting.

In Spain the interest in the axiomatization of accounting began relatively early when, in April 1958, a Spanish translation of my 1957 article appeared in *Tecnica Economica*. This interest (especially in some methodological and mathematical aspects) was revived when a series of articles by M. Garcia-Garcia ("Modernas Tendencias Metodologicas en Contabilidad", *Revista Española de Financiacion y Contabilidad*, Jan. 1972), and articles by J. U. Requena-Rodriquez, and E. Buenos-Campos, all in the inaugural issue of the *Revista Española de Financiacion y Contabilidad* (1972), took reference to Chambers' and Ijiri's work as well as to my own. In 1972-73 I was invited by the editors of this journal to publish an article on recent improvements of my theory which was published in Spanish. In other hispanic countries, like Argentina, the interest in AAM and related research manifested itself in the 1980s when I was invited to the International Editorial Board of *Teuken* (the Accounting Review of Argentina) on which I served for some years.

In the United Kingdom, it was Trevor Gambling (*Societal Accounting*, London 1974) who based his argument for recognition of cultural and social values, among others, on my nineteen basic assumptions which penetrate a considerable part of his book. Furthermore, Laughlin ("On the Construction of a Paradigm of Accounting Science", Working Paper, 1979), from the University of Sheffield, refers to the need for approaching accounting theory from both ends, the general (uninterpreted) theory as well as the specific interpretations. He perceptively remarks that "undoubtedly such a stand makes an immense amount of sense and yet it is surprising, even alarming, how little Mattessich's ideas have been developed over the years." (p. 22). I accept this more as a critique to others than myself because I devoted most of the time in between to the writing of my book on *Instrumental Reasoning and Systems Methodology* (IRSM 1978/80) creating such a basis, not only for accounting, but for all applied sciences.

As to AAM, a review in the British journal *Management Accounting* (April 1965, p. 157) stated that "Both of these groups (accountants and economists) will find this book immensely stimulating, for the author attempts the stupendous task of completely rethinking the fundamental structure of accounting theory". Another UK publication, *The Journal of Management Studies* (May 1966, pp. 206-208), said that "Mattessich's *Accounting and Analytical Methods* shares little common ground with other books reviewed here, and merits separate consideration by virtue of its

outstanding contribution to accounting thought". As my *Critique of Accounting* (1995) continues this task of conceptual clarification, I hope that future generations will be able to appreciate this kind of foundational work. Other authors in Great Britain have more recently taken up some of my ideas on matrix accounting, axiomatization and simulation (e.g., Leech, Mephram and, above all, Willett).³⁰

In Australia, Michael J. R. Gaffikin and M.J. Aitken included AAM among the eighteen major contributions to accounting thought (in the English literature) in their book *The Development of Accounting Theory: Significant Contributors to Accounting Thought in the 20th Century* (New York: Garland, 1982).³¹ Later Gaffikin published two penetrating essays on "The Methodology of Early Accounting Theorists" (*Abacus*, Spring 1987), and "Legacy of the Golden Age: Recent Developments in the Methodology of Accounting" (*Abacus*, Spring 1988) in which AAM and other publications of mine are emphasized.

In Poland, Alicja Jaruga of the University of Łódź, who in the fall of 1990 visited us in Vancouver, had for decades been an enthusiastic proponent of AAM and my ideas in general. And Anna Szychta, a collaborator of Alicja Jaruga, is writing a dissertation about AAM and other publications of mine (see also Chapter 15).

In the United States, however, the inevitable reaction to *a priori* research and the postulational approach began in the sixties with my former colleague W. J. Vatter ("Postulates and Principles", *Journal of Accounting Research*, Autumn 1963) but made itself felt mainly in the early seventies. Although one further substantial contribution to accounting theory construction by

³⁰ And my paper on "Axiomatic Representation of the Systems Framework: Similarities and Differences between Mario Bunge's World of Systems and My Own Systems Methodology" in *Cybernetics and Systems* (Vol.13, 1982), pp. 51-75, seems to have had some impact on MIS experts in their own axiomatic explorations: e.g. Yair Wand and Ron Weber, "A Model of Control and Audit Procedure Change in Evolving Data Processing Systems", *TAR* (January 1989), pp. 87-107.

³¹ The books discussed in Gaffikin's and Aitken's (1982) list of "Significant Contributors to Accounting Thought" are, in chronological order: C. E. Sprague, *The Philosophy of Accounts* (1907); H. R. Hatfield, *Accounting: Its Principles and Some of its Problems* (1909); W. A. Paton, *Accounting Theory* (1922); J. B. Canning, *The Economics of Accountancy* (1927); D. R. Scott, *The Cultural Significance of Accounts* (1931); H. W. Sweeney, *Stabilized Accounts* (1936); S. Gilman, *Accounting Concepts of Profits* (1939); K. F. MacKneal, *Truth in Accounting* (1939); G. O. May, *Financial Accounting* (1943); W.J. Vatter, *The Fund Theory of Accounting* (1950); A. C. Littleton, *The Structure of Accounting Theory* (1953); M. Moonitz, *The Basic Postulates of Accounting* (1961); E. O. Edwards and P. W. Bell, *The Theory of Business Income* (1961); R. Mattessich, *Accounting and Analytical Methods* (1964); R. J. Chambers, *Accounting, Evaluation and Economic Behavior* (1966); Y. Ijiri, *The Foundations of Accounting Measurement* (1967); R. R. Sterling, *The Theory of the Measurement of Enterprise Income* (1970); T.E. Gambling, *Societal Accounting, Beyond the Conventions* (1974).

Robert R. Sterling (*Theory of Measurement of Enterprise Income*, 1970) was still to be printed - and although various publications on the postulational approach by Chambers, Ijiri and myself received the AICPA/AAA literature awards for notable contributions - the reaction of the dialectical process of academic fashion had to come, and manifested itself in the following two ways:

(1) *An overt criticism of accounting research of the sixties*. Earlier, J. W. Buckley, P. Kircher and R. L. Mathews - who analyzed and juxtaposed various attempts at formulating accounting postulates and principles - pointed out (in "Methodology in Accounting Theory", *The Accounting Review*, April 1968) that: "Absence of methodology is probably the major cause of isolation of most new endeavours in our field. The objective of too many authors appears to be uniqueness or originality. Progress is retarded by this attitude." (Buckley *et al.* 1968, p. 278). I wholeheartedly agree with this criticism and believe that, by now, we would have been much farther in the construction of a general theory of accounting, had we behaved less individualistically. But such individualism is characteristic of the "juvenile phase" of theory construction in general, and I personally am convinced that the "manhood phase" still lies ahead of us. We ourselves, as well as future generations, may learn from our errors.

But the heavy guns of opposition moved forward with the monograph *Accounting Research 1960-1970: A Critical Evaluation* ed. by N. Dopuch and L. Revsine. There, specific criticism is found by Nelson in "A priori Research in Accounting", as well as Dopuch and Revsine "Editors' Preface", and in a separate study by Gonedes and Dopuch "Capital Market Equilibrium, Information Production and Selected Accounting Techniques" in *Studies in Financial Accounting Objectives: Journal of Accounting Research* (Supplement 1974). Probably many accountants shared Carl Nelson's view expressed in the following words:

The new writers have applied logic, other philosophic techniques, economics, and mathematics to the accounting problem at a level exceeding that of their predecessors....But at this point we must stop. We may have a more logical structure today, but we really have not moved very far, in substance from the earlier writings. Impressive as the scholarship is, we are not significantly advanced from where we were in 1950. (C.L. Nelson, "A Priori Research in Accounting", *Accounting Research 1960-1970 - A Critical Evaluation*, 1973, p. 15).

However, it seems that Nelson and others overlooked that accounting, as a whole, is a most schizophrenic discipline in which academicians work towards more and better information to develop a structure able to fulfil an important social cybernetic function, while many practitioners and managers effectively oppose such endeavours and, with it, the practical application of new theoretical insights. The well-known New Zealand scholar Murray C. Wells, of the University of Sydney, illuminating another aspect, responded to Nelson with the following words:

*Some of the authors proposing these systems which appeared during the golden age already have been identified - Edwards and Bell [1961] and Chambers [1966]; others include Sprouse and Moonitz [1962], Mattessich [1964], and Mathews [1965]. The works of these authors were debated throughout the 1960s, and that debate served to clarify and identify the alternatives. Without that identification, the next step of the revolutionary process could not proceed. It **has** proceeded, as shown by the published evaluations of the alternatives. ...The fact that the evaluation process has taken place, and is continuing, is evidence of the importance of the so-called a priori works; hence our disagreement with Nelson's comment that these works are of doubtful value. (M.C. Wells, "A Revolution in Accounting Thought?" *The Accounting Review*, July 1976, p. 477).*

(2) *A reorientation of many young scholars, away from the analytical approach, towards empirical research.* The inevitable reaction to the heavy emphasis upon analytical research in accounting during the fifties and early sixties manifested itself in an increasing need for, and interest in, behavioural accounting research in the seventies and eighties. This was a natural and wholesome phenomenon. Indeed, competent empirical research could enormously enrich theory construction and theory testing in accounting; above all, empirical research may one day play a crucial role in the teleological interpretation of the general theory (see chapter 17).

Yet despite this new trend, the favourable response from US scholars to AAM continued, and in 1977 it was reprinted in the prestigious "Accounting Classics Series". Furthermore, I received, over the years, much encouraging response from various professors. The following passage by William E. McCarthy (from his letter of November 6, 1990), who holds the Arthur Andersen & Co. Alumni Chair at Michigan State University, is representative:

*Your **Accounting and Analytical Methods** is a work which, in concert with Ijiri's 1975 AAA monograph, has literally shaped much of my explorations into better methods of accounting and economic events in a modern computerized environment. As an undergraduate ... I was exposed to four years of philosophy, and I am continually amazed at how modern problems of knowledge representation with computers return to the same philosophical questions that the Greeks grappled with. I am definitely more of a computer scientist than anything else now, but analysis such as yours reconfirms my belief in the basic efficacy of reorienting accounting systems toward a more semantic base.*

The interest in more recent and forthcoming publications also seems to be alive, as a letter (of October 7, 1994) from Ken Peasnell of the International Centre of Research in Accounting of the University of Lancaster testifies:

*I read with interest in your recent EAR (**European Accounting Review**) article about your forthcoming book, **Critique of Accounting**, to be published by Quorum Books. I very much want to get my hands on a copy...I recently had occasion to revisit your 1978 **Instrumental Reasoning** book, and my appetite is whetted for more!*

Or a letter which Athol S. Carrington (former Department Head of Accounting of the University of New South Wales, and retired Pro-Vice Chancellor of this university) wrote on January 5, 1995 to a former colleague of his, Peter Forster (in connection with the same EAR paper, but also because of my "pioneering effort on computer based budget models and...exploration of the instrumental sciences...and ...more recent contributions", as Carrington confirmed to me in a letter of February 23, 1995):

Like you, I am an admirer of Mattessich. I think he probably has a clearer perception of the place of accounting and therefore research in accounting than anyone else I am aware of.

In spite of the shifting of my interests towards more philosophic issues, I continued to explore problems of axiomatization of accounting. Not too long ago, Wolfgang Balzer (University of Munich) and I published a paper on "An Axiomatic Basis of Accounting: Towards a Structuralist Reconstruction" in *Theory and Decision* (May 1991, pp. 213-243), translated into Japanese by Koguchi (Keizaigaku Ronsan, May 1994, pp. 209-232).

My work on financial simulation, on the other hand, found much less attention among accountants than among management scientists and data processing experts - such books as Thomas H. Naylor's *Computer Simulation Experiments with Models of Economic Systems* (1971) assured that my pioneering efforts in financial simulation came to the attention of a wide readership. I also gave pertinent papers at several such associations, one of which was the Annual Meeting of The Institute of Management Sciences in New York in 1962.

In general, however, my efforts were less popular than the publications of Ijiri, Chambers and Sterling, or those of the next generation of leading accounting academics. But popularity has never been on my mind, and I have always shared Joseph Campbell's view that:

practically without exception the significant modern work has, in the first place, an extremely difficult time coming to public notice at all, and in the second place, if it ever does appear, the so-called critics will almost certainly knock it out. (Myths to Live By, 1972/88, p. 49).

It is for the reader to decide whether those words, referring to modern art, might also apply to academic accounting.

7. SPREADING MY WINGS AND CASTING AN ANCHOR IN VANCOUVER

After attending in Berlin the 1965 Annual Meeting of the Verband der Hochschullehrer für Betriebswirtschaft, e.V. (Association of University Teachers of Business Administration), where I met many old friends, among them Vernon K. Zimmerman, I spent a delightful summer semester as Visiting Professor at the Free University of Berlin. This gave me the opportunity of becoming more closely acquainted with the eminent Erich Kosiol and his collaborator, Marcel Schweitzer, who later assumed a professorial Chair at the University of Tübingen. Then my wife and I took vacations in the Black Forest and, later, in Vienna and Yugoslavia. Afterwards, we proceeded to St. Gallen where I served as a Visiting Professor at the Handelshochschule during the fall/winter semester 1965-66. In 1965 I also received invitations to give a series of lectures at the universities of Bochum, Cologne and Bonn. In the latter city I again met Willhelm Krelle; there, I also got to know Horst Albach (the son-in-law of the eminent Erich Gutenberg, and himself one of the most prominent scholars of finance and business administration in Germany - now apparently at the Humboldt University of Berlin), who kindly invited us to his home in Bad Godesberg. Then followed a "call" to a full professorship and Chair of Economics (with emphasis in Accounting) at the Ruhr University Bochum. This university was founded in 1961; it seemed to offer an exciting atmosphere of research and expansion. After some correspondence with the pertinent ministry in Rheinland-Westphalen and my Dean in Berkeley, I accepted the position in Germany as a dual-professorship (keeping for the time being my appointment in Berkeley, but with the intention to terminate the latter in 1967).

Yet before beginning my new career in Europe we embarked in March 1966 upon one of our most unforgettable journeys. Our first stop was Istanbul, with its spicy oriental atmosphere. The Hagia Sophia, the Blue Mosque, the Topkapi Museum and innumerable other fascinating buildings and treasures overwhelmed us. Furthermore, our friend Tillo Kuhn (who was on leave from Berkeley and did some consulting for Turkish governmental agencies) and his Turkish colleague acquainted us with some aspects of Istanbul, such as the gypsy quarter, which tourists ordinarily might not visit. Tillo was stationed in Ankara where we spent several days, doing sightseeing as well as shopping. Then, he and his family took us in their VW-bus across the high Anatolian plateau and Cappadocia to Göreme where bizarre cave dwellings, once occupied by Byzantine monks, are adorned with primitive yet most powerful religious murals.

But this was merely the first leg of our journey. From Ankara we flew to Beirut, then one of the most modern and dynamic cities of the Levant. Later, even more impressive sights awaited us in the unique atmosphere of the ancient quarter of Jerusalem, with its Wailing Wall, the Dome of the Rock, the large Mosque and many other places. We then proceeded to Cairo with its impressive museum, its legendary sphinx and the pyramids of Giza. Later, we went to Luxor and Karnak with

their immense columns and temple ruins, and finally to the unforgettable necropolis of Thebes with its innumerable royal tombs. Then, we went to Greece where, finally, my desire to see the Acropolis was fulfilled. We concluded this intoxicating journey during the Easter week with a visit to Rome which, for me, was no longer terra incognita.

The spring semester 1966 at the Ruhr University was most interesting. Many things were familiar from my time of study in Vienna, but the classes were even larger than during the war (up to 500 students in a single classroom). I also became co-director of the Institut für Unternehmensführung und Unternehmensforschung (Institute of Management and Business Research). From the very beginning I noticed that here too university politics played a role unworthy of genuine scholars. At this time there was a bitter fight in the election for Rector (President), and the winner was Kurt Biedenkopf from the law faculty. He was, at heart, more politician than scholar, and a few years later abandoned academia to become, at first, a well-known figure of the conservative party of Germany, and later the most prominent political person of Saxony, namely prime minister of this German province. He also became founding president of one of the new universities.

My chair in Bochum was endowed with a competent secretary and several excellent assistants. In this university system most assistants were full-time employees and often were asked by their "boss" to do personal services unrelated to their job. Since I never demanded from my collaborators such extra chores, they always showed great appreciation and were fiercely loyal. Indeed, when I abandoned this chair in 1967, some of them had tears in their eyes. Professors in Continental Europe enjoy an incomparably higher social status than on the American continent, and are treated much more generously. During my tenure there, I not only published a series of articles, but also the following three books which appeared in the series of our institute (Bochumer Beiträge zur Unternehmensführung und Unternehmensforschung) and were published by Bertelsmann University Press: *Die wissenschaftlichen Grundlagen des Rechnungswesens* (1970, a revised and abbreviated German version of *Accounting and Analytical Methods*), *Harvard-Fälle aus der Praxis des Rechnungswesens* (1969), originally collected by Robert N. Anthony, and *Der Computer im Dienste der Unternehmensführung* (1968, edited together with my colleague from the Ruhr University, Walther Busse von Colbe). The latter book contained a series of lectures presented (at this university) by renowned authors such as, for example, Konrad Zuse, the scholar and engineer who pioneered electronic computers in the 1930s in Germany.

I was very happy to be back in Europe but had to return to Berkeley for the academic year 1966/67. On our return to the USA we first went to the Bahamas and later spent three weeks in Miami where the AAA Annual Meeting took place. On our way back to the Bay Area, we made a stopover in Las Vegas, rented a car and visited the Grand Canyon as well as some parts of Arizona.

While resuming my teaching duties in Berkeley, one of my assistants from the Ruhr University informed me that the new quarters allocated to our chair did not correspond to the

original promise. When I complained in a letter to the colleague in charge of the allocation, I received an offensive reply. This clinched the matter: I was not willing to be subjected again to the whims of a single unbalanced colleague to whom the others had not the guts to stand up.³² If something like this starts in Bochum that early, would it not mean jumping from the frying pan into the fire? My *major goal* was by no means to settle in Europe or to be spoiled by a generously endowed chair, but to find a place where there was an atmosphere of pleasant and serious academic cooperation that would enable me to pursue my research undisturbed by distrust and machinations. Some colleagues may have deemed it naive to harbour such expectations, but I was firmly resolved to find such a place - and in the end I did find it at UBC.

During this time an inquiry (whether I would be available permanently) arrived from the University of British Columbia. My wife and I drove in the Spring of 1967 to Vancouver to look into the matter. Apart from the fact that we were very well received, and wined and dined at a most beautiful Faculty Club³³, I noticed that here was a new dynamic Dean, Philip White. He had the will and potential of expanding a relatively small Faculty of Commerce and Business Administration into a major research institution with a first-rate doctoral programme. After careful reflection, and impressed by the personality of Philip White, I accepted what then was a gamble. But I had little reason to regret this decisive step. For over a quarter of a century I have had the most marvellous colleagues whose team spirit is hardly excelled by any faculty I have known. No wonder that I could never bring myself to lift the anchor once it was sunk into the picturesque "harbour" of Vancouver's UBC.

Of course, I still had to return to Bochum for my last semester. After this duty was fulfilled we drove by way of Nürnberg to Austria for vacations. Later we went to Copenhagen shopping for furniture, and then to London where I presented a paper on "Some Thoughts on the Epistemology of Accounting" in the Guildhall at the Second International Congress of Accounting Education. Then we took a flight to Montreal, where we visited with an old friend the "Expo 67", and later proceeded to Vancouver since the Semester started already in the beginning of September. My wife returned to Berkeley where she arranged the transportation of our belongings. Afterwards she drove with her mother to Vancouver, joining me in our provisional home. A few months later we noticed a pleasant house for sale on the UBC Endowment Lands (a mere 12 minutes walk from my study in UBC's Henry Angus Building) with a beautiful yard, undoubtedly influenced by Japanese garden architecture. We immediately fell in love with it and within a couple of days decided to buy

³² Years later this particular colleague seems to have got in conflict with the faculty in general and, as I was told, refused to attend the faculty meetings for a considerable time.

³³ This Faculty Club, a major jewel in the crown of UBC, unfortunately became insolvent in 1994 and, under much faculty protest, was expropriated and closed down by the University Administration.

this property. In doing so, we learned that the garden and the patios were designed by Arthur Erickson who then was not known to us, but who already had a growing reputation as a first rate architect. Of course, we would not have dreamed he would win the first prize at the World Exposition in Osaka (1970) and become the leading architect of Canada. Indeed, no lesser than Philip Johnson (the renowned disciple of Mies van der Rohe) said: "Arthur Erickson is by far the greatest architect in Canada, and may be the greatest on this continent". Many years later I met Arthur Erickson at UBC, introduced myself and told him that we are the present owners of the "Lindenfeld House",³⁴ and ever since purchasing it, enjoyed his garden. We renamed the house "Hermitage", not so much because Hermi reigned in the first "étage", but because it was surrounded by trees and offered a retreat and sanctuary from outside disturbance, excellently suited for such self-contained people as the three of us (and after Mama's death in 1979, the two of us). But now our Odyssey was completed, and I could think of doing serious research again. I also took up calisthenics and some jogging, which I pursued for two decades, as well as relaxation exercises, all of which has helped me to boost my limited energies.

Hermi and I felt very much at home in Vancouver; and so did Hermi's mother to whom we both were much attached for the warmth of her kind heart and the broad range of her intellectual interests. She was the ideal mother-in-law, and in the 24 years she lived with us, I did not have a single quarrel with her. In 1968 I received an inquiry from Eugen Sieber (whose home we visited in 1967, and years later, he visited UBC with his wife), whether I would be interested in an academic chair at the University of Erlangen-Nürnberg. Nürnberg would have been a delightful place to live, but leaving UBC, where I felt so well, and after such a short time, was just inconceivable. Furthermore, we had already a very pleasant circle of friends in this city.³⁵ As to my office at UBC, it was originally on the seventh floor of Henry Angus Building. Facing north with a view toward Horseshoe Bay, it offered an overwhelming panorama of water, mountains, and even some permanent snow fields. Although a few years later - in the course of the reorganization of the Henry Angus building, when my office became part of our Faculty Lounge - I had to move three floors lower, my somewhat larger corner study still offered a glance at the snow covered mountain range (and in 1993 I had to move to the newly built David Lam building). The spectacular site of Vancouver, its strategic location, its increasing commercial and financial significance, and not least

³⁴ Elda Lindenfeld was a psychiatrist who studied under Alfred Adler (Freud's famous pupil and, later, antagonist), and like myself, was born in Trieste and grew up in Vienna. We never met her personally since she died shortly before we bought the property from her estate.

³⁵ Above all, Hellmut May (who in 1936 was the youngest active participant at the Olympic Games) and his family; Bernhard Hoeter, Notary Public and Honorary Consul of Guatemala, and his wife Kristine (who, sadly, died a few years ago); Ursula and Boris Mange, who own manufacturing and trading enterprises, and others.

the growing reputation of our university attracted many visiting colleagues - either for a few days on their way to other destinations, or for a semester or so as visiting professors. From Australia we had Ray Chambers and his wife, and before, Murray Wells, at our table. From Austria Anton Egger, Adolf Stepan and Peter Swoboda and others visited Vancouver. Giuseppe Galassi, from the University of Parma, came for a semester to audit some of my courses, and in 1990, after an absence of 15 years, revisited Vancouver. He, obviously, was taken by surprise about the many changes, new buildings and architectural sights in our beautiful city. From India came Bhabatosh Banerjee, and from Japan Hiroshi Deguchi, Noboru Harada, Shin-ichi Inoue, Hide Kamiryo, Yoshiaki Koguchi, Norio Nagano, Haruo Okamoto, Shizuki Saito, Atsukio Suzuki, Hiromitsu Sato and others. From Germany, for example, Eugen Sieber and Erich Kosiol and their wives visited us in the 1970s, so did some of his former students, Erich Grochla and Marcel Schweitzer. From New Zealand came Bevan Clarke, Tom Cowan, and Roger Hopkins, and from Poland Wojciech Gasparski and Alicja Jaruga. Paul Weilenmann came from Switzerland, Hein Schreuder from Holland, Åke Magnusson from Sweden and, of course, many from the USA.

Vancouver was also an ideal place to convene, and so in 1968 a AAA committee meeting dealing with the Foundations of Accounting Measurement was arranged at UBC. The participants were Yuji Ijiri (as Chairman), Alfred Rappaport, Edward Summers (whom I visited some two decades later in his home in Austin, Texas), Arthur Thomas and myself; and the Report was published in 1971 as a Supplement to *The Accounting Review*. From 1968 to 1970 I also became a member of the Canadian Institute of Chartered Accountants' (CICA) Committee for Distributing Scholarships and Research Grants. And in 1969/70 I was on the Executive Committee of the Canadian Chapter of the AAA.

In 1969 I arranged the C. L. King Memorial Lectures at UBC to which we invited William W. Cooper as King Lecturer, supported by Norton Bedford and David Solomons for whom I have particular admiration. It was a marvellous opportunity to manifest our seriousness about accounting research and to create closer ties to eminent academic accountants in the USA. The Proceedings were published in 1971 in our Faculty's Monograph Series which was under my editorship for many years. Also in 1969, quite out of the blue, came an invitation from the University of Canterbury in Christchurch, N.Z., to spend two or three months at this university as Distinguished Erskine Visiting Fellow. This was a particular honour which in previous years fell to such eminent persons as Gerald Debreu (later Nobel laureate), Norton Bedford, and Maurice Moonitz. But before our departure to the southern hemisphere, I published in *Cost and Management* (March/April 1970) what I deemed to be a harmless little article: "On the Perennial Misunderstandings of Asset Measurement by Means of 'Present Values'". But Chambers disagreed with my views, and wrote a response. The result was a series of rebuttals in this journal, reinforcing our opposite points of view, and revealing some of the underlying causes. Beyond that, this debate extended into a lengthy correspondence which at times grew quite bitter. However, over a decade

later we again resumed a lengthy friendly correspondence that stretched from January 1981 to a recent letter in the Summer of 1995.

8. VISIT TO JAPAN AND THE PACIFIC RIM

I accepted the invitation from Canterbury University with great pleasure, and on April 26, 1970 my wife and I embarked on this exciting adventure to the Far East and the Southern Hemisphere. The first stop was Hawaii, where I quickly recovered from a cystoscopy which I had to undergo in Vancouver shortly before our departure. It was our first visit to these enchanted islands, and we fell in love with Oahu at first sight. Although the regrettable commercialization of this "paradise" progressed rapidly in later years, Hawaii has remained our favourite vacation spot to this day - something hardly anticipated at this trip.

Then we flew to Tokyo where we had reservations in the Toky© Hotel. When we checked in, the clerk handed me a small note which I pocketed without paying much attention to it. Entering our room, exhausted from the flight of eight hours, I threw myself onto the bed forgetting all about the note. But after a while I must have pulled it out of my pocket subconsciously and glanced at it. Lo and behold, it was from Schinzaburo Koshimura, President of Yokohama State University, informing us that he, his wife and a representative of Dobunkan Publishing Co. were awaiting us in the hotel lobby. Like stung by a tarantula I jumped from the bed, and we hurried down to the lobby.

From this moment on we noticed that Japanese hospitality is something very special. After some drinks, and a pleasant chat - which gave us opportunity to admire the fluent English of Mrs. Koshimura, a particularly charming lady - we were invited to a performance in the Kabukiza which was close by. Our fatigue was gone instantaneously as we became totally absorbed in this colourful, stylized drama which fascinated us despite the language barrier. Afterwards the Koshimuras took us to a restaurant to sample sushi and other Japanese delicacies. This concluded our first day in this unique and generous country.

On the next day a "pilgrimage" to the Meiji Shrine, a visit to the Imperial Palace, and general sightseeing with other interesting places were on the schedule. Although it was overcast and slightly raining, our excitement for Tokyo was not only undiminished but even enhanced by the misty atmosphere. Another day, with better weather, was devoted to Asakusa, the Shinto Shrine of the Kannon Goddess, Ueno Park with its interesting museums, and shopping in Ginza. The day was crowned with an evening in the renowned restaurant of Chinzan-so. The Koshimuras, backed by the two publishing houses of Dobunkan Ltd. and Daisan Shuppan Ltd., were gracious enough to arrange in our honour a marvellous, typically Japanese banquet, in which a dozen persons participated. There, we got to know the publishers and some of Koshimura's assistants (who already worked on the translation of both AAM and the preceding anthology of *Matrix*

Accounting).

Our next stop was Osaka where private accommodations awaited us. This had the advantage of getting acquainted with the daily customs of Japan, like bathing rituals, the perennial changing of slippers when going from one room to the other, sleeping on the floor with round pillows under the neck, tea ceremonies in festive kimonos, and so on. Our host and his family shared the house with his parents, and since his father was a retired Buddhist monk, the rituals in their home were particularly strict. Our hosts had two lovely children, a two year old boy and a sweet girl of about six. The day after our arrival, the lady of the house confided in us that her little daughter had asked her concernedly whether there was "something wrong" with our eyes - whereupon her mother tried to explain the reason for our "funny look". The subsequent day we visited the International Exposition 1970. It was interesting, but what impressed us most on this site was something Canadian, even something designed by "our" Arthur Erickson. It was the mirror-like Canadian Pavilion, reflecting buildings, sky and clouds in scintillating, kaleidoscopic colours. Indeed, in the final competition it won the first prize among the many competing pavilions. In the city of Osaka we visited the impressive but reconstructed castle of shogun Toyotomi Hideyoshi, the monastery of Shitenno-ji and other fascinating places. Our host, an employee of a pharmaceutical company, was most kind and, on the weekend went with us to Kyoto. What a unique city, and how much tradition. So many temples, wooden palaces, and beautiful gardens: the delicate, lean Kinkaku-ji, the retreat of shogun Ashikaga Yoshimitsu, mirroring itself in a dreamy lake; its very different counterpart in the opposite eastern hills, the Ginkaku-ji, and farther south, the mighty Kiyomizu-dera; the colourful Heian Shrine with its opulent garden and blooming cherry trees, the austere Zen-monastery of Ryoan-ji with its rock-garden, radiating an infinite serenity, and evoking feelings that no photograph can ever convey. We were inebriated by the variety of forms and impressions which overwhelmed us on this unforgettable sunny spring day. But all too soon we had to say goodbye and board the plane for Hong Kong.

We arrived at the British crown colony of Hong Kong, literally the "fragrant harbour", in pouring rain. No wonder that on the following day the fragrance did not quite match our expectations. The water stood 30 cm in the streets of Kow Loon, and hours went by before the waters receded, thus enabling us to leave the hotel. Our misery was compounded by the fact that Hermi had an inflamed cyst on her right leg which urgently needed treatment. I contacted our friend and former colleague from Berkeley, Cho Ming Li, who meanwhile had become "Vice Chancellor" (the English title for a university president) of the Chinese University of Hong Kong. But as he was in Canada to receive an honorary doctorate from the University of Western Ontario, his wife Sylvia took us under her wings. She arranged Hermi's visit with her uncle, Dr. Lu, a renowned surgeon who on the same afternoon removed the troublesome cyst. Afterwards, Sylvia had her "chef" prepare a gorgeous dinner for us in their luxury apartment overlooking the harbour and city (the Vice Chancellor's University Residence in Shatin was then still under construction).

The following days were taken up by sightseeing and shopping, as well as a visit to the Chinese University of Hong Kong, situated in Shatin close to China's "bamboo curtain". The most lingering of the many impressions of Hong Kong were its stark contrasts, be it of rich and poor, elegance and neglect, Asiatic and European, traditional and modern, water and mountains, deluge and sunshine - they are too numerous to be exhausted. The turmoil in the streets of Kow Loon, the intensive traffic in the boulevards of Victoria, the constant coming and going of innumerable barges and other vessels of all sizes across the bay, the overpowering view from Victoria Peak, all this created such excitement and raised the pulse of life to unknown heights. Again there was the inevitable "goodbye", and we had to press on.

Our plane proceeded eastward with short stopovers in Formosa and, quite unexpectedly, a landing at the airport of Saigon, crowded with military airplanes, Vietnamese refugees and U.S. soldiers. Finally Bangkok, citadel of Buddhism and Venice of the Far East: innumerable temples, colourful and right out of a fairy tale; tropical lagoons (clongs) with idyllic suburbs; floating markets and the mighty, brownish Chao Praya (Menam river), major artery for the slim public motorboats speeding around with incredible velocity from one stop to another; lots of frigates, dreamy sampans (houseboats) on which children played, making their caprioles, and diving into the water. All this rapt our souls with enchantment and ecstasy.

Here again we wanted to visit an old friend, Peter Holzer of the University of Illinois (originally from Austria - see Chapter 4). He too was out of town, but his wife, a charming Viennese, took good care of us. Since her husband did consulting work in Thailand, she had a limousine with chauffeur at her disposal, and generously showed us a good deal of the city. Add to this the tasteful atmosphere of the marvellous Oriental Hotel (which in later years, unfortunately, burned down and was rebuilt somewhat differently), and you have the best prescription for a perfect sojourn. Of course, such art treasures as the Emerald Buddha as well as the Buddha of Wat Trimitri (consisting of five tons of pure gold, hidden and forgotten for centuries under a plaster cover), contributed essentially to this unforgettable experience.

A further stop was Singapore, the equatorial Lion City and, what then seemed to be, competitor of Hong Kong. One of my former graduate students, and then lecturer at Singapore University kindly received us at the airport and next day introduced us to his colleagues at the university. Already then the city was quite modern and surprisingly clean, yet not without losing its traditional, oriental flavour. I particularly recall a snake charmer. My wife, in her great love for animals, could not resist caressing those slippery reptiles, among which there was a boa constrictor and a Malaysian mamba. Only the king cobra kept us in respectable camera distance. Our friend, Bessy Wong, widow of a former colleague of mine from UBC, often spent time in this interesting city and was just in town. She and her late husband were good friends of Kuan Yew *Lee*, the long-time, most successful Prime Minister of this city-state (whom we previously got to know shortly in Vancouver at the sad occasion of Leslie Wong's funeral). She arranged a visit to the estate of Lee's

sister, where Bessy herself was accommodated. Three beautiful ponies greeted us already from the distance, and the most spirited one liked Hermi so much as to nip her leg - but apart from a large, temporary blue spot, it caused no harm.

We now had to face a longer journey to Australia - stopover in Perth, regrettably at midnight, then arrival in Sydney. We liked the city, but not as much as we did on our second visit in 1988. Of course, coming from such exciting places as Kyoto, Hong Kong, Bangkok, and Singapore, this city had to be an anticlimax, particularly in the light of the long shadows of the "Australian winter". Another factor, contributing to our reaction was that my wife, on our tour through the city, did not feel well (a premonition of what was to follow during the next days and weeks). I was supposed to give a paper at the University of New South Wales, but since we departed ten days too late from Vancouver because of my operation, I had to cancel my presentation in Sydney as I had to do in Tokyo. Apart from the city tour, there was only time for a phone call to Athol S. Carrington of the University of New South Wales, since the next day took us already to New Zealand.

Marvellous flight over the snow covered and glacier-studded "Alps"; arrival in Christchurch and hearty welcome by the Davenports. But Hermi felt miserable, she came down with a severe bronchitis and pneumonia from which she took weeks to recover. After several days of very high fever and much worrying, we also had to search for more suitable accommodations which we finally found. The "winter" seemed slightly colder than in Vancouver, particularly since central heating was not as common as in Canada. Otherwise we felt very much at home in what is considered to be the most English city outside of England. The colleagues at the University of Canterbury, and people in general, were extremely friendly.³⁶ The students were good and absorbed new ideas with eagerness and enthusiasm. I also had opportunity to visit the University of Otago in Dunedin where Tom Cowan (who years later also visited us at UBC) received me most cordially, and where I presented a paper.

Back in Christchurch, we used our spare time for reading the proofs of the German version of AAM (*Die wissenschaftlichen Grundlagen des Rechnungswesens*). In spite of her convalescence, Hermi, with her keen eye, found many errata. We also worked together, deep into the night, producing the indices of names and subjects, so that the material could be dispatched in time. Since our time of departure from Christchurch had come, we could not mail the parcel our-

³⁶ My closest contacts were, apart from the Davenports, Bevan Clarke and Roger Hopkins, then both Senior Lecturers. Two years later Bevan and his family joined us from 1972 to 1974 in Vancouver to complete his doctoral degree at UBC. Afterwards he obtained an academic chair at Canterbury University. In 1990 he and his wife visited us in Vancouver on their way to a sabbatical at Rutgers University. Roger Hopkins (who later became acting Vice President at the University of Fiji and held positions at the University of Singapore and Victoria, N.Z.), as well as his wife Ruth also visited us years later in Vancouver, and several times crossed our path at conferences.

selves and had to leave it to others. Yet somebody at the university failed to put the correct postage (for Germany) on the parcel, thus making all our rush to naught and causing a delay of no less than three months in the publication of this book.

On our way homewards we spent a few days in beautiful but windy Wellington, where colleagues received us most cordially and where I gave a presentation - years later my former UBC-colleague Watarangi Winiata returned to the University of Wellington where he still seems to be active. I also presented a paper in Auckland where Trevor Johnston and some of his younger colleagues took excellent care of us. But before going to Auckland we made a stopover in Rotorua where we admired some remnants of Maori culture as well as the fantastic geysers and sulphur cauldrons that mother earth spewed out of her belly.

After leaving New Zealand on July 24, we did not return directly to Vancouver but stayed for some ten days in Tahiti. By crossing the international dateline, we arrived the day before. It was dawn, the radio in the airplane played a subdued Polynesian melody, and out of the mist of the vast Pacific around us arose a group of magical islands - like Venus, born from the foam of the sea, and transcending into mythology. Nowhere was the atmosphere more romantic than here where one could breathe the air of the South Sea in its undiluted purity. Yet, in saying this, I should exclude the capital, Papeete, because here modernity had already taken its toll - of course, today the situation seems to be incomparably worse, as I conclude from reports and TV-films. But already in 1970 the streets of Papeete were frequented by countless motor scooters, the most favoured means of transportation of the native Polynesians. Otherwise these islands had still maintained their charming, dreamy and timeless character. The privately operated busses, for example, had an unpredictable random schedule. In waiting for a bus, one patiently sat down by the roadside; if you were lucky the next one would come in five minutes, if not, perhaps in two hours. In this way, as well as by means of a VW-bus, hired together with a couple from Rio de Janeiro, we explored this dream-like island with its lush vegetation, its crystal clear waters and tranquil magma beaches. We visited the Gauguin museum and the coral reefs with their colourful ecology, walked under palm trees that were pregnant with a rich crop of coconuts, attended performances of wild Tahitian dances and the much milder hulas well known from Hawaii.

A trip to the sister island of Moorea, with its bizarre and jagged mountain peaks and its forlorn little harbours, enhanced our feeling for the South Sea, and gave us an inkling of what it must have been in Captain Cook's time. The return to Papeete during an approaching thunderstorm, on one of the smaller motor yachts, gave us a taste of how rough the sea can be in these waters. Finally, with a sigh of separation, we said goodbye and embarked on the airport for Vancouver by way of Oahu.

9. THE GOLDEN AGE OF UBC'S FACULTY OF COMMERCE AND BUSINESS ADMINISTRATION

After our return from the Far East and the southern hemisphere, I plunged myself with new energy and enthusiasm into all the work that awaited me at UBC. Meanwhile our applications for citizenship were approved, and so we became full-fledged Canadians. While the efforts to convert our Faculty into a major Canadian research institution began in 1967, this trend gathered momentum in the seventies and reached its climax in the early eighties. It was true for most of our divisions, but particularly for the divisions of Finance, Management Science, and AMIS (Accounting and Management Information Systems). This may be confirmed in many ways, and one of them is an article by Robert C. Reeve and Patrice J. Hutchison "The Contribution of Non-U.S. Institutions to Academic Accounting Journals" in *Abacus* (Spring 1988), pp. 90-93, in which UBC ranked first (over the decade from 1977 to 1986) among 25 leading universities outside the USA.³⁷ Another evidence, particularly referring to the UBC Accounting Division's *leading* role in Canada (during the period from 1976 to 1989) is contained in A.J. Richardson and J.J. Williams (1991) paper "Canadian Academic Accountants' Productivity: A Survey of 10 Refereed Publications, 1976-1989", in *Contemporary Accounting Research*, pp. 278-294, and its Table 3. There, UBC is on top, and followed (in the number of theoretical, empirical as well as methodological publications) by the University of Toronto, University of Alberta, McMaster University, McGill University, and University of Waterloo.³⁸ As to the international standing of our faculty, the following quote from our Alumni Magazine, *Viewpoints*, offers some hints: "As Dean of Commerce, Peter [Lusztig] spearheaded the effort to obtain worldwide recognition for the Faculty. We are now the only Canadian business school with departments that rank in the top ten in North America, and in the top twenty internationally". (*Viewpoints*, Spring/ Summer 1991, p. 16). The

³⁷ According to the study by Reeve and Hutchison (1988), UBC led in accounting and finance (on a weighted as well as un-weighted basis from 1977 to 1986); it was followed (in weighted rank) by: the Hebrew University in Jerusalem, University of Toronto, Lancaster University, University of New South Wales (Australia), University of Tel-Aviv, University of Manchester, London Business School, and others. This study is based on publications in ten leading journals (*Journal of Accounting Research*, *The Accounting Review*, *Journal of Finance*, *Journal of Financial and Quantitative Analysis*, *Accounting Organizations and Society*, *Journal of Business Finance and Accounting*, *Abacus*, *Journal of Accounting*, *Auditing and Finance*, *Accounting and Business Research*, and *International Journal of Accounting, Education and Research*).

³⁸ This study by Richardson and Williams (1991) is based exclusively on accounting journals (*Abacus*, *Accounting Historians' Journal*, *Accounting, Organizations and Society*, *The Accounting Review*, *Auditing*, *Contemporary Accounting Research*, *International Journal of Accounting*, *Journal of Accounting and Economics*, *Journal of Accounting and Public Policy*, and *Journal of Accounting Research*).

reason for such achievements lies in our Faculty's ability of hiring from 1967 to the early eighties) excellent faculty members, and developing a first-rate doctoral programme for AMIS and other divisions (bringing forth such doctoral students and scholars as Amin Amershi, Eduardo Schwartz and others). Yet by the mid-eighties this long honeymoon was over, and due to budgetary difficulties and a myopic educational policy of the Province, we lost some of our most outstanding professors (for details see Chapter 11). However, despite these setbacks, there exists enough evidence (high-level awards, etc. - see Chapter 14) that our Faculty has continued playing a leading role in accounting and other research areas of management and business administration (with UBC ranked "overall" as number one among Canadian Universities (see *MacLean's*, November 14, 1994, p. 21).

But in 1971 we were in the best of swing. It was in this year that I received the distinguished "Killam Senior Fellowship", and in the fall of 1971, I was invited to give a series of lectures in Graz at the Austrian Academy of Management (where I also met Anton Egger, who later became professor in Graz and now holds a chair at my former *alma mater* in Vienna). Afterwards, we went to Venice (which we hardly recognized because of the immense crowds of tourists in every nook and cranny) as well as to Florence. After our return to Vancouver, I began working on another article for *The Accounting Review (TAR)* which appeared in July 1972 under the title "Methodological Preconditions and Problems of A General Theory of Accounting", and which subsequently received the AICPA/AAA gold medal and Award for Notable Contribution to the Accounting Literature. In May 1972, I followed an invitation from the University of Illinois at Chicago to give a paper on methodology. Then came an invitation from the University of Osaka for some presentations in Kyoto, held in August 1972. This time my wife accompanied me only to Hawaii, where she remained while I proceeded to Japan. The Kyoto meetings (where I presented two papers) were most interesting, and I got to know, among other scholars, Naomi Tsumagari from the University of Tokyo and Shizuki Saito, who later also joined this renowned institution. The result was a series of articles by Saito and myself on accounting axiomatization in the journal of Musashi University. Afterwards I went to Yokohama where I again met Shinzaburo Koshimura and his wife. They kindly invited me (together with one of Koshimura's colleagues) to a trip to Kamakura where I finally had the opportunity to see the immense bronze Daibutsu (Buddha statue) that I longed to see for decades. After this overwhelming experience, Dobunkan Ltd., on the instigation of Koshimura, made arrangements for a cosy banquet. This second visit to Japan gave me opportunity to buy one or the other Ukiyo-e print, thus adding to my modest collection. I fell in love with this unique art form decades ago and bought the first "scraps paper" in the early 1960s in Berkeley.

In August 1973 I was supposed to attend the AAA meeting (in Quebec City, if I remember correctly) to receive the AICPA/AAA award mentioned in the preceding paragraph. But I had already made previous arrangements in Europe, and thus asked my UBC colleague Jerry Feltham

(who, a few years before, received the same award jointly with Joel Demski) to accept the prize on my behalf. This summer, after a few days in Vienna, we were again in Graz where I lectured at the Management Academy. Subsequently I participated actively, upon invitation of our good friend, Erwin Grochla, at the Symposium of his Institute of Organization and Automation at the University of Cologne.

If my recollection bears me out, it was either in 1973 or 1974 that Elisabeth Schwarzkopf (whom we had seen and heard many years before at the San Francisco Opera) gave a Lieder recital in Vancouver's Queen Elizabeth Theatre. After the performance I retrieved our coats from the cloakroom and, at this occasion, ran into the resident Consul of Germany, whom we knew quite well. He invited us to a small party at the Georgia Hotel, and we suspected that Elisabeth Schwarzkopf would be there. It was a cosy party of hardly a dozen people and, indeed, the famous Prima Donna, her husband Walter Lege (of Angel Records), and her Australian accompanist were among them. Elisabeth Schwarzkopf and I had a long talk about the latest Viennese opera scandal (the simultaneous hiring of Bernstein and von Karajan for the same opera - obviously one of the foolish bureaucratic slips which led to quite an uproar). Arriving from a busy tour through Japan, Schwarzkopf did not know anything about it, while I had just read the most recent number of the airmail-issue of the *Spiegel* reporting all the intriguing details. Opera people are always eager to learn about such scandals; but it now dawned upon her why her friend "Herbert" (von Karajan) tried to reach her by phone in London (alas, in vain) shortly before her departure to Tokyo - obviously to tell her this very story.

In 1974 I gave a paper at the University of Washington in Seattle, and later received an invitation to present a paper at the University of Technology of Vienna which I gave in the same year, and which in 1976 led to my appointment to a Chair at this university. I had become somewhat restless at UBC and wanted to explore a permanent return to Europe. Later I obtained permission from our new Dean at UBC, as well as from the Austrian Federal Minister of Science to maintain, temporarily, professorships at both places. On the occasion of my visit to Vienna in 1974 I had a long chat with Erich Loitsberger of the University of Vienna, and was invited by the renowned Howard Raiffa of Harvard University, then Director of the International Institute of Applied Systems Research, to have luncheon at this institute in Laxenburg (near Vienna), where I met an old friend from UBC (1968-71), Giandomenico Majone, who now was with the University of Rome. At this occasion, I also had a long and interesting conversation with Tjalling Koopmans, who received the 1975 Nobel Prize jointly with Leonid Kantorovich - the latter I met two or three years later when he presented a paper in Vienna. In July 1974 I received a letter (dated July 9th) from the Vice-Chancellor and Principal of the University of New South Wales (Sydney, Australia), inquiring whether I would be interested in accepting the "Directorship" of its Australian Graduate School of Management. On July 26, of this year I declined this flattering inquiry with the emphasis that my priority was research rather than administrative activity.

In 1975 Nils Hakansson invited me to give a presentation in Berkeley in May and, if my memory bears me out, it was at this occasion that I met Friedrich von Hayek, who incidentally gave a presentation the very next day in the economics department. This visit to Berkeley gave me an opportunity to see many old friends, among them the Conants as well as the Kunkels (see Chapter 5). The latter invited me then to a Physics Department picnic in the hills of Berkeley, at which about a dozen Nobel laureates participated. As my manuscript on *Instrumental Reasoning and Systems Methodology* was progressing well, I gathered the courage to present, in August of the same year, a paper at the International Congress of Logic, Methodology and Philosophy of Science. It was my first opportunity to meet a variety of renowned philosophers, and I very much enjoyed this congress that, conveniently enough, happened to meet in London, Ontario. Above all, I was longing to meet Wolfgang Stegmüller (of the University of Munich, but originally from the Tyrol). His books, among others, had greatly helped me to gain some competence in philosophy, and I was eager to learn more about epistemic structuralism which he was about to advance together with Joseph Sneed. After their panel presentation, in which the renowned Thomas S. Kuhn also had an important part to play, I had an opportunity to talk to Kuhn as well as Stegmüller. Later at this convention we made an outing to Niagara Falls which enabled me to discuss for many hours various issues with Stegmüller. After this we attended together a Shakespeare play in Stratford, Ontario. Another advantage of this congress was meeting Carl Hempel as well as Werner Leinfellner, an Austrian compatriot and the co-editor of both the journal *Theory and Decision* as well as the book series called "Theory and Decision Library". It was through him that four years later my book *Instrumental Reasoning and Systems Methodology* was to appear in this prestigious publication series and that, many years later, I became a member of the Editorial Board of the Philosophy-Social Science Section of this series. Over the years I frequently met Werner Leinfellner (who was at the University of Nebraska but later became associated with the University of Technology of Vienna) which helped to reinforce our friendship. In 1975 or 1976 I was invited for a semester or two to the graduate executive school IMEDE in Fontainebleau (near Paris) but had to decline, as I had just accepted my chair in Vienna.

10. PHILOSOPHY AND FOUNDATIONAL ACCOUNTING RESEARCH

The more I contemplated the foundations of accounting, the more I became aware that the resolution of many of the pertinent problems puzzling me would require a better philosophic grounding. To remedy this situation and to offer our graduate students a broader vision, I pleaded (as soon as our new Ph.D. programme was established) for a couple of seminars in research methodology (similar to those Churchman taught in Berkeley) which I would offer to our doctoral students in general, not only to those of accounting. The resistance of a few faculty members was relatively easy to overcome, and so I taught for about two decades one such seminar on an

obligatory basis for most doctoral students of our faculty and for many years another, more advanced seminar, but this one on a voluntary basis. I worked very hard to acquire the knowledge necessary for conducting those seminars, but I did it with such enthusiasm and fascination that in retrospect it seems to have been more pleasure than work. The old adage that "the best way to learn something is by teaching it" proved itself most true. Of course, without the interest and active participation of our excellent Ph.D. students this enterprise may have well come to naught - I have a collection of enthusiastic letters from some of my former doctoral students and present colleagues. Furthermore, such colleagues from UBC as Izak Benbasat, Eduardo Schwartz (then still a Ph.D.-student) as well as colleagues from abroad, such as Giuseppe Galassi and Åke Magnusson, attended those seminars; also Fay Butterworth, the wife of my dear colleague John, became an enthusiastic auditor.

But apart from those seminars, one of the more urgent tasks was to clarify the problem of *interpretation* in accounting theory. AAM concentrated mainly on a general framework with only some illustrations of specific applications (e.g., budget simulation). As I was convinced that the interpretation in accounting must be *purpose-oriented*, I tried to delve more deeply into this particular aspect in my paper "Methodological Preconditions and Problems of A General Theory of Accounting" (*TAR* 1972).³⁹ Yet, in contrast to my 1957 paper and my subsequent two books (all published long before these awards were established), this award-winning article found relatively little response in the literature and was only occasionally quoted. This seems difficult to explain, but the main reason may have been a turning point in the research interests of many academic accountants. Nevertheless, in 1972 I was invited by the University of Illinois (at the Chicago campus) to present a paper on methodology. But during the waning 1970s, methodological research found less and less attention in accounting. Undeterred by this new trend, which from the very beginning seemed to me most short-sighted, I devoted increasing efforts to philosophic research because I was, and still am, convinced of its long-term significance for an applied science like accounting.

Delving into the literature, I found that the entire epistemological basis of the applied sciences was hardly explored. And since there was no doubt in my mind that academic accounting as a whole was, and could never be, anything but an applied and normative science, I recognized the need to explore this basis for applied sciences in general. In a way this was a prerequisite before

³⁹ As pointed out, this article was honoured in 1973 with the international CICA/AAA Award for Notable Contribution to the Accounting Literature. But years later, a professor from a major US university came for a few days to UBC and told me that he was on the committee which granted this award to me. He added that he voted in my favour only because the article did not contain any mathematics. Since I did not have the impression that this remark was made in jest, I found his criterion for selecting an award-winning publication very strange, but it did reveal how much antagonism against mathematical thinking still existed among traditional accountants.

any application of epistemology to accounting in particular could be done. For this reason, I published "The Incorporation and Reduction of Value Judgments in Systems", *Management Science* (September 1974), and then embarked upon a comprehensive, pertinent programme which was discussed in detail in those methodology seminars, and out of which arose my book, *Instrumental Reasoning and Systems Methodology - An Epistemology of the Applied and Social Sciences* (1978/80),⁴⁰ as well as many papers. With the decision to pursue predominantly methodological or, better said, foundational research, I put myself into the position of an outsider, and a good distance away from the mainstream of the behavioural and even analytical accounting research that was to come. I pride myself not to have followed the lure of the fashionable but to have stuck to what I deeply believe to be important and, above all, what has fascinated me ever since. This required some sacrifice on my part. So far, I have only a limited, but apparently growing, number of aficionados among the younger generation who would share my conviction for the need of foundational research. I hope that the day will come when a greater proportion of academic accountants will reach the same conclusion.

However, due to this anti-philosophic trend in recent accounting research, *Instrumental Reasoning and Systems Methodology* found only limited response among accountants. I wrote this book primarily to clarify in my own mind foundational problems encountered in the applied sciences, and learned much in the course of doing so. I hope it offers a fair survey of those problems. If it possesses originality, this may be found in two aspects: (1) by showing how norms can be incorporated in systems, and (2) by considering the possibility of dealing with instrumental hypotheses (i.e. formalized means-end relations) not only from an analytical (deontic) point of view but also from an empirical one. Although the book was not written for accountants, but for applied scientists in general, it was favourably discussed in *The Accounting Review* (April 1980, pp. 366-367) where A.W. Corcoran concluded, and correctly predicted, that "this penetrating, challenging, and worthwhile book is not destined for great popularity in accounting, but does have many contributions to offer the intrepid". Another positive review from an accounting point of view appeared in *Kaikei* (July 1982, pp. 28-41) by Norio Nagano. The major response, however, came from other social sciences and philosophy. Of particular importance to me was the review by an eminent operations researcher and philosopher, who confirmed his comprehension of the book's essence through the following words:

A science that purports to deal with goal-directed systems, and places values at the focus of attention also needs a philosophy if it is to develop a productive method...Here in my opinion lies the justification of the author's distinction between material and mental aspects of systems. Ascription of mental aspects is not so much

⁴⁰ A paperback version of this book was published in 1980.

an inference as an attitude, a guide to action...Therein is also the distinction between a positivist conception of science as a set of propositions, and a normative conception of science as an ongoing cultural activity. (Anatol Rapport, Futures, April 1979, pp. 162-165).

The book also found favourable response in the *Journal of Cybernetics* (vol. 10, 1980, pp. 216-264) where F. de P. Hanika considered it "a timely and thoroughly scholarly work". Among my accounting colleagues from UBC, George Gorelik has always shared my interest in systems theory. He himself published in this area, and his translation of Bogdanov's *Essays in Tektology* (1980) from Russian is well known. But I also received great moral support from my MIS colleagues, particularly Izak Benbasat, Albert Dexter and, above all Yair Wand who (partly with another good friend, Ron Weber from the University of Queensland), stimulated by reading some of my publications, applied Bunge's systems axiomatization to management information systems. After my retirement, I also sat on the dissertation committees of Dan Paulson (later with the University of Lethbridge and now unfortunately deceased) and Ken Takagaki (now Associate Dean of the B.C. Institute of Technology), both of whom applied philosophical research to the area of management information systems.

Apart from the enlightenment and intellectual enjoyment that I personally obtained from this concern with philosophic issues, I hope that my graduate students as well as my accounting research benefited from it. Indeed, most of my accounting papers published in the 1980s are tinged with insights gained from these reflections on methodology, epistemology and ontology (see also Chapter 13). Another aspect of this philosophical research was my intensive and lengthy correspondence with Fritz Machlup, renowned Austro-American economist of Princeton University and pioneer of "knowledge economics". I wrote to him in February commenting on his book *Methodology of Economics and Other Social Sciences* (1978), and later sent him a copy of my book of the same year. His reaction was most favourable:

*Thank you for your book **Instrumental Reasoning and Systems Methodology**. I have opened the book and have done a bit of browsing. This was not only a pleasure but you find me downright enthusiastic. Your book comes to me as a godsend, because I have just started immersing myself into systems theory. I can imagine that I shall soon send you a list of questions seeking enlightenment.*

(Machlup's letter of March 31, 1981)

*I first must tell you how much I enjoyed your **Instrumental Reasoning and Systems Methodology**. It is remarkable the degree to which our views run along parallel lines, and I really wonder whether this is due to the fact that we are both Austrians and have been schooled in Austrian methodology and philosophy, or whether it means that we are right....I enclose a tentative publication plan... you will see that I*

have taken the liberty of listing you as a potential commentator on the papers on systems theory (Mortazavia) and cybernetics (Eden). In view of your extraordinary grasp of these difficult areas, I believe a comment from you would greatly enrich our project and would be of enormous help to me in my effort at understanding the methodological relationship involved.

(Machlup's letter of January 20, 1982)

This was the beginning of my contributions to his (and Una Mansfield's) anthology on *The Study of Information: Interdisciplinary Messages* (1983) which ultimately contained three papers of mine. His co-editor also invited me to write a contribution ("The Systems Approach: Its Variety of Aspects") for a special issue on "Perspectives on Systems Methodology and Information Research" of the *Journal of the American Society for Information Science* (November 1982). Una Mansfield expressed the reaction to this article in her letter of June 14, 1982 as follows:

Your superb survey of the systems literature is something that I would have welcomed in my own early days of researching this area, and your exposition of the various approaches, as outlined in Table 1, should go a long way towards relieving the confusion that confronts the uninitiated.

I only regret that my efforts in this area have found relatively little response among academic accountants, probably because of the new trend of mainstream accounting research in the 1980s. Although I have stated my views on contemporary accounting research in various places, let me paraphrase some passages from *Accounting Research in the 1980s and Its Future Relevance* (Vancouver, BC: Canadian CGA Research Foundation, 1991):

Statistics and modern finance theory have dominated accounting research during the last two decades or so. Though appreciative of both areas and their important achievements, I am highly critical of the frequent neglect with which their limitations and simplifying assumptions are treated when applying the pertinent tools to accounting. Furthermore, it seems that modern finance theory is partly responsible for a series of unsound financial and economic practices. The most glaring among them are:

1. the encouragement of short-run maximizing strategies by basing the evaluation of managers (in the USA as well as Canada) on stock prices instead of sound long-term investment and other long-term economic criteria (as is customary in Japan and Europe);
2. the growing substitution of debt-equity for owners' equity not only shifted the tax-burden to non-corporate sectors, but encouraged over-indebtedness, heightened risks, and aggravated the business cycle;
3. the practice of leveraged buy-outs through junk bonds - though, at first, maximizing

stockholders' as well as bondholders' short-run earnings - frequently resulted in long-run losses in excess of related previous short-run gains.

The occasional disregard of common sense in the application of modern statistics to accounting is no less dangerous. Indeed, whenever reason exceeds its boundaries - i.e., becomes parochial or atomistic instead of holistic - it has ended in unreason and intolerance.

One may also wonder whether mainstream accounting is not being eroded by the neglect of foundational research and by the fragmentation of our discipline. Of course, Carl Devine, James Gaa and, above all, Yuji Ijiri produced important publications in foundational research during the last decade. But to open the gates for this kind of activity on a broader basis, one must first convince the editors and referees of the leading accounting journals of its importance. One might also remind them of the "paradox of originality": thoughts with genuine long-term value are rarely readily accepted, they often barely survive the short-run.

11. INTERLUDE IN VIENNA

Immediately after the end of the UBC's winter semester in April 1976, I left for Vienna where I was installed as Professor (Ordinarius) of the University of Technology. This had the windfall that I automatically became Austrian citizen without losing the Canadian citizenship. Immediately after the war I had applied for the Austrian citizenship, but it took the bureaucrats two years to approve it. However, by this time, I was already in Switzerland. And this nullified all the previous efforts. It was the irony of fate that now, at 54 years, this citizenship fell into my lap without much ado. Vienna, that's where I grew up, where I went to school, where the first twenty-five years of my life were spent. Who would deny that my mentality, the whole essence of my being is Austrian? My mother held this citizenship, and so did my wife before she married me. No wonder that this return to Vienna, and particularly this official event, seemed to signal a true homecoming.

At the university in Vienna an immense amount of work awaited me. My agreement with the Federal Minister of Science stipulated that a new Institute of Industrial Administration and Methodology would be established, and my first task was to fight with various bureaucratic levels (the ministry, the university, the faculty and even with some of my colleagues) for the fulfilment of this promise. The Rector (President) who hired me, Fritz Paschke, a man with a strong and marvellous personality, was of immense support in this struggle. It was through him that I obtained most valuable connections with industry. Unfortunately his tenure as Rector was just about to expire which, obviously, reduced his influence in university politics.

After endless negotiations, I secured for the institute most of the top floor of the building in Theresianumgasse 27. The view from there was beautiful, directly into the garden of the

Theresianum (the most prestigious school of Austria, formerly reserved for the high aristocracy, and still restricted to the very wealthy). A few months later I was successful in arranging the renovation of these rooms, and obtained funds from IBM and other industrial sources that enabled me to furnish these six rooms. This effort was enhanced by the custom of the Austrian universities of borrowing academic paintings from a central source for the professors' offices, a delightful facility of which I made good use. Furthermore, I obtained funds for greatly expanding our institute's library. Finally, I looked around to hire a competent secretary well versed in English, as well as several permanent assistants, among them Janos Ács and Paul Jankovitsch, both of whom came from the Institute of Advanced Studies (the "Ford Institute" founded by Oskar Morgenstern, and mentioned in Chapter 3). No sooner was all this accomplished, jealousies became apparent. One of my colleagues even remarked that my office looks like that of a minister of state. I wish they had known how modest my study at UBC was, and how happy I was there doing serious research, while here I had to fight with all kinds of bureaucratic institutions and even with colleagues, thus neglecting my true calling. And why did I do that?

First of all, if I am in charge of something, I try to do the best I can. I did this at Mt.A. when I built up a new Commerce Department from scratch, and so I tried now to build up a new institute in Vienna. But there was a second reason that is more difficult to understand for someone unfamiliar with European academic mores. In Continental European countries the social status of a university professor is entirely different from that in America (indeed, in Austria his bureaucratic status and salary are equivalent to those of a general in the military), and this forces him "to keep up with the Johnses"; otherwise he loses local prestige, no matter how good his reputation abroad might be. All this contributes to an atmosphere loaded with tension, particularly within the same faculty. However, the relations with my colleagues from other faculties were always excellent - especially with those from the Faculty of Science with whom I had close contact, such as Gerhard Tintner, Helmut Frisch - whose *Theories of Inflation* (1983) I much enjoyed several years later - and many others. When I arrived in Vienna in 1976, Herbert Hax, long-time editor of the *Zeitschrift für betriebswirtschaftliche Forschung*, who was about to transfer from the University of Vienna to the University of Cologne, kindly invited us to his home. I also had the opportunity to listen to interesting lectures given in Vienna by Nobel laureates such as Leonid Kantorovich and Laurence Klein. In a conversation with the latter, I discovered that we share a close mutual friend: Mike Conant from Berkeley. In 1978 I also attended a series of lectures arranged at our university in Vienna and given by Nicholas Georgescu-Roegen, whose book on *The Entropy Law and the Economic Process* (1971) I admired for some time. We had exciting discussions, and I gave him a copy of my *Instrumental Reasoning and Systems Methodology*, whereupon he immediately asked why I omitted the renowned Austrian economist J.A. Schumpeter from the list of my dedications. It turned out that I had his name (and that of Gottfried von Haberler) on the list of my manuscript but, most regrettably, the printer must have dropped those names, and I did not discover this when

reading the proofs. But I corrected this omission in the 1980 paperback version of this book. Another contact during this time was Gerhard Seicht, whom I visited in 1978 at my *alma mater*, and whose comprehensive book *Die kapitaltheoretische Bilanz und die Entwicklung der Bilanztheorien* (1970), served me for decades as a valuable source of reference on German accounting literature.

The major difficulty was that my institute was part of the Faculty of Mechanical Engineering, where a "mechanistic" and narrow-minded thinking prevailed, and where the understanding and sympathy for accounting and methodological research did not abound. Within less than a year I noticed that this was an untenable situation, and I asked for an interview with the Federal Minister of Science, Herta Firnberg. I informed her that I intended to resign unless my institute would be removed from the Faculty of Mechanical Engineering and be made an independent Senate Institute. This appealed to her very much, since her recent law for re-organizing the Austrian universities provided for just such a possibility. The minister immediately agreed to my proposal, but told me that the consent of the University Senate should be obtained. When I talked this over with Fritz Paschke and other colleagues interested in keeping me in Vienna, it seemed that the Senate would be sympathetic to such an arrangement. And when the time came to fulfill my duties at UBC, I left Vienna quite confidently that by the time of my return in April 1978, the pertinent consent of the Senate would have been given.

At the end of 1977 or beginning of 1978, while again in Vancouver, I received an invitation from Robert Sterling and Art Thomas to participate at the Accounting Researchers International Association Symposium (in May 1978) at Rice University. But due to my forthcoming obligations in Vienna, I could not participate. Yet I sent them a pertinent paper that was included in their anthology *Accounting for a Simplified Firm Owning Depreciable Assets* (1979) ed. by R. R. Sterling and A. T. Thomas. Returning to Vienna in 1978, I noticed that during my absence from Vienna two or three leading members of the Faculty lobbied several members of the Senate, and undermined my application with the most incredible means at their disposal. The result was that during all those months of my absence, the Senate seemed to have disregarded my application. Upon my return I insisted on the settlement of this issue and reiterated my condition, but the Senate did not consent. After this, I had another discussion with the minister in which she offered to convert my institute into a Senate Institute *without* the consent of the Senate. But she warned me that this would rather increase the tensions than resolve them. By this time, I had already gathered enough experience in university politics to know what was best for my research and the inner peace it required. Hence I resigned.

But this story has an aftermath because a major argument of my opponents was that the Faculty of Mechanical Engineering could not afford *to lose* an institute - a strange argument, as the institute did not exist before my appearance, and was built up mainly through my own initiative. Yet, not long after my departure, the minister consolidated several institutes (including the one on

the second floor of Theresianumgasse 27). Under my direction this could not have happened, since the existence of that institute was a condition of my joining this university. Apart from this, I had the minister's guarantee of exemption from any future consolidation. Thus the university suffered a considerable loss because of some senseless and most shortsighted intrigues. The section into which this institute was ultimately converted was, several years later, taken over by Adolf Stepan, who still treats me as an "unofficial member" of his section, and with whom I maintain most friendly relations. One of his former assistants, Alfred Wagenhofer (see his book *Informationspolitik im Jahresabschluss*, 1990, and our Chapter 15), visited UBC two or three times where he did significant research, also some teaching during his most recent stay in 1989, and was offered a position, but decided to stay in Austria. Indeed, he became Austria's most prominent young accounting scholar.

I personally left Vienna with one eye weeping and the other quite cheerful. Although I would liked to have stayed in Vienna, my research would have greatly suffered under the impact of this particular atmosphere. I also hope my decision was a triumph of integrity in which glamour and social status, as well as an excellent future pension, was sacrificed for the sake of creativity and peace of mind.

In spite of all those difficulties, I tried to keep up some of my research during those years in Vienna. At least I succeeded in completing the manuscript for *Instrumental Reasoning and Systems Methodology*. As to our private accommodations during this time, I must admit that the Austrian government looked after their intellectual elite very well, certainly much better than is the case in America. We obtained in Baden, one of the most prestigious spas of Austria, a state-subsidized, sizable condominium (which, of course, we had to give up in the end). Nevertheless, the disadvantage was that I had to spend almost two hours commuting every workday. This was another factor that reduced my time for research, and was particularly hard for somebody who, in Vancouver, used to live only a few steps from his workplace. We all (Hermi, Mama, and myself) enjoyed this interlude in Vienna which gave us an opportunity to see many old friends and to travel in beautiful Austria.

Furthermore, Vienna as a base gave me an opportunity to attend several conventions and meetings. Among others, I participated in June of 1976 (in Linz) at the annual meeting of the Verband der Hochschullehrer für Betriebswirtschaftslehre, e.V. (Association of University Teachers of Business Administration). There, I got to know L. J. Heinrich, and met Karl Vodrazka and Ernest Kulhavy, both of whom I knew quite well before. At next year's meeting of the same association (in Darmstadt) I participated as a member of its Advisory Council, and also presented a paper. In September of 1976 I gave a presentation at the International Congress for Cybernetics in Namur (Belgium) where I hoped to meet Mario Bunge (who unfortunately had to cancel his visit); this trip also enabled me to visit Brussels for the first time.

In 1977 I presented a paper for the Austrian Association of Operations Research and, a year

later, another one at the Institute for Advanced Studies, both in Vienna. In March 1977 we travelled to Nurnberg where I gave a talk at the Commission for Epistemology (Association for University Teachers of Business Administration) and where we met Karl Lechner, former Rector of the University of Graz, whom we missed at our visits there. During my intermezzo back on the American continent, I participated in August 1977 at the Annual Meeting of the AAA in Portland where I presented a paper and met such old friends as Peter Holzer, Maurice Moonitz, David Solomons, Bob Sprouse, George Staubus, and John Wheeler. Back again in Vienna, I took a flight to Berlin to an interesting meeting of the 1978 Commission for Epistemology where I gave a paper, and had the pleasure of meeting another Canadian, the renowned philosopher and game theorist Anatol Rapoport, who shortly afterwards became director of the Austrian Institute for Higher Studies, before Hans Seidl took over (see also Chapters 3).

Back for good in Vancouver, I appreciated the friendly, relaxed and scholarly atmosphere among my colleagues as well as the kindness of Canadians in general. The 1978 Annual AAA Meeting convened in Denver. At this occasion I acted as chairman of the panel discussion on "An Evaluation of the `Statement on Accounting Theory and Theory Acceptance'", on which Barbara Merino, Kermit Larson, Laurence Revsine, Murray Wells and Jerold Zimmerman presented their views which I tried to synthesize together with some of my own thoughts. Meanwhile an invitation arrived from Gary Previts to join, with the presentation of a paper (in November 1978), the "Faculty of the Accounting Research Convocation of the University of Alabama" in Tuscaloosa. There, I met many old friends and, after more than twenty years, W. T. Baxter from the London School of Economics.

12. FINANCIAL CRISIS AT UBC AND ANTI-INTELLECTUALISM IN GOVERNMENT AND BUSINESS

I think it was in 1979 that the Administrative Science Association of Canada met in Saskatoon where I presented a paper and where I met Dean Michael Maher, George Murphy and other colleagues. I also participated actively at the same association's annual meeting at Dalhousie University in 1981 which gave me the opportunity to meet several old friends from Mt.A., Gusti Roulston and Douglas Williamson, and his wife Rosemary. With the Williamsons I visited the home of Alex and Rhoda Colville (see Chapter 4), another friend from Mt.A. In the last year of the seventies we made a trip to Sweden which gave me the opportunity to get in touch with several colleagues from the Stockholm School of Economics, above all, with Sven-Erik Johansson (whom I first met in the 1960s in Berkeley and, again, in 1994 in Venice), with Åke Magnusson, whom I knew from his stay at UBC, as well as with a professor from the University of Stockholm. After some sightseeing in this interesting city, as well as in Uppsala and surrounding areas, we took an airplane across the Baltic Sea to Helsinki where I visited Jaakko Honko, Rector of the Helsinki

School of Economics, with whom I had contact during my Berkeley days while he was visiting there for a semester or so. In Helsinki we embarked on a luxury-liner for a boat trip to Leningrad (now, again, St. Petersburg). This had the advantage that during our stay in this "Venice of Russia", the Finnish boat offered most comfortable accommodations and excellent meals. The many fascinating buildings and monuments, the overwhelming art treasures, particularly those of the Hermitage, and the visit to Peterhof, the Summer Palace of Czar Peter the Great, are etched in our memory.

After our visit to the USSR I attended the 4th International Congress of Logic, Methodology, and Philosophy of Science in Hanover where I presented a paper. There, I had the opportunity to meet, among many other scholars, V. N. Sadovsky from Moscow.⁴¹ In subsequent years, I did my best to arrange a visiting appointment for Sadovsky at UBC. However, due to the military interference of the USSR in Afghanistan and its diplomatic consequences, we could not get the permission from the Canadian authorities.

In the same year (1979) I was appointed to the "Consultative Group on Research and Graduate Education in Business, Management and Administrative Studies" of the Social Sciences and Humanities Research Council of Canada. Its chairman was André Fortier, Dean of Commerce at McGill University and, apparently, former President of the Canadian Broadcasting Corporation. This group met many times in the East of Canada during a year or more, and ultimately produced a report under the title *University Management Education and Research: A Developing Crisis* (Ottawa, Ont.: SSHRC, 1980). The decade closed with an invitation to participate at the Management Accounting Symposium of the University of Illinois, held in November 1979, in Urbana-Champaign.⁴² My paper was subsequently published in *Management Accounting* 1980, edited by Peter Holzer, and later reproduced in *Modern Accounting Research: History, Survey, and Guide* (1984/89/92).

In the late 1970s or early 1980s, Jerold Zimmerman visited UBC. We went together to lunch in the Faculty Club and had an animated conversation. Yet, as soon as I tried to convince him of the importance of philosophic research in accounting my words fell on deaf ears - at least, this

⁴¹ I previously corresponded with Sadovsky who kindly had sent me, the year before, a copy of his book (jointly with I. V. Blauberg and E. G. Yudin) on *Systems Theory* which makes reference to my *Systems Methodology* book. Another favourable reference to this book of mine in Russian literature is found by A.A. Malinovski (the son of the renowned A.A. Bogdanov, whose original name was Malinovski) in "General Systems Theory in Biology and Medicine", *Piotre (Nature)* No. 7, 1987, p.6.

⁴² At this conference, arranged in a fairly intimate setting, I met many old friends: Peter Holzer, Hanns-Martin Schoenfeld, Norton Bedford, West Churchman, Gordon Davis, William Cooper, and John Wheeler, as well as some scholars with whom I had previously no particular contact, such as Chris Argyris, Anthony Hopwood, Rene Manes, Gordon Shillinglaw and others.

was my impression. During this period I presented a paper at York University in Toronto, meeting John Parker (now at Dalhousie University), and visited our friends, Tillo and Naomi Kuhn, who invited me to their idyllic summer residence in New Chelsea near Ottawa (now their permanent abode).

The 1980s, at first, seemed to continue the favourable and expanding trend of the seventies, but after a few years financial difficulties were felt at UBC. This not only caused severe budgetary curtailments but also the loss of several first-rate faculty members. Most of our divisions, particularly the accounting division, have still not fully recovered, despite some intervening years of prosperity in the BC economy. Yet it was in 1980 that I was appointed to UBC's "Arthur Andersen & Co. Alumni Chair of Accounting". This was on the recommendation of an independent committee of colleagues who considered many external as well as internal candidates. It was of great benefit to my research; it enabled me to reduce my teaching load by one course per year, and offered additional funds for research as well as travelling to conferences and related meetings. Our Dean, Peter Lusztig, was most skillful in generating funds from industry for converting full professorships into distinguished academic chairs. Indeed, soon afterwards a second "distinguished" academic chair was created within our division. This was the "Certified General Accountants Chair", which my eminent colleague Jerry (G.A.) Feltham obtained. I have always had great admiration for Jerry's pioneering work in information economics as well as his work in agency-contract theory (see Chapter 15). And in order to brush up on my knowledge in these areas, I audited five years later one of his doctoral seminars which I very much enjoyed. Also in 1980 I was elected as Fellow (accademico ordinario) to the Accademia Italiana di Economia Aziendale, one of the national academies of Italy. I was pleased with this honour, as it helped to reinforce the ties to the country of my birth. Though I consider myself to be an authentic Austrian, there is no denying that for almost half a century I possessed Italian citizenship.

In the same year the Annual Meeting of the AAA was held in Boston, and Hermi and I attended it. There, I had no particular duties to fulfil as far as I remember. But Shizuki Saito of the University of Tokyo was, at this time, spending a year or two at the Harvard Business School, and so he invited us to his home for dinner where we met his wife - the Saitos visited UBC for several weeks in 1983, and in 1992 we had a reunion in Tokyo. From Boston we went in August 1980 to Europe for two presentations. One paper I gave on "Systems Theory" at the FEOLL Institute of the University of Paderborn in Germany. The other was the paper "An Evolutionary Survey and Comparison of Current Cost and General Purchasing Power Hypotheses and their Applications" which I presented at the 3rd International Congress of Accounting Historians, then convening at the London Business School. There, we again met many old friends, among them W. T. Baxter and R. H. Parker, long-time editor of *Accounting and Business Research*, as well as Frank Clark and Michael Gaffikin, both of whom now hold professorships in Australia. After this meeting in London we rented a car, and made a delightful tour to see Stonehenge and many of the famous

cathedrals in southern England, and also paid a short visit to Wales. Afterwards, we went to Vienna and Salzburg where we attended the Summer Festivals and heard Zubin Mehta conducting a Beethoven symphony.

The paper I presented in London, and related ones - such as the one on "Inflation Accounting in Canada and the USA: A Comparative Analysis", which I gave at the meeting of the Northwest Accounting Research Group in Seattle in April 1981, as well as the paper "On the Evolution of Inflation Accounting: With a Comparison of Seven Major Models" published in *Economia Aziendale* (December 1982) - were the outcome of my growing interest in clarifying some unresolved issues of current value accounting. In this connection I also resumed my correspondence with Philip Bell (co-author of the well known book *The Theory and Measurement of Business Income*, 1961). The above mentioned publications were partly accompanied, partly followed by a series of articles in professional journals in which I criticized the two CICA Exposure Drafts of 1979 and 1981 (both by the Accounting Research Committee of the Canadian Institute of Chartered Accountants) for a current cost accounting legislation of Canada. It seems that my criticism contributed toward the ultimate result which was legislated in "Reporting the Effects on Changing Prices" (CICA Handbook, Section 1045, December 1982). I have always considered this regulation a fairly good compromise; regrettably it was never strictly enforced. Thus it was adopted only by a minority of the pertinent Canadian companies (at first, by hardly twenty percent, and later by even less) and later was merely recommended on a voluntary basis.

To these research efforts belonged a presentation which I delivered in May 1981 at the Annual Meeting of the Administrative Science Association of Canada in Halifax, N.S.; the topic was "Towards a Better Canadian Current Cost Accounting Approach". In connection with this topic, I must confess that I found the award-winning monograph by W. W. Beaver and W. R. Landsman *Incremental Information Content of Statement 33 Disclosure* (FASB 1983) a disappointment. Its major flaw was accepting the short-term pricing behaviour of investors (as the decision criterion for evaluating the current cost approach, and comparing it with other valuation methods) instead of pursuing a long-term cost-benefit analysis. The result was a biased and negative attitude towards current value accounting. This may, ultimately, have influenced the one decisive vote of the Financial Accounting Standards Board by which it decided to discontinue the legislation on compulsory price-level adjustments in the USA - cf. my Commentary, Section vi, to the anthology *Accounting Research in the 1980s and Its Future Relevance* (1991).

In the fall of 1981 we spent our vacations in Portugal, enjoying Lisbon and surrounding areas. Later we drove south to the Algarve, visiting many interesting places. Afterwards we flew to Vienna where I had an invitation from Robert Trappl (who heads the Department for Medical Cybernetics of the University of Vienna and is editor of the journal *Cybernetics and Systems*) to present, in a small but intimate circle, a paper at the Austrian Society for Cybernetics. Then we went to England where Edi Stamp, then Director of the International Centre for Research in

Accounting, had invited us to spend a week or more at the International Centre for Accounting Research of the University of Lancaster and where I presented several papers. The hospitality at Lancaster was generous, and I still have good memories of our social gatherings as well as the lively discussions with Ken Peasnell, Simon Archer, Mike Mumford and others; and of course with Edi Stamp who kindly invited us to his home. The news of his untimely death a few years later was a shock to us and, certainly, a great loss for the accounting profession.

On this trip I accepted an invitation from Tom Lee to give a talk at the University of Edinburgh followed by a delicious dinner in his home. We stayed at the cosy Faculty Club, and I had opportunity to meet other faculty members. Roland Munro and his charming wife were so kind to drive us around and show us the Scottish countryside. Furthermore, I became acquainted with M. J. Mepham with whom I had previously corresponded, and whom I met again seven years later in Australia. Since this was our first visit to Edinburgh, we took great pleasure in getting to know this interesting and historically fascinating place. The next stop, not far away, was Glasgow where William McInnis, of the University of Strathclyde, kindly picked us up at the railway station. He also made marvellous arrangements for hotel accommodation, excellent meals, and above all, for my two lectures, one of which was followed by the presentation from another visitor, W.T. Baxter of the London School of Economics. At several receptions I had an opportunity to meet various faculty members of the University of Glasgow and, of course, of the University of Strathclyde, among them David Forrester who kindly invited us to his home.

In 1981 I was appointed to the Editorial Board of the journal *Economia Aziendale*, on which I am still serving. In this year I also began an intensive correspondence with Fritz Machlup (Princeton University) which lasted until his death in 1983. This exchange of ideas led to my writing three contributions for his book (in co-editorship with Una Mansfield) *The Study of Information: Interdisciplinary Messages* (1983). From 1981 to 1982 I served on the Board of Governors of the School of Chartered Accountants (of B.C.). And in 1982 I presented a paper at the University of Calgary, met my former student and colleague Al Prentice, as well as Michael Maher (who recently had become Dean of the Faculty of Management in Calgary) and many other colleagues.

In the summer of 1982 we attended the Annual Meeting of the AAA in San Diego where I chaired the Session on "Actual Topics in Cost Accounting". In this year the book *The Development of Accounting Theory: Significant Contributors to Accounting Thought in the 20th Century* by Gaffikin and Aitken (mentioned in Chapter 6) appeared which included AAM among the relatively small number of those "significant" contributions. Although today the number of leading books would, of course, have to be expanded by several new works, the editors tried to be as objective as possible, comparing their "list" with other citations in textbooks and "widely used accounting theory expositions" (p. 2). Furthermore, I received the invitation to join the prestigious Editorial Board (together with Mario Bunge, Anatol Rapoport, A. Sen, R. Tuomela, A. Tverski, and others)

of the *Theory and Decision Library* (Philosophy and Methodology of the Social Sciences, Reidel and Kluwer Academic Publishers).

In June 1983 the Annual Meeting of the CAAA convened in Vancouver, and on this occasion we had some old friends and their spouses in our home, among others Tom Dyckman and Mike Gibbins (who meanwhile had left UBC for the University of Alberta) as well as some colleagues from UBC. In the summer of 1983 I first had to present a paper at the University of Technology of Vienna, and later another one in Salzburg at the 7th International Congress for Logic, Methodology and the Philosophy of Science where I also chaired one of the sessions. I particularly enjoyed these philosophic meetings; they not only offered an opportunity to meet interesting and eminent scholars - at this meeting, for example, Werner Leinfellner introduced me to Karl Popper - but one could learn much, and exchange views with people on the same wavelength.

Afterwards we went to Kitzbühel where my old friend from school and kindergarten, Kurt Fiedler (see Chapter 1) and his wife Herta, invited us to stay at their villa. The house not only permitted a view over this famous resort but also offered a marvellous panorama of the mountains. We then proceeded to Piburg, another place in the Tyrol, where we were invited to stay at the venerable family seat and summer retreat of a distant cousin of mine, Wolfgang von Pfaundler. He is a well known professional photographer, film maker, as well as ethnologist (of the University of Innsbruck), particularly renowned for his research on the people of the Tyrol. Then we took the train to St. Gallen where we visited old friends, and got to know one of Wolfgang von Pfaundler's sons, a neuro-surgeon, who by coincidence was working during this time at the General Hospital of this beautiful city (where we got married 31 years before). This busy year closed with an invitation for a December presentation at the European Institute for Advanced Studies in Brussels, which I would have liked to accept, had it not been for a previously entered commitment.

In the first half of the 1980s, probably in 1983, Hein Schreuder from Holland (later with the University of Limburg as well as the firm DSM Polymer & Hydrocarbons in Sittard) spent some time at the University of Washington in Seattle and visited UBC. We had a pleasant exchange of opinions and found some common interests, hence we remained in correspondence; I also met him again in 1991 on his home turf in Maastricht.

In 1984, upon the recommendation of Peter Swoboda and Fritz Paschke, I was inducted into the Austrian Academy of Sciences as a corresponding member (persons not residing in Austria can, apparently, not become full members). Again, I was greatly pleased that Austrian scholars would honour me thus and further strengthen my ties to the country of my youth. In this year the CAAA met at the University of Guelph (Ont.) where I had a pleasant talk with Abraham Briloff - whose books and contributions to the "ethics of accounting" I have always greatly admired - as well as with Haim Falk, then editor of *Contemporary Accounting Research*. Furthermore, my paper on "Bridging the Gap between Contemporary Accounting Research and the Profession" gave me the

opportunity to introduce the audience to the anthology of *Modern Accounting Research: History, Survey, and Guide* (which was then about to be published). From Guelph I flew to Cleveland where an old friend, Gary Previts, had invited me to present a paper at the Case Western Reserve University. He, his colleagues, and doctoral students received my paper with enthusiasm. Afterwards I was invited to an animated dinner.

For the summer of 1984 I had an invitation to participate on a panel discussion with the Nobel laureate Herbert Simon and other prominent scholars at the Tenth International Conference on Operations Research in Washington, D.C. It was a most interesting convention. Although I had met Herbert Simon several times before, it was from this time on that we got to know each other better. And on occasion of his visit to UBC, not too long afterwards, our Dean, Peter Lusztig, asked me to arrange a luncheon in our Faculty Club in honour of Herbert Simon. Another visit of his to our university took place in 1986 when he spent a week in Vancouver as Distinguished Woodward Lecturer, giving a series of presentations. In this year I joined the Board of Directors of the Canadian Certified General Accountants Research Foundation (now called CGA-Canada Research Foundation), and served on this board for six years. I much enjoyed these board meetings, and had the feeling that there I could possibly contribute more than to any other committee I ever served on.⁴³

From Washington D.C. we flew by way of New York and Frankfurt to Genoa from where we proceeded to Rapallo for vacations, and afterwards spent a week in Montecatini. Well rested and invigorated, we participated at the 4th International Congress of Accounting Historians in Pisa (1984) where I presented a paper. We also had an opportunity to visit the lovely town of Lucca and, now for the third time, Florence. But the highlight was a trip (organized by the Congress) to Borgo San Sepulcro, the birthplace of Luca Pacioli as well as his teacher, the famous painter of the early Renaissance, Piero della Francesca.⁴⁴ It was an interesting and most enjoyable conference with all the spirit and flare of the Italians.

But when we returned to Vancouver we heard the extremely sad news that our friend John Butterworth had succumbed to stomach cancer from which he had been suffering for some time. His untimely death was a great loss to all of us at UBC, as well as to accounting research in general. John was not only an excellent scholar but one of those rare human beings whose ethics radiated like the beacon of a lighthouse, offering inspiration to all who knew him. He had such

⁴³ In general, lengthy committee meetings are not for my temperament. Not only do I find most of them boring but, above all, a waste of time. Usually one or the other participant is unable to constrain his ego, and one is forced to spend hour after hour listening to some megalomaniac who likes to hear himself talk.

⁴⁴ Again I had the opportunity to meet such old friends as Galassi and other colleagues from many countries and continents as for example, Rosella Franceschi Ferraris and Riccardo Varaldo (both University of Pisa), Ernest Stevelinck (Belgium), and Dieter Schneider (University of Bochum).

natural modesty about him that he never applied for being reviewed and promoted to full professor (something of a requirement at UBC). I certainly consider it a privilege to have been associated with him for two decades or so, and wrote one of my papers in memory of him. Feltham, Amershi, and Ziemba (eds.) also dedicated their anthology (*Economic Analysis of Information and Contracts*; Boston: Kluwer, 1988) to John Butterworth.

In 1985 we spent our summer vacations, relatively early, in Mallorca where we enjoyed the intimacy of Palma, its surroundings, and, to a limited extent, the still windy beaches. We then had a wonderful flight over Mont Blanc and the snow covered Alps to Zürich. There, I had a meeting and pleasant exchange of ideas with Paul Weilenmann who, years before, had visited UBC. From Zürich we proceeded to Hanover (in German: Hannover) where I gave a paper at the Annual Meeting of the Association of University Teachers of Business Administration. Hanover is a lovely city, and we always enjoyed visiting it. Above all, we found Hanover to be a better place for shopping than Frankfurt or some other European city. In this year the annual AAA meeting was held in Reno (Nevada), and I attended it without being otherwise engaged. On this occasion I met Hartmut Will, who used to be one of my colleagues at UBC but meanwhile had moved to the University of Victoria.

For the Summer of 1986 I had an invitation, as a plenary speaker, to the 11th International Wittgenstein Symposium in Kirchberg some 30 kms south of Vienna. This conference was in the location where, after World War I, Austria's most eminent Philosopher, Ludwig Wittgenstein taught elementary schooling to peasant children. This visit was a very special and most enjoyable experience. The meetings were well organized by Adolf Hübner (President of the Austrian Ludwig Wittgenstein Gesellschaft), his dear wife and family as well as by the Leinfellners (Werner Leinfellner, together with Hübner founded those annual meetings around 1976 or so). Again there was an opportunity to meet old friends and many renowned scholars. Above all, I finally could meet personally Mario Bunge with whom I telephoned and corresponded for years without ever meeting him. His many books on the philosophy of science have been my "staple food"; I owe them and him a good deal of philosophical knowledge and inspiration, and ultimately paid tribute to him in my contribution to the book *Studies on Mario Bunge's Treatise* (Amsterdam: Rodopi 1990).

My presentation on "An Applied Scientist's Search for a Methodological Framework" went very well and became especially lively in the discussion period in which Bunge and others participated. Among the other plenary speakers were Mario Bunge, the eminent mathematicians Roger Penrose (from Cambridge University), René Tom (from France), and G. Kreisel (from Stanford University). Further participants were such well known philosophers as J. M. Bochenski, R. Tuomela, Ilkka Niiniluoto, Brian Skyrms, and many others whom I longed to meet for ages. Of course, I felt quite elevated by having the above-mentioned paper published together with the papers of such famous scholars from other fields (in *Logic, Philosophy of Science and Epistemology* ed. by P. Weingartner and G. Schurz, 1987). Afterwards we took vacations in

Pörtschach, Carinthia. At the subsequent visit to Vienna, Adolf Stepan and his wife invited us to their home for dinner. Later we visited our friends, Emil and Heidi Buechi and their family, in Speicher, Appenzell.

In December 1986 I attended a Board meeting of the Canadian CGA Research Foundation in Toronto. At the occasion of this visit the Thorntons invited us to dinner in a fine restaurant. The next day I gave a presentation at McMaster University in Hamilton, followed by a pleasant dinner with Haim Falk, his wife and Jim Gaa.

If I remember correctly, it was in the spring of 1987 that I was invited by Paul Griffin (whom I, apparently, met seven years before, during my visit in Wellington, when he was still a student) to present a paper at the University of California at Davis. The 1987 Annual CAAA Meeting took place in Hamilton, Ont. Afterwards Dan Thornton, who at this meeting received the well-deserved CAAA Award for Distinguished Contribution to Accounting Literature (later called "Haim Falk Award"), invited me to his home near Toronto. From there we visited with his younger daughter, a delightful young lady, the McMichael Canadian Collection. This museum in Kleinburg, Ont., possesses a unique collection of works of the well-known Group of Seven as well as of Tom Thomson, probably the most renowned of all Canadian painters. I am most grateful to Dan for giving me the opportunity to see those paintings and a museum that for years had been on my list of "places to visit". I have always appreciated my special friendship with Dan Thornton. Not only do I admire his scholarship, we also have many other interests in common, among them our enthusiasm for classical music.

This year also brought an invitation to the 1987 Discovery Symposium of the Honda Foundation that convened at this time in Vienna. Many prominent statesmen as well as scholars participated in it; we were treated most royally and had the opportunity to meet Mr. Soichiro Honda, the founder of the Honda Motor Co. The first evening began with a dinner at the Hilton Hotel where most of the participants were accommodated. At this dinner we shared an intimate table and interesting conversation with John M. Roberts and his wife; he is the historian and Vice Chancellor of the University of Southampton who became particularly well known through his impressive BBC television series "The Triumph of the West". The meetings, where I presented a paper, took place in the Hofburg (the former Imperial Palace). This magnanimous invitation ended with a gorgeous banquet in Palais-Hotel Schwarzenberg. There, we shared the table with Adolf Stepan (my successor of the Chair in Vienna) and his wife who practices as a physician.

Subsequently we participated at the 12th International Wittgenstein Symposium in Kirchberg to which we went from Vienna after the Honda Symposium. Again I met Mario Bunge and Robert Trappl but I also had the opportunity to meet the newly appointed Austrian Federal Minister of Science, Hans Tuppy, a renowned biochemist. I was amazed how well informed he was about my research and former activity in Austria. Before this convention we followed in last year's footsteps and spent two restful weeks in Pörtschach. Afterwards we visited Zürich, St.

Gallen, and Frankfurt a.M. There, my wife and I were invited to dinner by the family of the late Fritz Schmidt (i.e., by two of his daughters, as well as a son-in-law and a grandson) who pioneered the "current cost accounting approach" in the 1920s and 1930s. Thus, I had opportunity to learn further details about this giant of German accounting theory, and could see his villa and family seat.

The beginning of 1988 brought my compulsory retirement (due to the age limit set by UBC) as well as my "emeritation". But I continued to do full-time research and even taught in the fall of this year one course. Some UBC colleagues appealed against this age discrimination and even sued the university. This gave me hope that one day I could be reinstated retroactively. During this year J. C. Gaa's Monograph on the *Methodological Foundations of Standardsetting for Corporate Financial Reporting* (AAA, 1988) - on the Editorial Consulting Committee of which I served - was published. Jim Gaa not only has a doctoral degree in accounting but previously acquired a Ph.D. in philosophy - no wonder that we understand each other particularly well. He is a most serious and profound scholar, and I have highest regard for his work. His more recent book is *The Ethical Foundations of Public Accounting* (CGA-Canada Research Foundation, 1994), which I had the pleasure to review for this foundation.

The 1988 Annual CAAA Meeting took place in Windsor, Ont. where my paper "Counting, Accounting, and the Input-Output Principle" received the "1988 Award for Best Paper". I met many old friends, particularly Dan Thornton who was about to leave the University of Toronto in order to accept the distinguished CA-Chair at the University of Calgary, and William R. Scott, who was then about to take over the editorship of *Contemporary Accounting Research* from Haim Falk. Bill Scott is not only one of the most likable persons, but also one of the leading accounting researchers of Canada; he received at this meeting the CAAA Award for Distinguished Contribution to the Accounting Literature. From Windsor we went to Bermuda for some ten days. A former student of mine from Mt.A. - who has been living in Bermuda most of his life - and his dear lady, were kind enough to show us this idyllic place and to invite us to their home with a beautiful view onto the ocean. After this vacation I attended a Board meeting of the Canadian CGA Research Foundation in Montreal.

In August of the same year, we took a short vacation in Hawaii on our way to Australia. There, our first landing was in Cairns where we tried from the air to catch a glimpse of the Great Barrier Reef. But our first destination was Brisbane where, upon the kind invitation of Frank Finn, I was scheduled to present a paper at the University of Queensland. I met many other faculty members, among them Merle Gynther. She is the sister of R. S. Gynther - well known for his book on *Accounting for Price-Level Changes, 1966/79* - whom I met in the 1960s and who invited me to give a presentation at the University of Queensland in 1970. Due to my delayed departure (see Chapter 8), I had to cancel this presentation. R. S. Gynther meanwhile had left this university for actual practice. We did not visit the Expo-site but enjoyed lovely Brisbane and its surrounding, particularly the beautiful beaches of the Gold Coast. A fine dinner at the Finns concluded this

pleasant assignation, after which we proceeded to Sydney.

This time we could better enjoy Sydney, and its impressive layout, than on our first visit that was all too short. Now the occasion was the 5th World Congress of Accounting Historians where I had two papers to present. At an excellent dinner party in the home of Murray Wells and his wife, we got to know new people and met several old friends.⁴⁵ Above all, I now could meet Denise Schmandt-Besserat, an archaeologist from the University of Texas in Austin. We had previously corresponded intensively, and her work on pre-historic writing, counting and record keeping has had an inspiring effect on me (see Chapter 13). Masao Ueno, who also attended this conference, gave me regards from Shinzaburo Koshimura who, sadly, died a few months later. Ueno later approached me with the suggestion of translating one of my presentations (the one about "Academic Accounting Research in Canada") into Japanese. Indeed, about half a year later it was published in *Wako Keizai*.

Of course, we also met the Chambers who decades ago visited our home in Berkeley, and more recently in Vancouver when Simon Fraser University invited Ray for a lecture series. At my second presentation, the day before our departure from Sydney, I did not feel well, and had to harness all my willpower to finish this lecture. During the night I fell so ill that we had to call the hotel physicians who diagnosed a severe influenza. He gave me the choice of being hospitalized in Sydney or to take the risk of flying to Vancouver with a fever of over 39 degrees Celsius. We decided to take the flight, and after 20 hours or more *en route*, I arrived more dead than alive in Vancouver. The next day Hermi came down with the same horrible flu, and for weeks neither she nor I could leave our home. All this was not only very disagreeable but most embarrassing; because a few days later I was supposed to participate (together with Herbert Simon, Kenneth Boulding and other notables) at the Conference of Praxiology and Methodology of Economics in Warsaw, sponsored by the Polish Academy of Sciences and other organizations, and financed by the Sabre Foundation, Inc. (USA). The invitation to this event and my presentation of a paper came many months before, and everything was arranged. But now, I was so miserable that there was no other way but to cancel my participation by cable. Nevertheless, Wojciech Gasparski, of the Polish Academy of Sciences and editor-in-chief of *Praxiology*, invited me to the Editorial Board of this journal. I accepted this honour with particular pleasure as I found myself there in company with such renowned colleagues as Herbert A. Simon, Mario Bunge, W. N. Sadovsky, and others.

I finally recovered from this horrible influenza to give at UBC my graduate seminar on Income Determination in which Yoshiaki Koguchi and Haruo Okamoto participated. There were several pleasant occasions when we had social gatherings with these gentlemen and their wives.

⁴⁵ Among these were Frank Clarke, Michael Gaffikin, Giuseppe Galassi, Alicja Jaruga, Paul Garner, Kyojiro Someya and Ichiro Shiobara. At the conference I also had a lengthy discussion with G.A. Swanson with whom I had already corresponded, and who shares some of my interests in the systems approach.

Indeed, over the next two years Yoshiaki Koguchi paid regular visits to my study, and we had the most interesting discussions, many of which Yoshi taped on his recorder. There are few scholars who studied my publications so carefully as he did, and who are so well versed with my ideas. By the time he had to leave, in spring 1990, we struck a good and sincere friendship.

For February 1989 I had an invitation to present a paper at the University of Texas at Austin where such old friends as Bill Cooper, Ed Summers and others took good care of me. Furthermore, this visit enabled me to meet again Schmandt-Besserat, who together with her husband (also a professor at this university) invited me to luncheon. During this summer, Jim Ohlson, from Columbia University, who had been a student of mine in Berkeley and later was a post-doctoral fellow at UBC, spent several weeks at our university. In former years we two did not always see eye to eye, particularly about the distinction between accounting research, on one side, and economic research in accounting, on the other side. Apart from that, I must confess, the more I study his work, the more I am impressed by it - though I still maintain that it is economic research for accountants. I have tried to emphasize my admiration for Ohlson's work in the Commentary to my anthology on *Accounting Research in the 1980s and Its Future Influence* (1991).

In August of 1989 we participated at the Annual Meeting of the AAA in Honolulu where we met, among many others, our special friend Maurice Moonitz whom we had not seen for some time, as well as Stephen Zeff, Bill Cooper, and Yuji Ijiri. Yuji had just received the special honour of being inducted into the Accounting Hall of Fame. There, I also met two other friends, Peter Holzer and Hanns-Martin Schoenfeld, as well as Adolf G. Coenenberg (University of Augsburg) with whom I previously corresponded and who reviewed AAM in the mid 1960's in the *Zeitschrift für betriebswirtschaftliche Forschung*.

In this year I continued my full-time research at UBC as well as the teaching of one course. Because of the inflexible, bureaucratic policy of UBC, which did not permit anyone to teach after age 67, this was my last teaching activity. In December the meeting of the Board of Directors of the CGA Research Foundation was in Toronto. Afterwards we visited our old friends, the Kuhns, near Ottawa and took this opportunity to see the new and very impressive buildings of the National Gallery and, on the other side of the river, in Hull, the Museum of Man. There is a great contrast in architecture between these two buildings. The National Gallery, built by Moshe Safdie is lofty and full of airy glass, but the Museum of Man by Douglas Cardinal, is earth-bound and stunningly beautiful. Cardinal, who himself is a descendant of local Indians, has created a unique abode for anthropology, reflecting man's feeling for and integration with nature. It is a worthy monument to Canada's Indian heritage. The soft and curved forms of this complex of buildings seem to grow out of its natural surrounding of river, plain and forest.

The 1990 CAAA Annual Meeting convened conveniently near us, at the University of Victoria, on Vancouver Island. I presented a paper and, as usual had the opportunity to meet many

old friends.⁴⁶ I also had a chat with Ross Skinner, who at this occasion received the CAAA's "1990 Haim Falk Award for Significant Contribution to the Accounting Literature". On the last evening of this conference we went out to dinner with Dan Thornton, his charming wife and some other colleagues, among them Heidi Chrisman of Laval University (and later of the University of Quebec in Montreal) who also is of Austrian descent.

In the summer of this year, Joel Demski from Columbia University visited UBC. Joel, an eminent scholar and close friend of Jerry Feltham, is a quiet and reticent person. He gave several interesting papers, and I had some opportunity to talk to him privately as well as on matters of research. Once one gets to know him, he is a pleasant and kind person.

In October 1990 I followed an invitation from Al Hunt and Dean George Lerner to spend a week at Lethbridge University to give a series of lectures. The reception was most cordial and the response of faculty and students very pleasant. This visit closed with my being speaker at the annual Pacioli Dinner at which many practitioners participated. There, I pointed out - half seriously, half in jest - that it was not Luca Pacioli, but I who discovered double-entry record keeping. I did not refer to the well-known facts that double-entry was practised over a century before Pacioli, and that Benedetto *Cotruglio* (of Ragusa) wrote a manuscript about it almost forty years before Pacioli did. I referred to something more surprising. Namely, to the surprising fact that nobody (before my 1987 paper - see next Chapter) noticed that the Sumerian practice of putting tokens (of assets, i.e., goods and services) into a hollow clay ball (after having impressed them onto the outside of this ball in order to see at a glance the total equity contained in it), constituted a kind of double entry, closely related to the debit and credit in our modern sense. Since the Sumerians could, of course, not have been aware of this modern relationship, it was, indeed, I who first recognized their usage of it (archaeologists could, obviously, not be expected to perceive this particular aspect). The reason why the Sumerians did not develop and exploit this valuable notion, lies in the invention of cuneiform writing and its precursor. The latter impressed the tokens onto flat clay tablets, thus the tokens were no longer required as symbols for assets, merely their function as writing tools remained. I wrote several papers on this subject and got good mileage out of interpreting Schmandt-Besserat's archaeological discoveries from an accountant's point of view, and making new inferences.⁴⁷

⁴⁶ Among them were Rashad Abde-khalik, then editor of *The Accounting Review*, and George Murphy (University of Saskatchewan). George is Canada's leading accounting historian and has produced many fine studies; he has also philosophical interests and firmly believes in the importance of methodology for our discipline. No wonder that he was invited by Michael Chatfield and Richard G. Vangermeersch, the editors of *The History of Accounting: An Encyclopedia* (Garland, 1995) to write an article about my work for this comprehensive reference work.

⁴⁷ For the reader interested in the exciting details, I recommend particularly two articles of mine: "Prehistoric Accounting and the Problem of Representation: on Recent Archeological Evidence of the

In the Spring 1990 I became a member of the editorial board of the new journal *Accounting, Business and Financial History* (U.K.), the editor of which, J. Richard Edwards, I would meet in Maastricht a year later. Most of 1990 - with the exception of two weeks in Hawaii, the CAAA meeting in Victoria, and my trip to Lethbridge - was spent by completing and revising several manuscripts that were published during 1990/91. My 1991 schedule was even heavier when I continued my full-time research and publication activities at UBC. Indeed, the true colour of an academic reveals itself best by the work done without expectation of any financial or other reward. This calls to mind a passage from the *Bhagavad-Gita* (Sections II and III):

Desire for the fruits of your work must never be your motive in working....Work done with anxiety about results is far inferior to work done without such anxiety, in the calm of self-surrender.

But the issue of continuing employment was not quite settled; a decision then issued by the BC Human Rights Commission concerning compulsory retirement, in favour of two of my colleagues, increased the hopes of many of us to be eventually reinstated. However, at the end of 1990 came the verdict of the Supreme Court of Canada that the compulsory retirement of professors, reaching the age of 65, does (according to a majority opinion - it was a split vote) not violate the human rights laws of Canada and its provinces. This dashed all my hopes of being reinstated at my former position. Compared to the USA and the countries of western Europe where professors can serve beyond 65, professors are now the group officially most discriminated against in Canada. I now can only hope that our new Dean, Michael Goldberg (who, by the way, contributed considerably to making Vancouver the Canadian financial centre of the Pacific Rim) and my colleagues at UBC, who have been most supportive, will help me in maintaining an office and research facilities for a long time to come.

Although I mentioned above the budgetary difficulties of UBC which began in 1982 or 1983, I still have to add a few words justifying the title of this Chapter. For many years John Butterworth, Jerry Feltham, George Gorelik, Dan Simunic, I and others of our faculty endeavoured to build up first-rate graduate and doctoral programmes in various fields of business administration. I think there is plenty of evidence to demonstrate that we succeeded. We also had in our division many excellent young scholars who helped us broaden our division's spectrum into behavioural accounting and empirical research (D.C. Hayes, Mike Gibbins, Gordon Richardson, etc.). And the *analytical* area - with such scholars as Amin Amershi, Tony Atkinson, John Butterworth, Jerry

Middle East from 8,000 B.C. to 3,000 B.C. *The Accounting Historians Journal* (Fall 1987) and "Archeology of Accounting and Schmandt-Besserat's Contribution", *Accounting, Business and Financial History* (March 1994), special issue *From Clay Tokens to Fukushima-Boki*, ed. by J.R. Edwards and B.S. Yamey.

Feltham, later Jack Hughes, and previously Jim Ohlson (as former post-doctoral fellow at UBC and frequently a Visiting Professor), as well as others - has always been the strength of our division.

However, due to a restrictive academic and financial policy by the government of the province of British Columbia, we lost many excellent faculty members.⁴⁸ While in 1984 our accounting division still had five full professors and five associate professors, by June 30, 1994, it had only one full professor (Jerry Feltham) and one active associate professor (Dan Simunic who meanwhile became full professor) - not to speak of our Arthur Andersen Alumni Chair which has been vacant for several years until very recently when Jerry Feltham was appointed to it, while Dan Simunic has now been appointed to the CGA Chair (which Feltham held previously). With a drop of 80 percent in senior professors of accounting,⁴⁹ it was surprising that we could maintain our division's reputation. On the teaching side, we were able to keep such excellent pedagogues among our lecturers and instructors as Steve Alisharan, Roger Davis, Don Lockwood, Johan de Rooy and others. On the research side we have presently several promising assistant professors: Joy Begley, Sunil Dutta, Vasu Krishnamurthy, Mary Margiotta (regrettably, the latter two just left in 1995), Amin Mawani (a former student of mine), and Jacob Nelson.

Some members of the business community did occasionally help to mitigate this precarious situation; the establishment of a considerable number of distinguished chairs in our Faculty is a typical example. But in accounting the last of the chairs was established in 1980 or 1981, and the Institute of Chartered Accountants of British Columbia hardly offered sufficient moral or financial support for maintaining our international reputation. Indeed, I was so disillusioned with the bureaucratic and parochial attitude of some of its leading figures, that in 1988 I handed in my resignation as a Chartered Accountant.⁵⁰ By this action, I hoped to awaken the more prominent members of

⁴⁸ This dilemma is shown on a broader scale by official statistics, according to which in the first half of the 1980's the salaries of UBC were among the highest in the country, while in 1989 they were on 16th place among Canada's universities (and possibly lower at present). In the face of such a dilemma it is remarkable that our Faculty still succeeded in receiving, for example, the most grants among Canadian business schools in the prestigious Natural Sciences and Engineering Research Council's grant competition in 1991.

⁴⁹ Not counting the two active professors emeriti, George Gorelik and myself.

⁵⁰ In other provinces the situation may be different. The members, and particularly the officials, of the Chartered Accountants Institute of Alberta, for example, seem to have much more appreciation of intellectual activity. It is unlikely that I would have resigned in such an atmosphere. Of course, the situation may meanwhile have improved in the B.C. Institute of Chartered Accountants, but the fact that such a powerful researcher as G.A. Feltham - who received the highest honours from the AICPA, AAA as well as the CAAA, and who did more for the international reputation of Canadian accounting than anyone else - has (in spite of his long-standing membership as a Canadian chartered accountant), hardly received from the BCICA the recognition he would deserve. But who knows, perhaps this note may, in time, have an impact.

this institute; but I overrated either them or my own contributions to Canadian accounting research during the past four decades. However, in defence of the accounting profession, I must admit that another institution, the Canadian Certified General Accountants Research Foundation, did its best to support academic accounting research, and thereby helped finance several studies generated at UBC. I must also add that the present research manager of this foundation, Stephen Spector, is one of the most enthusiastic editors with whom I ever collaborated.

13. NEW IMPETUS TO RESEARCH

In the 1970s my impetus for research came mainly from two sources, first, the concern with writing *Systems Methodology and Instrumental Reasoning* and the philosophical issues related to it; and second, from my interest in problems of inflation and current value accounting. But in the late 1980s when "retirement" approached, I tried to open new doors. As I was resolved to continue with my research, I welcomed every stimulus capable of inspiring new ideas. From 1983 to 1994 I was fortunate to have had several such stimuli that gave rise to a series of papers and books which, I hope, are not without originality.

The first of these "impulses" came when John Butterworth in 1983 presented a paper at our Faculty - later incorporated in Chapter II of the book by Butterworth and Falk on *Financial Reporting - Theory and Application in the Oil and Gas Industry in Canada* (Hamilton, ON: Society of Management Accountants of Canada, 1986). It was an attempt to distinguish various accounting paradigms along the lines of Thomas S. Kuhn. But by this time there were already tendencies in the philosophic literature (by Lakatos, Laudan, Sneed, Stegmüller, Balzer, Bunge and others) to go beyond Kuhn's conception of theory, and to regard a "theory" as a whole network of smaller theories or, in Stegmüller's terminology, "theory-elements". Soon afterwards I tried to apply this new view to Butterworth's paradigms, and was invited to present a related paper as a plenary presentation at the 1986 Wittgenstein Symposium as mentioned in the previous chapter.

Later, various versions of this paper, with different kinds of extensions, appeared in other publications, one of them in *Keiri Kenkyu* (Autumn 1990, pp. 3-30). There, I extended the structuralists' *conceptual* duality of non-theoretical vs. theoretical variables to a double-duality by adding the distinction between non-observational vs. observational variables, both dealing with the *reality side*. This conveys a clearer picture for the analysis of ontological as well as epistemological problems, and seems to be more acceptable from the point of view of a realist and thus of modern science. That this is not merely a purely philosophical concern, is shown by the perennial search in accounting for observational variables and their relations to theoretical ones (see also Chapter 17).

Another stimulus came from my growing interest in the evolution of contemporary accounting research. My anthology *Modern Accounting Research: History, Survey, and Guide* (1984/89/92) found favourable response in the accounting literature, as illustrated by the review of

a well-known author, M. Scott Henderson (now Dean at the University of Adelaide):

*Richard Mattessich is one of the founders of modern accounting research and any of his work in this area should have an immediate and appreciative readership. They will not be disappointed.... Whilst practitioners may find it heavy going, I am sure that students and academics will appreciate this volume. The Canadian Certified General Accountants Research Foundation must be congratulated for supporting the publication of a book of this sort. (M.S. Henderson: *The Australian Accountant*, March 1985).*

Similar reaction came from another prestigious professional journal:

*Richard Mattessich of the University of British Columbia has edited and contributed to one of the best collections of articles to appear in recent years on the many dimensions of accounting research. He provides an excellent introduction entitled "The Scientific Approach to Accounting". **Journal of Accountancy** (USA, January 1985).*

Academic journals too responded favourably:

*Practitioners and non-doctoral students are likely to find some of the readings, especially in Parts III and IV challenging and perhaps difficult to appreciate. But the mix of readings will permit them to get an overall feel for the state of accounting research...the volume as a whole provides a particular perspective on accounting research. Those students and academics who have not yet developed their own perspective will find this a useful aid to their development efforts. Those who have already developed their own, and perhaps different perspective will find it useful to reexamine their views in light of the perspective promoted here. (Chee W. Chow, *TAR*, October 1985), pp. 766-767.*

That so many excellent readings have been brought together under one cover, at reasonable cost,...is an important accomplishment in pedagogy, of which both the author and the publisher should be proud. Additionally, the author's commentaries, framing the articles, make the book much more than just the sum of its parts. I can foresee using it in the classroom for many years, perhaps along with the assigning of updated review articles....Overall it is difficult to find fault with this impressive monograph. Some readers, of course, will disagree with Mattessich's methodology. The acceptance of an approach is ultimately a personal matter. I hope that they will be "conscientious objectors", and look at the work with suspension of disbelief.

(Thornton, *Contemporary Accounting Research*, Fall 1985, pp. 138-139).

This anthology was reprinted in 1989 as well as 1992, and has been supplemented by a more recent book on *Accounting Research in the 1980s and Its Future Relevance* (1991). The latter too had excellent reviews (e.g. *The Accounting Review*, Oct. 1992, pp.878-879) and in 1993 was translated into French under the title *La recherche comptable dans les 80 et sa pertinence future*. This complement contains a comprehensive commentary that offers a careful analysis of the many achievements of this particular decade, as well as a discussion of its boons and banes.

A third stimulus I derived in 1985 from reading (in *Discovery*) an article about Denise Schmandt-Besserat and her work on prehistoric writing, counting and record keeping (see above). She presented overwhelming evidence that record keeping for legal and commercial purposes preceded writing and even abstract counting. I became fascinated by this discovery, and wondered why this exciting archaeological research, so relevant to our profession, had not previously been systematically exploited by accounting researchers. In a series of articles, I interpreted her discoveries from an accounting as well as philosophic point of view and tried to draw new inferences.

This enabled me, among other things, to demonstrate that a prototype of double-entry record keeping was practiced by the ancient Sumerians already over 5,000 years ago. A most surprising conclusion which, due to the particular way in which this duality manifested itself, only an accountant could have recognized.

A fourth stimulus came through the reading of two or three articles that aroused my suspicion. The first was by a former student of mine, Lloyd Heath ("Accounting, Communication and the Pygmalion Syndrome", *Accounting Horizons*, March 1987, pp. 1-8), the second by Robert Sterling ("Confessions of a Failed Empiricist", *Advances in Accounting*, Vol.6, 1988, pp. 3-35). Both articles made me uneasy - and for similar reasons. They finally forced me to digest thoroughly a problem that had perplexed me for some time. As early as 1981, when I made a presentation at the University of Edinburgh, the question arose from the audience whether such variables as income, debts and owners' equity are abstract or concrete. At this time I was tempted to answer "abstract" or even "theoretical". But Heath's (1987, pp. 2, 4) assertion that "income does not exist in the real world any more than a family with 1.6 children exists in the real world...and `stockholders' equity is simply a name", as well as Sterling's (1988, pp. 4, 5) related claim that "with rare exceptions accounting numerals do not represent phenomena, *any* phenomena...and there are no phenomena that correspond to most numerals that appear on financial statements" (1988, pp. 4, 5) made me doubt my original answer. However, I began to rethink this problem only after I read Thornton's response ("Theory and Metaphor in Accounting", *Accounting Horizons*, December 1988) to Heath's article. Thornton suggested that we should not answer these questions literally but metaphorically. Although this is a clever way to resolve this particular problem, I had the distinct

feeling that there was more to it.

Soon it dawned upon me that the solution lay in distinguishing clearly between physical reality versus social reality (a juxtaposition which Heath seems to have confused with the totally different dichotomy between physical reality vs. its conceptual representation). Based on the crucial notion of "emergent properties" (already examined in *Instrumental Reasoning*, 1978), I first developed the "onion model of reality" which conforms better to our everyday linguistic usage than does any other model. It regards reality as forming a hierarchy of many levels, from ultimate reality to social reality or beyond. I then pointed out that income, debt as well as ownership claims belong to social reality, and are empirical, even observational variables; they are by no means empty concepts or mere names. But why is the clarification of this issue crucial? Because the major task of science is to represent reality (though in an approximate way); and this can only be done if one is able to distinguish clearly "what represents" from "what is to be represented". For further details, I refer to the two "reality papers" mentioned below, and to Chapter 3 of my forthcoming *Critique* (1995).

From the very beginning I knew that with these "reality papers" (which I deem to be among my better works) I "had a tiger by the tail". But when I submitted a concise version in January 1989 to *Accounting Horizons* (where Heath's and Thornton's papers appeared and to which I thus responded), I received a reply in August 1989 rejecting it, and stating that the paper: "is 'murky' at best; frankly it reads like the work of a zealous 'professional student' who has never done any hands-on accounting work".

After the first unsuccessful attempt with *Accounting Horizons*, I sent a version of this paper to the editor of *The Accounting Review* inquiring whether I should officially submit it to this journal. His advice was to send it back to *Accounting Horizons*, as it was a response to one or even two of its articles. Indeed, there ought to be a drastic reason before an editor rejects a response to a previous publication of his journal. Yet again, it was rejected and I had to submit it elsewhere. Finally, I sent it to *Advances in Accounting*, where Sterling's (1988) paper appeared because my paper was no less a response to Sterling as it was to Heath. Even here one of the editors was highly critical, and expressed his "disappointment" in no uncertain terms. Usually the editors hide behind the argument that the style is unacceptable, but I suspect the actual reason is that they themselves are not conversant with philosophic issues. Yet another editor of this journal was more favourably disposed towards my paper; and after I agreed to eliminate much substance, a shorter version was finally accepted for publication in *Advances in Accounting*. The full length version was afterwards readily accepted (for a simultaneous publication) by the Research Foundation of the Indian Accounting Association in their first monograph, edited by Bhabatosh Banerjee under the title *Contemporary Issues in Accounting Research* (Calcutta: IAA, 1991).

This positive reaction I would have expected on the basis of my experience with Indian students in our doctoral seminars. These students always exhibited an extraordinary affinity and understanding for philosophical problems. And when Banerjee's book (in which my article

appeared on pp. 2-30) was discussed by P.P. Gupta in *The Accounting Review* (January 1992, pp. 231), the verdict was that "'Social versus Physical Reality in Accounting and the Measurement of its Phenomena' is the most interesting in the entire volume....I am impressed with the effort put forth by the Indian Accounting Association Research Foundation". More recently, I presented this paper on several occasions in America and Europe, and had enthusiastic response. Indeed, because of this and other recent works, I was selected for the "1991 Haim Falk Award for Significant Contribution to Accounting Thought" of the Canadian Academic Accounting Association. I consider this honour not so much a personal triumph, but a victory of philosophic over the prevailing anti-philosophic thinking in accounting.

Several colleagues asked me what the reaction of Heath and Sterling was to those papers? I maintained a long-standing correspondence with Sterling, with whom I agree on many things but disagree on others. So I asked him for a response on this reality issue. But, apparently, my letter caught him at such a busy time that he stated in his letter (of November 9, 1989): "I cannot do much more than acknowledge receipt and offer my thanks at this time." In a subsequent letter (of December 22, 1989) of slightly over 100 words, Sterling points out that I have misunderstood his position, so that no defence is necessary. Since my interpretations were based on verbatim quotations from Sterling's publications, such a response might seem somewhat abrupt, the more so as I have maintained a long-standing correspondence with him and always answered his requests for comments in detail. For example, in a lengthy letter to me (of July 22, 1987) he heartily expressed his thanks (to my comment on his MS of "Confessions of a Failed Empiricist") to which I later replied in equal details.

In the case of Heath - who, after all, was my former student - the situation was even worse. Two friendly and pertinent letters of mine remained unanswered. In the 1960s and 1970s such an attitude would have been difficult to imagine. Nowadays this seems to have become the norm; and it is no coincidence that Ray Chambers states in a footnote on the first page of his paper "Positive Accounting and the PA Cult" (*Abacus*, March 1993, pp. 1-26): "An earlier draft of this paper (February 1990) was sent to the authors of the main work discussed [Watts and Zimmerman (1986)]; none has expressed commentary or opinion."

The spring of 1991 was quite eventful. In April I presented the "reality paper" at the Annual Congress of the European Accounting Association (EAA), where it was very well received, and where several distinguished professors from America (David Solomons, Rashad Abdel-khalik and others) were among the audience, many of whom expressed congratulatory remarks. As this was my first participation at an EAA Congress, then held in Maastricht (The Netherlands), I was impressed by the large attendance. I also admired the excellent organization which, among others, was in the capable hands of Hein Schreuder, with whom I previously had exchanged correspondence concerning issues such as "accounting as an applied science" and the book by Anthony G. Hopwood and Hein Schreuder, *European Contributions to Accounting Theory: The Achievements*

of the Last Decade (Amsterdam: Free University Press, 1984).

After Maastricht, we paid a short visit to our old friends, the Buechis, and then proceeded to Parma where we had to cope with an unexpected snowfall and, afterwards, a good deal of cold and rainy weather. The overwhelming hospitality of Galassi made our stay in this historic city a true pleasure. Among the many kind things that he did for us, was an invitation to a marvellous performance of Donizetti's *Lucia di Lammermoor*. The highlight was an aria by "Lucia" accompanied by a few soloists. Never before had we heard such a sensitive interplay between voice and two or three instruments. Such intimacy is probably impossible to achieve in a larger opera house.

We also had the opportunity to visit Galassi's home in Langhirano and his summer place in Cervarezza in the northern Apennines, not too far from the ruins of the historical castle of Canossa where, in 1077 emperor Henry IV had to bow before Pope Gregory VII and beg his release from the ban of excommunication - it is still debated whether this was a true humiliation of an emperor or merely a clever diplomatic move on his part. On another day, one of Galassi's collaborators, Stefano Azzali, showed us Roncole and Busseto, both well-known as being the origin of Giuseppe Verdi's life and career respectively - we also saw Sanct Agatha, the big estate which Verdi acquired in later years. Another of Galassi's collaborators, Paolo Andrei and his charming wife, took us to a private art collection which reminded us, on a smaller scale, of Paul Getty's museum in Malibu (Los Angeles) which we visited a few years before.

At the Istituto di Ricerche Aziendali of the University of Parma, headed by Galassi, I met further colleagues and collaborators of his.⁵¹ The series of three lectures which I presented there were well received, and the attendance was amazing (at the first lecture, one for first-year students, there must have been between 400 and 500 students). Indeed, I had great difficulty in entering the classroom where the students squatted even around the podium. This reminded me of my own study time during WWII as well of my teaching at the Ruhr University. But my successor at this university, Gert Laßmann, who visited us in September 1994 in Vancouver, mentioned that some classes have now around one-thousand students.

In the week of our return from Italy we went to a CAAA Conference on "Curriculum Development in Accounting: Preparing for the Next Century" at the University of Lethbridge where I presented a paper on "Philosophy and the Future of Accounting". This conference also broadened my insight into the wide-ranging dissatisfaction with the present way of teaching accounting. I fully agree that one of the major reasons for this unsatisfactory state are the many textbooks which seem to be more a source of revenue for publishers and authors than mental nourishment for the students. However, much of the criticism may be misdirected. The fact that North America has fallen behind its economic competitors, is all too often blamed on the

⁵¹ For example, the professors Pezzani, Polonelli, Tanzi, Sandrini, Fellagara and Bisaschi, as well as Fabrizi, the Dean.

professors, instead on the social and educational deficiencies of society in general. As long as the parents and pre-college teachers, on this continent, do not succeed in instilling in the young people (possibly from earliest childhood on) the same *discipline* and *work ethics* customary in many Asian and European countries, most efforts will be in vain. No advanced or sophisticated accounting education could then remedy this particular situation.

A week after the Lethbridge meeting we went to Chicago, following an invitation by Dennis Reigle, Managing Director (University Relations) at the head office of Arthur Andersen & Co., Société Cooperative. The occasion was a two day celebration of the Arthur Andersen Alumni Professors. It was a most magnanimous festivity and was held at various places. A reception at the Nikko Hotel (JAL), an interesting working session at the Head Quarter of AA&Co, a grand dinner at the Mid-American Club, and above all, a visit to Saint Charles, the marvellous Training Centre of AA&Co (which every university could envy for its modern facilities and luxurious setting). The highlight was the closing ceremony at this centre where, to the surprise of all guests, a series of large bronze plaques were unveiled - each of them having etched or engraved the picture of a present or former Arthur Andersen Alumni Professor. When my wife saw my likeness engraved, she said, "It seems, they have given you what you have wanted for some time; they have given you more hair" - indeed, my hair had become somewhat thin at the top. I used this jocular remark to some advantage after the subsequent luncheon, when I - as one of the most senior participants - thanked the officials of Arthur Andersen & Co. on behalf of the guests, many of whom were "eternalized" in bronze and honoured in such a splendid and generous way.

This celebration also offered the opportunity of meeting most of the Arthur Andersen & Co. Alumni Professors. Surprisingly, I knew only a few of them in person. For example, my former Berkeley student, Ted Mock, now at the University of Southern California, and an eminent contributor to the accounting literature; furthermore, Dale Flesher, at the University of Mississippi, whom I frequently met at the International Congress of Accounting Historians; and William McCarthy, at Michigan State University, whom I had met for the first time a month before in Maastricht, but with whom I corresponded previously.⁵² Here in Chicago, as in many other places before, I encountered several scholars who asked me whether I am the Mattessich who wrote *Accounting and Analytical Methods* (which they digested during their doctoral studies); I usually answer jokingly that "there is only one Mattessich in accounting", which, as far as I know, is no exaggeration.

⁵² Prof. William E. McCarthy was among the many accounting scholars of the "younger" generation who told me that he was "reared" on my book AAM (see his kind letter, partly reproduced at the end of Chapter 5 of these memoirs). Other scholars who made similar remarks were, for example, the Prof. Rashad Abdelkhalik, in the early 1980s on occasion of his visit to UBC, and Prof. Ray Brown, in 1994 when we met in Venice.

Before returning to Vancouver, we spent an additional day in Chicago, mainly devoted to visiting the Art Institute that harbours one of the most impressive art galleries on this continent. Of course, a single day can offer nothing but a rough survey, but since I missed visiting this magnificent temple of fine art on my first visit to Chicago in 1972, I caught up belatedly.

But my relatively extensive travelling schedule for this year was not yet exhausted; I still was scheduled to attend the CAAA Annual Meeting at Queen's University in Kingston, Ontario. After our return from Italy, I found a letter from Andrew Oppong, the pertinent committee chairman of the CAAA. It told me that I had been selected unanimously to receive the prestigious "1991 Haim Falk Award for Distinguished Contribution to Accounting Thought" to be conferred on June 7, 1991 at the Awards Luncheon of the Canadian Academic Accounting Association at Queen's University in Kingston, Ontario.

At this time, I was the only one in simultaneous possession of this award and the corresponding "Award for Notable Contribution to Accounting Literature", granted to me in 1972/73 by the American Institute of Certified Public Accountants (in cooperation with the AAA). Meanwhile my dear colleague Jerry Feltham has more than caught up, as was to be expected. While the American award was in the form of a gold medal, the Canadian one was in the form of a large bronze plaque. I feel honoured that my name has been added to that of such distinguished scholars and former recipients as Dan Thornton, Bill Scott, Toni Atkinson, and Ross Skinner - Mike Gibbins, a former UBC colleague, received the Haim Falk Award in the subsequent year, and Jerry Feltham in 1994. This might be an appropriate place to quote some excerpts from my acceptance speech for this award, which was handed over to me by Richard Chesley:

Professor Chesley, ladies and gentlemen: this is a great honour indeed, and I want to thank you and your committee, and all those who believed in my research, from the bottom of my heart. But I also want to congratulate your committee, and the CAAA in general, for the insight and the courage to grant this award on the basis of one or several related papers which definitely belong to the greatly neglected area of philosophy of accounting.⁵³ The fact that you voted unanimously in favour of those recent publications of mine gives me hope that a turning point has come in the

⁵³ Apparently this award was given for my two papers "Social Reality and the Measurement of Its Phenomena" in *Advances in Accounting* (vol. 9, 1991), pp. 3-17 and its more comprehensive version "Social Versus Physical Reality in Accounting and the Measurement of Its Phenomena" in *Contemporary Issues in Accounting Research*, ed. by B. Banerjee (Calcutta: Indian Accounting Association's Research Foundation, 1991), pp. 1-30, possibly together with such related papers as "Epistemological Aspects of Accounting" in *Praxiology* (New Series, Vol. 1, No. 1, 1991) and in *Keiri Kenkyu* (Vol. 34, Autumn 1990), pp. 3-30, and "An Axiomatic Basis of Accountancy: A Structuralist Reconstruction" (co-authored with W. Balzer) in *Theory and Decision* (Vol. 30, 1991), pp. 213-243. One of the CAAA conditions for the Haim Falk Award is that it must refer to *publications of the last 5 years* before granting it.

appreciation of philosophy among accountants.

The original citation mentioned something like "the greatest philosopher of accounting" which surely makes me blush. But whether I deserve such a designation or not, I should point out that the number of philosophers of accounting is so extremely small that there may not be much to it to be the first among them. However, since I have too high a regard for my fellow accounting philosophers, I must rule out this possibility. It is true, for a long time my fascination with accounting has not been that of an accountant, but that of a philosopher. I wanted to investigate in what way, and to which extent, accounting can become a scientific discipline - above all, I wanted to clarify the foundations and scientific boundaries of accounting. And although the title "philosopher of accounting" makes me very proud, the preceding statement indicates that my area of interest is mainly the philosophy of science within accounting. I certainly could not claim much competence in the area of ethics, which recently has become more prominent in business schools. And I am the first to concede that such experts as the brilliant Briloff and our own Jim Gaa, are immensely more competent in this particular area.

*Yet the importance about this event today is the recognition that philosophy has something extremely important to contribute to accounting....But I am not yet done, and have to indulge your patience for one more minute. I want to touch on the reason why philosophy has been held in so much disregard by so many accountants. One reason, undoubtedly, is the fact that a few accountants may have done empty "philosophizing" in the negative sense. But the major reason might be found in the naive and erroneous belief that philosophy is mainly concerned with unrestrained speculation while science is something precise that is endowed with reliable measures of confirmation. Neither is true; and it is important to remember that science too contains an irreducible speculative element, though this element is somewhat stronger in philosophy. But both areas possess features of control, and ultimately both test a new insight by its fit into the pattern of previous knowledge. Indeed, it is impossible to seriously explore the foundations of accounting without a sound philosophic background. After all, the **foundations** of all sciences rest on philosophic principles, only the **activity** of science rests on scientific ones. This is not only my belief, but an often forgotten truth which I wanted to convey to you today.*

The first plenary session of this 1991 Annual Meeting of the CAAA was presented by Abraham Briloff and discussed by Ross Skinner and Morely Lemon. It was an excellent session, pivoting on the ethical and not-so-ethical behaviour of American business including public

accounting firms. I very much agree with Briloff's criticism of our present-day situation, and have the impression that he has become a legend in his lifetime, namely *our profession's living conscience* - something accountants need almost as badly as the law profession does. It was a great pleasure to meet him again and to get acquainted with his wife. There were several other interesting sessions, particularly the presentation of a paper (known to me previously in several drafts) by the husband and wife team from Simon Fraser University, Laurence Boland and Irene Gordon on "Critiquing Positive Accounting Theory". Irene is a past president of the CAAA, and Larry a well known philosopher-economist with whom I have had many interesting meetings and discussions in the past. He shares my enthusiasm for the application of philosophy to accounting and economics.⁵⁴

During August 1991 we had the pleasure of seeing again Yoshiaki Koguchi in Vancouver. He worked with me for several weeks on the translation of these memoirs and other projects. On September 11, 1991 I gave a presentation at the University of Southern California in Los Angeles at the invitation of my former students, Ted Mock and Pat Hughes. In the evening, Ted and his dear wife invited me to dinner and a performance at the Hollywood Bowl. It was a most interesting concert, organized by the well-known Peter Sellars (whose modernized and controversial versions of several Mozart operas I saw some time before on television).

In October my wife and I went to Hawaii to attend (from 16. to 19.10.1991) the Third Asian Pacific Conference on International Accounting, where I chaired a session on Financial Accounting. Meeting many old friends, I also got to know two delightful colleagues from the City Polytechnic of Hong Kong (now City University of Hong Kong or CU-HK), Judy Tsui (then Assistant Head - now Head - of the Accounting Department of CU-HK) and Dennis Taylor (then Head of the same department) who invited me to give a series of lectures in Hong Kong the following year. I also met Hiroshi Kawakita, managing partner of the Japanese public accounting firm of Deloitte Ross Tohmatsu & Co., and Yukio Fujita from Waseda University (who, in the following year, arranged my presenting a paper at his university). At the end of this conference Thorben Thomsen handed over to me - in the form of a beautifully carved African ebony trophy - The Business Instrumental Panel Award 1991 for Creative Excellence in Accounting.

⁵⁴ Again there was opportunity to meet many old friends such as George Murphy, Dan Thornton, Ross Skinner, Eldon Gardner, and Beccy Reuber (who invited several of us, including Thornton and the Skinners, to a cosy buffet dinner), as well as several friends from the Canadian CGA Research Foundation: its President, Ernest Boudreau, and Stephen Spector, the Research Manager who helped in a most enthusiastic and competent way in the publication of our newest monograph, *Accounting Research in the 1980s and Its Future Relevance* which was about to be published.

14. HONG KONG, TOKYO AND KYOTO REVISITED

In 1992 we made preparations to combine the Hong Kong trip with the invitation for a three weeks stay at Chuo University, including a lecture series. I successfully applied for the Asian Pacific University Scholars' Award of the B.C. Centre for International Education to cover my airfare, and partly that of my Kyoto trip in August. Aside from previous papers, I prepared a lengthy manuscript on a topic particularly close to my heart: the conditional-normative approach to accounting, which I intended to illuminate from different angles in the forthcoming Asian lectures.

Before embarking on this new trip to the Far East, we spent some ten days in Hawaii. After a long flight, with stopover in Tokyo, we arrived dead-tired in the evening of April 28 in Hong Kong. Dennis Taylor had made reservations for a pleasant room in the Omni Hong Kong Hotel in Kowloon. However, the room was so well air-conditioned that, in spite of switching off this system immediately after entering the room, the temperature was so low that we continued to shiver. Finally, there was no other resort but to call the desk clerk who sent us an electric heater. How ridiculous, outside it was steaming hot with some 27 or 30 degrees centigrade, and inside we were forced to heat.

The next day, after a restful sleep, we crossed Hong Kong Bay with the Star Ferry next to our hotel and had a stroll through Victoria Island. Of course much was familiar from our first visit twenty-two years ago, and yet what a tremendous change. This bustling financial centre of the Asian continent has become even more fascinating from a business point of view. It still was a metropolis of contrasts, yet it had lost something of the mysterious oriental ambiance that overwhelmed us over two decades before.

In the afternoon, an old friend and former UBC colleague of mine, David Lam (not to be confused with the Lieutenant Governor of B.C. of the same name), invited us to the famous Hong Kong Club in the very centre of Victoria Island for five o'clock tea. The following day Dennis Taylor fetched me by car from the hotel for my first visit to the CU-HK, situated in the Hills of Kowloon. After meeting faculty members, such as Anthony Chan, Michael Weinberger, Barry Graham, David Yip, Alfred Ma, as well as some of its more permanent visitors, like John Curtis (University of Waterloo), Benjamin Tai (California State University at Fresno) and Peter Secord (St. Mary University), we had an excellent Chinese luncheon and lively discussions with the Dean of the Business School and other colleagues. In the evening of the same day, David Lam arranged dinner in The Peking Gardens with our wives and Judy Tsui (who not only was then Assistant Head of the CU-HK's Accounting Department, but is also David Lam's youngest sister) who hosted the dinner. So it was ultimately through David that we got this time to Hong Kong. He is now associated with the Extension Dept. of the University of Hong Kong and represents the CGA-Canada in this city as well as in the People's Republic of China. In the latter capacity he began to introduce CGA courses in Hong Kong as well as on the Chinese mainland - apparently both of my recent

monographs, published with the CGA-Canada Research Foundation, are now being used in China.

On May 1, I had the opportunity to visit the University of Science and Technology of Hong Kong (a new and impressive research institution) and had an interesting discussion with several of its professors. Surenda Mansingha was kind enough to show me around. Apart from its highly original architectural design, this university offers the most breathtaking view over the sea and the many small islands. Even the splendid view from UBC's *former* Faculty Club had difficulty in competing with such an overwhelming panorama.

After some rest during the weekend, I held (on May 4) a workshop and presented a paper at the CU-HK to graduate students and professors from several universities. For the rest of the day I worked in the study which the university put at my disposal and had discussions with colleagues and graduate students. On May 5, I visited with Judi Tsui the Chinese University of Hong Kong, and had luncheon (in the very same dining room as twenty-two years before) as well as interesting discussions with Philip Fu and Ferdinand Gul. The next day, I presented in the morning another paper with group discussions, and in the afternoon a third lecture, this time to honours-students of accounting at the CU-HK. During this and previous days several young instructors and graduate students consulted me on various research matters. I also had an opportunity to chat with the President of this university. In the evening, Dennis Taylor invited us for a drink at his home, overlooking Hong Kong Bay, followed by a dinner with him and his wife in a restaurant on Victoria Peak. The night view from there is, of course, another unforgettable experience.

On May 7, Dennis and I had luncheon and discussions in the Faculty Club of the University of Hong Kong with two professors of its Department of Management Studies. One of them was R. I. Tricker (or was it Gordon Redding?), the other was Gabriel Donleavy who, together with Dennis Taylor, recently began to launch a new journal, *The Asian Review of Accounting*. Before luncheon, Donleavy and I had an interesting conversation on a variety of topics. We soon discovered many common interests, ranging from Ijiri's triple-entry accounting to physics and modern architecture - I also learned that Yuji Ijiri would be the next Visiting Professor of the CU-HK.

The time went by too fast and the date of our departure could not be postponed. This visit certainly was a great experience, different from our first stay in Hong Kong, but just as interesting. Above all, it gave me an opportunity to live and work for some ten days with these people, regularly using the subway to the CU-HK, and getting a feeling of what it means to live in this vibrant city that courageously looks towards 1997 when it will become part of the People's Republic. But the greatest satisfaction was the meeting with so many fine academics - what a pleasure it is to be part of the community of scholars tied to the universal quest for wisdom and truth without any heed to national, racial or religious boundaries.

On May 8, we departed for Tokyo where Yoshi Koguchi welcomed us at Narita International Airport. He extended to us, on behalf of his father (managing partner of a public accounting firm), an invitation for two days at the Hilton Shinjuku Hotel before proceeding to the condomini-

um of Chuo University, quite a distance away. The following day Fujio Harada, then Dean of the Graduate School of Economics of Chuo University, gave for us, at the Century-Hyatt Tokyo Hotel (just opposite from the Hilton where we stayed), a banquet with professors from Chuo and other universities. It was a particular pleasure to meet Fujio Harada (with whom I corresponded for about two decades without having met him personally) as well as Kenji Aizaki, the former teacher of Harada, both of whom have had a long-standing tradition of promoting my research in Japan. Other professors present at this banquet were Yukio Fujita, from Waseda University, and Koguchi, Kawano, Koseki, and Ueda, all either presently or formerly associated with Chuo University.

On May 10, the Koguchis fetched us from the hotel and kindly helped us move to a pleasant, also quite spacious and well-furnished condominium (owned by Chuo University and put at our disposal during this stay). It is located in Tama City, a Tokyo suburb west of the centre, between the Keio-line station of Seiseki Sakura ga Oka and the Keio-branch-line station of Nagayama. In the afternoon of this day Haruo Okamoto (who like Koguchi had previously spent two years with us at UBC) joined us in the apartment, and we all went for dinner in the centre of Tama City. The next day I went to the Tama campus of Chuo University (about 45 minutes by foot plus train plus bus from the condominium). Mr. Shigeaki Asano, Managing Director of the Faculty Office of Economics, kindly assigned a study to me at Chuo University. This greatly facilitated my collaboration with Koguchi on various projects.

My first presentation was on May 12 at Waseda University in downtown Tokyo. It was by invitation of Yukio Fujita (whom I met half a year before in Hawaii); but my other acquaintance, Hiroshi Kawakita from Deloitte Ross Tohmatsu & Co., was so kind to attend as well. At a subsequent banquet - arranged in the University Faculty Club with its magnificent Japanese garden - I had the opportunity to meet and talk to several other professors.⁵⁵ On May 13 and 14, I was working with Koguchi at Chuo University and (for the 13th) I had an invitation from Tomonosuke Takagi, Chancellor (i.e., President) of this university, to a meeting and pleasant discussion. On May 15, I presented a paper at the downtown campus of Takushoku University, arranged by Haruo Okamoto who translated my paper. There was an audience of about a hundred; above the elevated platform was a long banner with the words "Welcome Dr. Richard V. Mattessich" (in English) and beneath these inviting words there was the title of my presentation ("Paradigms of Accounting"), written in Kanji and Katakana. My wife received a bouquet of flowers and was invited to visit a museum during my presentation. Afterwards, a banquet was arranged in a nearby restaurant with a view towards a delicate Japanese garden.⁵⁶ At this occasion, Masahide Miyokawa was so kind to

⁵⁵ Beside Yukio Fujita and Yoshiaki Koguchi, there were Kyojiro Someya and Ichiro Shiobara, both of whom I met in 1988 at the Wells' dinner party in Sydney; furthermore there were Hide Takazaki, Kiyoshi Ogawa, Masao Tsuji, and Hiro Sato, all from Waseda University.

⁵⁶ Beside Haruo Okamoto and his wife Midori (whom we knew well from her two-years stay in Vancouver),

award me with an honourable membership in the Japanese Pacioli Society.

The biggest event came on May 16 when Chuo University had invited scholars from many corners of Japan for a public lecture and reception in its original and elegant downtown campus. The occasion was most festive. There was a large and beautiful flower arrangement at the reading stand where the introductory speeches by Fujio Harada, other members of the Faculty of Economics, and Shigeji Wada, Director of the Institute of Economic Research, were given. Again there must have been about a hundred persons in attendance. Each guest was provided with the first instalment of the Japanese version of the present memoirs (published shortly before in *Chuo Hyoron*). My lecture was, of course, given in English but translated by a first-rate professional interpreter, who did a superb job even without seeing my manuscript beforehand. Upon completion followed a "question and answer period" in which Sei Kuribayashi, Norio Nagano and others participated. Afterwards, a lavish reception was prepared with excellent food, further speeches and new accolades. Only then did I realize that scholars came from several major cities of Japan, such as Osaka, Kobe, even as far away as Hakodate and Sapporo (the latter must be close to thousand kilometres by train from Tokyo). I regard this magnificent event as one of the highlights of my academic career, and am deeply indebted to Chuo University, above all to Fujio Harada and Yoshi Koguchi, for arranging this celebration, and for putting so much effort into it.

Particularly pleasant was the fact that a renowned scholar, Nobuko Nose (Prof. emerit. of Kobe University), who also attended, still remembered my 1957 publication (on axiomatization) in *Accounting Research*. She seems to have noticed this paper when she studied in England during the 1960s and 1970s, and in 1972 she co-authored with John Hicks, later Nobel laureate, the book *The Social Framework of the Japanese Economy*. Apparently, she was sufficiently impressed by my paper to draw the attention of Harada and other Japanese scholars to it - this may well have been the start of my popularity in this great country, at least until the two-volume Japanese translation of *Accounting and Analytical Methods* followed in the first half of the 1970s. Also present were several old friends; one was Shizuki Saito, from the University of Tokyo, whom I first met twenty years ago in Kyoto, then again in 1980 in Boston, and a couple of years later at UBC, when he and his wife spent several months in Vancouver. Present also was Norio Nagano, another old acquaintance, whom Shizuki Saito recommended to us, and who too spent a year or so at UBC. At the end of this unforgettable reception Saito invited us for an overnight's stay at the elegant Palace Hotel just opposite of the emperor's precinct.

The next day, a Sunday, we went in the morning shopping in Ginza. Around noon, Saito and his wife called for us at the hotel to take a stroll in the Imperial Gardens; later they invited us to a Buddhist monastery inn. There, a delicious, truly Japanese style vegetarian meal (shojin ryori),

there was the Dean of the Business School, Kazushige Shima, as well as Yasuhiko Kataoka, Sadakoto Koike, Masahide Miyokawa and several other professors from Takushoku University.

with uncountable courses, was served. The conversation was interesting and pleasant, the atmosphere serene - I am tempted to say magic. It transported us to the Japan of centuries past.

On May 18, I gave a lecture to undergraduate students at Chuo University, excellently translated by Yoshi Koguchi. On this day I continued my collaboration with Koguchi on various projects and translations. On the next day we again visited down-town Tokyo and did further shopping in Ginza.

On May 20, a "Workshop" at the Tama campus of Chuo University was arranged, and I addressed, with a further lecture, professors and graduate students mainly from this university. Again Koguchi was the translator - he is so familiar with my publications and ideas that I was hardly surprised how well he succeeded in doing also this oral and extemporaneous translation. Afterwards, a grand banquet in Japanese style was arranged - again with innumerable courses of the finest delicacies. Even when we did not know what we were eating, it was superb - not only in taste but also in its aesthetic presentation.⁵⁷ The following day I continued my collaboration with Koguchi. In the evening, he invited us to a most enjoyable orchestral concert at the Symphony Hall of Tama Centre.

On May 22 and 23, upon invitation of Harada, my colleagues Koguchi and Okamoto arranged a trip to Hakone and Lake Ashi (previously known to me only from Hiroshige's "53 Stations of the Tokaido", one of my most favourite works of art), with a stay at the marvellous Prince Hotel, offering not only excellent accommodation and meals but also a beautiful view of Mt. Fuji. My wife and I immensely enjoyed this journey to the country side, first with Odakyu-line, and then in the comfortable mini-van of Okamoto who had awaited us at the Hakone station. We visited museums, were surprised by thunderstorms, strolled in the beautiful garden of the luxurious hotel, enjoyed the restaurant and its food, admired the hallowed, snow capped Fuji Yama, travelled on a big sailing boat to the other end of Ashinoko, and finally took the longest funicular ride we had ever experienced. It offered a wonderful view of the terrain, exposing the entire lake Ashi and the glory of the surrounding countryside from a bird's perspective.

On May 24, the Koguchi family invited us to visit the Jindaiji (a buddhist temple precinct, founded by Saint Manku during the Heian period in 830 A.D.). Entering the main gate one is faced with the three Amida-buddha divinities, Amida Nyoray, Kannon-Bosatsu, and Seishi-Bosatsu. The main building is relatively small; its portico, being curved and extending into the roof structure lends it a feeling of graveness and depth. Apart from it stands a small but strikingly beautiful belfry with bronze bell and upswept roof, the angularity of which contrasts with the gently curved temple portico of the main building. After having thoroughly absorbed the ambiance of this sacred ground,

⁵⁷ The banquet was hosted by Fujio Harada and his colleagues; present were (apart from my wife and myself) Aizaki, Harada, Kameyama, the Koguchis, Nagano, Kawano, Koseki and other gentlemen - in total we must have been about fifteen or sixteen people.

we had a stroll in the extensive temple gardens as well as the adjoining botanical garden. There, we were surprised by torrential Spring showers. After such "heavenly cleansing" we were ready to partake, for the first time ever, at a Buddhist temple service. Upon this experience followed a dinner invitation in the home of the Koguchis. The food was most delicious and prepared with the ingenious touch of the lady of the house. What a joy to be in the home of those close friends who did so much for us, and who have a very special place in our hearts. The following days I worked in the office and continued my work with Koguchi. On May 26, I had, together with Harada and Koguchi, another meeting with the President of Chuo University, reporting to him about my activities, thanking him for the invitation to this first rate university, and saying sayonara.

On May 27 we left Tama City by taxi for Shinjuku, for a one night stay at the Century-Hyatt Tokyo Hotel. In the afternoon we did some shopping in Shinjuku and on the next day Harada arranged a goodbye luncheon in the very same room where we first met him three weeks before.⁵⁸ The Koguchis then accompanied us by train to Narita Airport. There, the parting was emotional and difficult for all of us; the major consolation was the prospect that I would be back in Japan in August for a meeting in Kyoto. At the present sojourn - in contrast to my previous visits to this country - I had the opportunity to stay for a much longer time that, in turn, enabled me to get to know, at least to some degree, the life and daily routine of the Japanese people.

What impressed us most? This question, a taxi driver in Kyoto asked me three month later. "It is the Japanese people with their innate yearning for perfection and the achievement of the highest quality in practically everything they do"; this was my answer. It was not flattery but my deepest conviction. In spite of all their economic success, the life of these people is not easy: the daily commuting to work is much longer and more wearisome than in most western cities; the housing situation is dominated by exorbitant real estate prices; the cost of living is extremely high; and there is the population pressure. Yet the Japanese are working long hours, are always patient, friendly and extremely helpful; they are highly disciplined, their art is sensitive, and their philosophy of life is profound and deeply rooted in religious tradition - no wonder that Westerners have difficulty competing with them.

Upon our return to Vancouver, there was much to do. Among the many things settle, was the completion of an invited paper "On the Nature of Information and Knowledge, and the Interpretation in the Economic Sciences" which I promised to write for a forthcoming, special issue of *Library Trends*. The paper turned out to be lengthy, but I enjoyed writing it. Its first section enabled me to articulate some basic ideas on the relation between energy and information, probing the roots of the latter. I had such notions for some time, but only when opportunity arises, do such

⁵⁸ Again, there were several of our friends, the Koguchis, Harada, Aizaki, Okamoto, Kawano and Ueda. After having received so much from them, again there was an exchange of gifts, a deeply rooted tradition of the Japanese people.

ideas take a more definite shape. I would like to further develop those thoughts in a general and philosophical work - perhaps God will grant me time to accomplish this after I have settled all the deadlines and obligations which are still in front of me.

During this time there also arrived a letter from Adolf Stepan (my successor at the University of Technology in Vienna) with an enclosed article which he kindly wrote about me and my work, on the occasion of my 70th birthday. This profile was published in the June 1992 issue of the *Zeitschrift für betriebswirtschaftliche Forschung* (the leading German research journal in business economics). At the end of July I received a letter from Ashton Bishop, Secretary of The Academy of Accounting Historians, stating that "in recognition of your distinguished contributions to accounting history you have been awarded Life Membership in the Academy of Accounting Historians by the Board of Trustees". Although this is *not* a membership in a *national* academy (as are my memberships in the Accademia Italiana di Economia Aziendale and the Austrian Academy of Sciences), it is a particular honour, as only the following nine people, alive or deceased, have ever been granted this privilege: Paul Garner (USA), the late Osamu Kojima (Japan), the late Kojiro Nishikawa (Japan), Ernest Stevelink (Netherlands), Basil S. Yamey (UK), Louis Goldberg (Australia), Andrew Barr (USA), William E. Stone (USA), and myself (Austria and Canada). Meanwhile my paper "Epistemological Aspects of Accounting" (previously published in *Keiri Kenkiu*) appeared in *Praxiologies and the Philosophy of Economics* (as the first volume of the New Series of *Praxiology*), however, in receiving this volume I was greatly distraught to notice that Exhibit 1 - which was correctly reproduced in the Japanese journal - was quite incompletely redrawn in this yearbook. This is the consequence when editors fail to send authors the proofs before publication.

My day of departure from Vancouver (for the International Congress of Accounting Historians) came sooner than expected and, after a pleasant flight with JAL, I arrived on August 18 in Narita where I enjoyed my stay at the Narita View Hotel. On the next morning there was time enough to go downtown by hotel-bus to visit the extensive temple complex (Shinjoji) of this charming city. The temple belongs to the Shingonshu Chisan-ha buddhist sect, and is dedicated to Fudo-sama (the god of fire). The splendour and magnificence of Japanese temples always has a special attraction for me. It is in this atmosphere that one catches instantly the true spirit of Japan - a spirit often hidden beneath the glitter of neon-signs and modern life. Upon my entrance into those precincts there happened to be a procession of colourfully dressed monks. I added their pictures to the collection of photographs that I made on these two trips.

In the afternoon I proceeded by air to Osaka and then by bus to Kyoto and its Hotel Gimmond close to Nijo Castle, the former palace of the Ashikaga shoguns. On August 20, the Sixth World Congress of Accounting Historians began. Next day I met my two friends, Yoshi Koguchi and Haruo Okamoto. After breakfast in the beautiful Miyako Hotel the morning sessions started with the keynote address by another old friend, Marcel Schweitzer from the University of

Tübingen, who spoke most interestingly about Eugen Schmalenbach. Afterwards I presented, upon the request of Denise Schmandt-Besserat, who could not attend in person, her paper on "Accounting at the Dawn of History".

Later, Masahide Miyokawa was so kind as to present me with an ancient Japanese ledger - how gracious of him, and how fitting for a congress of accounting historians. Afterwards he, Yoshi Koguchi and Haruo Okamoto invited me to join a private sightseeing tour. This enabled me to visit many fascinating places which I did not see on my previous two sojourns to this ancient (and former) capital of the Japanese empire. We visited the Konchi-in and Nanzenji temples (not far from the Miyako Hotel). Afterwards we partook, under polite conversation of the geisha hostess, at a tea ceremony in the Tetsugakuno Michi; then we visited the Shisen-do temple, also located on the east side, though further to the north of the city. Shisen-do is a hermitage from the mid-seventeenth century, built by Jozan Ishikawa, a samurai who retired to become a scholar of Chinese classics as well as a landscape architect. Everything is kept austere and serene in strict tradition with Zen-buddhism, but the study contains pictures of the 36 famous Chinese poets; in the harmoniously designed gardens, with gurgling rivulets, one can discover ancient gimmicks such as the Sozu, the precursor of a kind of water-clock that makes regularly hollow but emphatic noises to scare the crows away.

The evening saw a grand banquet and pleasant conversations with several old as well as new friends.⁵⁹ There I got to know Cheryl McWatters (then at McGill University, and later a Dean of the University of Alberta) who asked me for pertinent material to prepare an article about me and my research for a book, *Twenty Century Accounting Theorists* (sponsored by the Chartered Accountants Institute of England and Wales). Being a Canadian accounting historian, she was invited by Prof. J. R. Edwards (of the Cardiff Business School) to write such an article for his book which has meanwhile been published (by Routledge, London, 1994) in memory of the 500 years celebration of the publication of Luca Pacioli's *Summa di geometria, propotioni et propotionalità* (1494). I received a similar request for personal material on behalf of the Professors Guo Dao Yang and Yang Shi Zhan (from China's Zhong Nan University in Wu Han) who were preparing (in Chinese) an international-historical survey of contributors to accounting literature under the title *Hundred Notable Accountants and their Historical Contributions*.⁶⁰ A special feature of the

⁵⁹ Among the former were the Frank Clarke, Yves-Aubert Coté, Mike Gaffikin, Paul Gamer, Robert Gibson, Yasushiko Kataoka, Bill McCarthy, Barbara Merino, Lee Parker, Bob Parker, Gary Previts, Alfred Roberts, Shizuki Saito, Hanns-Martin Schoenfeld, Ichiro Shiobara, Kyojiro Someya, Richard Van-germeersch and Murray Wells.

⁶⁰ This book is sponsored by Zhong Nan University of Finance and Economics in Wu Han (Sheng Yang) through Liao Lin Province Publishers. Its publication might experience some delay, due to the enormity of such an ambitious task.

banquet was the presentation of excerpts of the famous Noh play Hagoromo (the Feather Robe). Not only was it the first Noh play I had seen, it also was a stunningly beautiful performance. Hardly ever did I experience such an eerie feeling, making one shiver with excitement as though transported into the realm of genuine ghosts.

On August 22, the Congress continued. This time the Keynote Address was an interesting paper by Xu Zheng-dan (from the Shanghai University of Finance and Economics) on "The Development of the Certified Public Accountants System in the People's Republic of China". Later, introduced by Sadao Takatera of Kyoto University, I presented my own paper "On the History of Normative Accounting Theory: Paradigm Lost, Paradigm Regained ?" The paper found a good response with some challenging questions from Marcel Schweitzer. The latter enabled me to elaborate in the question period some aspects that could not be accommodated within the originally allocated time. This paper was also published (with special permission) in the September 1992 issue of *Accounting, Business and Financial History* (ABFH) - surprisingly enough it drew attention wide enough for Quorum Books (a well-known subdivision of the Greenwood Publishing Group, Inc.) to inquire whether I would be willing to expand similar ideas to an entire book (see chapter 17).

Subsequently there was a pleasant luncheon, and my charming table partner was Tomoko Takayama from Tokyo Keizai University. This was the third time that we had met at Accounting Historians Congresses, for she also attended the congress in Pisa (1984) as well as the one in Sydney (1988). Although she speaks English very well, she tried to talk to me in Japanese, being aware of my endeavour to learn this phonetically beautiful but difficult language. But I must confess that it is much easier for me to formulate sentences and speak some phrases in Japanese (of great help in restaurants, on railway stations, and other public places) than to understand what people say. So far, few friends have had the courage to test me in this way, and I am most grateful to Tomoko Takayama for her patience in talking to me slowly enough, thus helping me to overcome this unaccustomed hurdle.

Again, the afternoon was reserved for a tour arranged by the same group of gentlemen. Again, further Kyoto sites unknown to me were explored, for example the Adashino Nembutsuji of the ninth-century priest Kukai, founder of the same esoteric Shingon Buddhism mentioned in connection with the Narita temple. Apart from the famous Amida Buddha carved by Tankei during the Kamakura Period (1183-1392), these temple precincts enshrine some eight-thousand Buddha statues on open cemetery grounds. On special nights candles are lit, and the many statues seem to be floating on incandescent waves. Other places visited were the Daikakuji temple and the Hirosawanoike pond as well as the Rakushi-sha hut and finally the wooden Togetsu-kyo bridge across the Katsura river with its Hotzugawa-Kudari fishermen. But this day we also visited several places familiar to me from previous trips, like the gorgeous Kinkaku-ji, with its new gold-plated facade, surrounded by a dream-like lake and marvellous garden; the contemplative Ryōan-ji with

its fifteen small rocks that stand like islands in a sea of smoothly-raked white gravel. In the evening there was a buffet dinner in the Miyako Hotel with international music and lots of fun.

On August 23, Yoshi Koguchi and I had further discussions on the translation of the memoirs. This settled, I returned by bus to Osaka and by air to Narita. During the flight I had again a glimpse of Mount Fuji. Staying overnight in the Narita View Hotel gave me another opportunity to see Yoshi and Etsuko Koguchi. At noon they came from Tokyo to visit me in the hotel, and I had the pleasure of showing them something Japanese which they did not yet know but which I had explored several days before. This was the beautiful Naritasan Shinshoji temple complex, referred to above. Later, at the Airport, there was another hearty goodbye, and the hope for a reunion in Venice at the 1994 Convention of the European Accounting Association, which then would celebrate the above-mentioned 500 years anniversary of the publication of Luca Pacioli's *Summa*. In the evening I took a plane to Hawaii where I awaited my wife's arrival from Vancouver.

15. RECENT HIGHLIGHTS: PISA AND VENICE

Back in Vancouver, I continued my work on what I now call Conditional-Normative Accounting Methodology (CoNAM). Furthermore a lot of correspondence had to be settled, and several reviews and reports as well. Then the brass plaque commemorating my life membership in the Academy of Accounting Historians arrived with a letter from Alfred Roberts. This letter contained the encouraging words that "your notable contributions to accounting history and accounting theory are well recognized and become more appreciated with the passage of time". I do not quote this passage out of smug self-contentedness, but in awareness that lots of time will have to pass before the full meaning of my struggle for CoNAM will be fully comprehended.

During the year 1993, I concentrated mainly on my forthcoming book *Critique of Accounting - Examination of the Foundations and Normative Structure of an Applied Discipline*. I also tried to complete several articles: "Conditional-Normative Accounting Methodology: Incorporating Value Judgments and Means-End Relations of an Applied Science" (for *Accounting, Organizations and Society*), "The Number Concept in Business and `Concern Economics'" (invited for presentation in honour of Leonardo da Pisa Fibonacci at the occasion of the 650th anniversary of the University of Pisa - meanwhile published by Marcello Morelli and Marco Tangheroni, eds., in *Leonardo Fibonacci - Il tempo, le opere, l'eredità scientifica*, Pisa 1994, pp. 109-135), and "Accounting as a Cultural Force: Past, Present and Future" (my plenary presentation at the 17th Congress of the European Accounting Association, published in the September 1994 issue of the *European Accounting Review*, pp. 354-374).⁶¹

⁶¹ Regrettably, I received neither galleys nor page-proofs of this article which now contains several minor errata. The same holds for the other recent paper of mine, published in December 1994 in Pisa. It seems to be a new editorial fashion, no longer to care about the author (particularly in overseas) but just proceed on the

In May of this year my wife and I took two weeks off to enjoy the sunshine on Waikiki and, from August 8 to 11, we attended the Annual Meeting of the American Accounting Association in San Francisco where we met, as usual, many old friends. Arthur Andersen & Co. again arranged for the Arthur Andersen chair-holders (actual and emeriti) a fabulous dinner. On this occasion we enjoyed from high up a beautiful sunset with sweeping, all-around view of the bay. At the AAA Meeting, I attended several interesting sessions, collected material and had a valuable exchange of thoughts with several colleagues. Of particular interest was the session on "Value-Relevance of U.S. vs. Non-U.S. Accounting Measures and Disclosures", to which first H.P. Möller and then Andrew Alford, J. Jones, Richard Leftwich and Mark Zmijewski contributed papers. Furthermore, I enjoyed a panel presentation on "The Stewardship Role of Accounting", chaired by Robert Ashton with such participants as Rick Antle, Bob Ashton, John Dickhaut, Yuji Ijiri, and Katherine Schipper. The next day, Maurice Moonitz invited us to his hotel room and we had a long and particularly pleasant chat with him. He told us about his time at Arthur Andersen & Co. and reminisced about its founder, the unforgettable personality of Arthur Andersen himself. It is always an immense pleasure to chat with Maurice, and I cannot cease admiring his unpretentious and straightforward ways as well as his great humanity.

The early part of 1994 was occupied with finishing my two presentations for Pisa and Venice and the preparations for the journey to Italy. The invitation from the University of Pisa came already in July 1993 from Rosella Ferraris Franceschi, a most charming lady bustling with energy, whom we knew from our previous visit, in 1984, to this venerable city. The subsequent correspondence was through two engineers, Marcello Morelli (from Rome) and G. Doveri (from Milan), both from the Fondazione IBM Italia which sponsored this project. We left Vancouver on March 17, 1994 and stayed until March 22 in London at the Strand Palace Hotel that was comfortable, and most conveniently located between the National Gallery and the theatre district.

Upon arriving on the airport of Pisa, under beautiful sunshine and mild temperature, Rosella Ferraris Franceschi and her collaborator, Fabrizio Cerbioni, kindly welcomed us, and guided us to the Hotel Cavalieri-Jolly. Later, we leisurely walked through the colourful lanes of Pisa to pay a visit to some old acquaintances: the baptistery, the cathedral and the famous tower which, sympathetically leaned toward us, even more so than during our former visits. In the evening we had the opportunity to meet the two gentlemen of the Fondazione IBM Italia, who had arranged a banquet for some of the conference participants. This gave me a first opportunity to meet other speakers, many of whom were either scholars with interest in the history of particular subjects, like myself, or historians of specific fields. Beside me, at the dinner, sat Heinz Lüneburg, a mathematician from the University of Kaiserslautern (Germany), who recently published a book on

assumption that the editorial process is infallible. Only a decade ago such a practice would have been unimaginable.

Leonardo Pisano's *Liber Abbaci*, which led to interesting discussions.

On the next day our special friend, Giuseppe Galassi, arrived and we had a heartfelt reunion. He too was instrumental in arranging my invitation to Pisa. Later, Cerbioni was kind enough to show my wife and me the area surrounding Pisa. He drove us to the small but ancient basilica of San Piero a Grado (supposedly on the site where Saint Peter disembarked on his journey to Rome). This 10th/11th century church, situated southwest of Pisa, far away from the hustle and bustle of tourist traffic, offers many interesting architectural, artistic and archaeological features. Most curious is the fact that it possesses two opposite main apses (each with two smaller side apses). A sequence of portraits of the Popes, from St. Peter, i.e., from the very beginning, to A.D. 1009, are another memorable trait.

In the afternoon, Giuseppe Galassi joined us, and we proceeded, across the Arno river, to the Palazzo Sapienza, the main quarters of the University of Pisa, where its Aula Magna Storica is located. There, the formal part of the conference took place. After several introductory speeches followed two lectures on Fibonacci (presented by Marco Thangeroni and others). In the evening, we had a pleasant meal and lively conversation with Giuseppe Galassi at the hotel.

On March 24, the individual lectures took place in the Palazzo dei Congressi. The latter is a modern and elegant conference centre very close to that part of the university that houses the department of business administration (economia aziendale). The first presentation was by Tito Antoni, who in 1984 organized so well the 4th International Congress of Accounting Historians. His topic, appropriately, was on Fibonacci's relation to and influence on accounting. Nine, of the thirteen lectures, were in Italian. Although my knowledge of it is far from perfect, I managed to catch a good deal. Two lectures were in French, and two in English. Among these was my own, early the next morning. The topic (on the relation of number theory and accounting) was upon request, thus not my own choice. Yet it gave me an opportunity to dabble into the history of mathematics and its relation to accounting. Further lectures presented in the same session were those of Galassi and Enrico Cavalieri (from Rome). These presentations were interesting and well attended by outside guests as well as local faculty members and graduate students. In the evening, a large banquet was arranged and I had opportunity to take photographs for mementos of this special occasion. We, and others, shared the table with Rosella Ferraris Franceschi, who mentioned that Busse von Colbe, my former colleague from the Ruhr University, had recently spent a very successful semester or so at the University of Pisa. Dinner was a worthy occasion to close an interesting conference and an honourable invitation. For this we were greatly obliged to Rosella Ferraris Franceschi and Giuseppe Galassi as well as to the generosity of the Fondazione IBM Italia and its officials.

The Venice conference was still some ten days away. In the meantime we took the opportunity to visit Siena, a city that has been on our agenda for a long time. It was here where the medieval and pre-renaissance art of Italy reached its climax, the place where artists like Duccio,

Guido da Siena, Simone Martini, the brothers Pietro and Ambrogio Lorenzetti, Sassetta and many others flourished. The first impression of Siena is that of a truly medieval city, and it takes a while to get used to the raw brick buildings and extremely narrow lanes. But suddenly you are in front of the magnificent Duomo. This famous and unique cathedral is profusely endowed with a wide range of treasures. Not only are you blinded by its rich and gleaming façade, you are engulfed in its incredible beauty of alternating black, white and red marble design. The interior continues this contrasting harmony, and overwhelms you even more with unexpected angles and sights as well as pieces of art too numerous to list. Alone the pulpit of Nicola and Giovanni Pisano is worth a visit to this city; this pulpit is no less elegant and impressive than the one which the same team created for the cathedral of Pisa. The adjoining Museo dell' Opere del Duomo offers further harvests of sculptures and paintings. Among the latter are the glorious Maestà and other well known works by Duccio.

A few minutes from the Piazza del Duomo lies the Piazza del Campo. There, the noble façade of the city hall (Palazzo del Comune), dominated by horizontal lines and Gothic windows, is flanked by the elegant and slender Torre de Mangia. This tower seems, at first, to have grown too tall; but it is precisely this deliberate disproportion which lends tension and excitement to the panorama. Inside there are, apart from other treasures, the famous city murals by Ambrogio Lorenzetti, some paintings by Simone Martini and Guido da Siena, above all, the Majestà of the latter, which glows in subdued, mystic colours.

Among the many rewarding sites of this city one finds the Pinacoteca Nazionale, which was the original impetus for our decision to visit Siena. Here the full richness of the Siennese school unfolds; small wonder that we returned again and again to this museum. After all, what Florentine art is for the Renaissance that is the art of Siena for medieval Italy. For March, the weather was surprisingly pleasant and sunny, though colder than in Pisa. Originally we had plans to visit Urbino, the city of Raphael, Bramante, and Frederico da Montefeltro, its enlightened Renaissance duke. This is another place I longed to see for ages but our hotel reservation must have got derailed and as it was Easter time, when last minute accommodation was unavailable, we decided to stay in Siena. Instead of Urbino we made an outing to San Gimignano, a small, delightful town, even more medieval in character than Siena, which preserved several of the original 56 family towers that once boosted the prestige of rivalling merchant dynasties and dominated the horizon, as do skyscrapers in the big cities of our age.

Our arrival in Venice was cold and rainy; it was even worse when we departed, but in between the weather god looked quite favourably upon us. A water-taxi brought us to the Hotel Europa & Regina, situated at the Canale Grande, just a couple of blocks away from Piazza di San Marco. Knowing that the Koguchis would stay in the same hotel, we looked forward to meeting them after some two years or so. In the afternoon we had a joyous reunion, and in the evening we went with them to Da Raffaele, a restaurant with a pleasant Venetian ambiance. The Koguchis had

just come from Rome and before that had visited Vienna. They were most enthusiastic about their trip and expressed amazement on how utterly different these European cities were from each other; each with a very distinct character, atmosphere and flavour.

The next day, the 17th Congress of the European Accounting Association began. The meetings were on the island of Giudecca in the Zitelle (formerly a school for maidens, and now converted for the purpose of congresses and similar occasions). It lies just opposite of the Piazza di San Marco, and a shuttle-service of boats was arranged to transport the congress participants to and fro. In the afternoon the plenary session was held. After the introductory speeches by Giuseppe Marcon, Reino Majala and P. Costa, the first paper was delivered by Enrico Viganò (University of Naples), then came my own presentation, which in turn was followed by that of the renowned economist and accounting historian, Basil Yamey, who offered some criticism of Sombart's thought on double-entry accounting.

For me, this occasion constituted a highlight in my academic career. Although it was not my first plenary presentation, I hardly ever had a larger audience (probably over a thousand) in front of me. In the days afterwards I attended a series of lectures, and found of particular interest those on "Accounting and Economics", chaired by Alfred Wagenhofer, and on "The Politics of Accounting", chaired by Anthony Hopwood. In between the sessions, as well as at various social occasions, I had the opportunity to chat or exchange views with friends and acquaintances.⁶² I also met several persons whom I wanted to meet for a long time; for example, Raymond Ball (though he insisted that we had met in the sixties in Toronto); furthermore I exchanged some words with George Foster (who sat beside me at the AAA Meeting in San Francisco in 1993, but then there was only time to congratulate him shortly to his AAA Outstanding Accounting Educator Award, which he had just received). This was also the occasion to meet Mrs. Anna Szichta, a collaborator of Alicja Jaruga under whom she presently writes her dissertation about my own efforts (some of her thoughts on this subject have already been published in the Polish literature).

Being born in Trieste, I was particularly pleased to meet B. Mei from the University of this city. At the Business Meeting Giuseppe Galassi took over as the President of the EAA. This is a well-deserved recognition for his tremendous organizational effort to boost the Italian membership in the EAA, and make Italy an important force in this association. I am pleased that he thinks with

⁶² For example, Simon Archer, Wolfgang Ballwieser, Richard Brief, Alfred Coenenberg, David Cooper, Daniel Coulombe (a former student of mine, now at Laval University), Ferraris Franceschi, Giuseppe Galassi, Anthony Hopwood, Alicia Jaruga, Gerhard Mueller, David Solomons, Thorben Thomsen, Alfred Wagenhofer, Murray Wells, Stephen Zeff as well as some friends from the University of Pisa, such as Stefano Azzali, Paolo Andrei, Anna Maria Fellagara and others. I also met in Venice three ladies, two from the Universidad Madrid Complutense, Amparo Cuadrado and Maria-Lina Valmajor (and their friend, Ana Gomez), who wanted to consult me on my forthcoming research, and who, subsequently, visited us in Vancouver in September 1994.

much pleasure of his semester in Vancouver and that, in a way, he was a "student" of mine. The organization of the congress was excellently handled by the Italian team, chaired by Luciano Olivotto of the University of Venice. He and I had several opportunities to chat with each other, among these occasions was the closing banquet which was arranged on a grand scale in the Excelsior Hotel on the Lido. Hermi and I shared the table, among others, with Galassi and the Wagenhofers, and learned about the chair which Alfred Wagerhofer recently occupied at the University of Graz as well as about his wife's activity as a public accountant.

16. THOUGHTS ON TWENTIETH-CENTURY ACCOUNTING THINKERS

Upon our return to Vancouver, there were urgent matters to attend, but before resuming my work on the manuscript of the new book (*Critique of Accounting*), we took a two weeks of vacation in Hawaii. Being back at home again, I embarked with new energy on the last phase of the book manuscript. During this time my previously mentioned ABFH paper on the Archaeology of Accounting was published. Meanwhile I also learned, first, that my paper on "Conditional-Normative Accounting Methodology: Incorporating Value Judgments and Means-End Relations" will appear in *Accounting, Organizations and Society* (AOS), second, that my recent EAA-presentation would be published in the *European Accounting Review* (EAR), and third, that the English version of the present autobiographical essay would be published by Chuo University Press.

In June 1994, I attended the Annual Meetings of the CAAA in Calgary at which occasion Jerry (G.A.) Feltham was handed over the Haim Falk Award. Jerry (together with Joel Demski) also received in August of the same year the even more prestigious and rare AAA Award for Seminal Contributions to Accounting Literature on the basis of their joint paper "Economic Incentives in Budgetary Control Systems" (*The Accounting Review*, April 1978, pp. 336-359). This well deserved recognition and the fact that Jerry Feltham (who also received the local 1994 "Academic Research Excellence Award" of our Faculty) is the driving force of UBC's Accounting Division, are a great boon for all of us. Despite the many budget cuts and the loss of senior faculty, the members of this division can boast at least five or six major literature awards.

A couple of weeks before finishing my book-manuscript I received the work *Twentieth-Century Accounting Thinkers*, edited by J. Richard Edwards (London: Routledge 1994). Among its 19 chapters is a profile about myself by Cheryl McWatters; but this is not the only reason why I should like to say a few words about this book (as well as about the specific profile). For me Edwards' book was a most welcome source of valuable information that is not easily found elsewhere; and I imagine that everyone interested in the history of academic accounting on an *international* scale would think no differently. This book also constitutes an indispensable complement to such historical books and summaries (limited to more specific areas) as: *Geschichte betriebswirtschaftlicher Theorie* by Dieter Schneider (München: R. Oldenbourg Verlag, first edition, 1981),

mainly dealing with the German literature (though not only of accounting literature but that of business administration in general), and *The Development of Accounting Theory: Significant Contributors to Accounting Thought in the 20th Century*, ed. by Michael J. R. Gaffikin and Micheal J. Aitken (New York: Garland Publishing, 1982), confined to the accounting literature in English.

Due to my studies in Vienna and my activity on the American continent, I was pretty familiar with accounting research in the German and English language areas, but I always wanted to know more about such research in France, Italy, Japan, Holland, and the Scandinavian area, to which even Finland might be counted. There is, of course, the previously mentioned book, *European Contributions to Accounting Research - The Achievements of the Last Decade*, ed. by Hopwood and Schreuder (1984). As the subtitle indicates, it limits itself to a single decade. Edwards (1994), however, contains more of the international-historical information I was looking for; it even filled some gaps in my knowledge about the German and English literature. Though most of the contributions (except two) concentrate on a single personality, each article offers considerable background information from which one can learn about the academic setting (i.e., the students, colleagues or scholars with opposing views) as well as of research interests and the pertinent cultural atmosphere of a country and period. Edwards' book might even help to break the narrow-minded and arrogant notion (predominant among some younger colleagues on the American continent) that serious accounting did not exist before 1968.

Being an anthology authored by twenty-six different contributors (including the editor as well as Davis Solomons, who wrote the Foreword), *Twentieth-Century Accounting Thinkers* is, of course, bound to be somewhat uneven. Some authors had concerned themselves with their particular subject for many years; Gaffikin, for example, has known the "subject" (Raymond Chambers and his writings) for decades, or may have even been his student. While other authors had less direct knowledge of their subject matter or had, for the first time, to delve into it. Some may also have fulfilled their task more meticulously than others; the articles by Tetsuya Morita and Junichi Chiba (about Iwao Iwata and Kiyoshi Kurosawa respectively), for example, are not only more comprehensive but also more carefully quoted than that by Yasushi Yamagata (about Wasaburo Kimura). But this does not change the fact that I found all those contributions a true treasure trove. I certainly feel honoured that the editor and his Editorial Board found my endeavours worthy enough to be included in this book, not to speak of Solomons "Foreword" which contains the following passage (p. ix):

The blight of 'positive accounting theory', which confines itself to the study of accountants' behaviour, driven, it is claimed, exclusively by self-interest, has left little room for the broad theorising about accounting (as distinct from accountants) that attracts accounting thinkers. Fortunately there are signs that the tide is turning. The twenty-first century may after all see its Patons, Schmalenbachs and Mattes-

siches.⁶³

The "Profile of Richard Mattessich" in this book was authored by Cheryl McWatters of McGill University. Overall it is well written and catches many crucial aspects of my endeavours. I am most grateful to this lady for devoting much time in studying many of my publications, as well as for such a favourable assessment of my endeavours. At times, this is even overdone. On pp. 26-27, for example, one might gather that some of Schmandt-Besserat's contributions to the archaeology of accounting are attributed to me. Yet, apart from minor factual inaccuracies (which the attentive reader of the present memoirs might amend for himself) and some misinterpretations,⁶⁴ there is at least one passage which I feel obliged to correct. McWatters states: "RVM [for Richard V. Mattessich] considers AAM to be a monumental work", despite the fact that I have neither entertained nor expressed anywhere such a view.⁶⁵

In this connection, I should like to add some remarks of possible interest to biographers and accounting historians. For these specialists, one should presume, it is adamant to distinguish between the following three categories: (i) factual statements (whether correct or erroneous), (ii) opinions, and (iii) interpretations. The above-mentioned case definitely belongs to the *first category*, because the author attributed to the "subject" (i.e., me) a state of mind (that I = he "considers AAM to be a monumental work") for which, however, there was no factual evidence. And without a fact there simply is nothing to interpret.

This case is very different, for example, from McWatters' (1994, p. 26) view that AAM is not a classic (see below). This is a personal *opinion, which one must respect*. Though in such a case one would expect a list of counter-evidence to the following *facts*: that AAM was reprinted in the

⁶³ Since the pronunciation of "Mattessich" rhymes with "rich", Solomons may be justified in adding an "e" in the plural; after all, one says "riches" and *not* "richs" (though in Chapter 1 I referred to my father's family as the "Mattessichs").

⁶⁴ One might also argue that, as a "profile", it is somewhat lopsided, considering, for example, that it devotes almost a full page to a minor article, like "The Constellation of Accountancy and Economics", but less than four lines to a book like *Instrumental Reasoning and Systems Methodology* (1978), though the latter is a crucial prerequisite for understanding accounting as an applied science; or considering that it relegates the most important *practical* aspect of AAM, namely its companion volume, *Simulation of a Firm through a Budget Computer Program* (1964), to a four-line endnote (# 11, pp. 31/37).

⁶⁵ To be on the safe side, I ran the search procedure for "monumental" in my computer files so I may ascertain whether I might have used, in the draft of my professional memoirs (which was at McWatters' disposal) or elsewhere, this expression in connection with AAM, perhaps in a different sense than ordinarily understood. But I never made such a remark, nor would I attribute the adjective "monumental" to a single and modest tome as AAM - even when its companion volume is taken into consideration.

"Accounting Classics Series" (of the Scholars Book Co., 1979) as well as in the Book Series of "Outstanding Financial Reprints" (Ann Arbor, MI: University Microfilms, 1979), and was translated into German and Japanese. Furthermore, that it has been abundantly referred to, and still is frequently quoted, particularly in the historical literature (including in an article by Gaffikin 1994, in the very same book where the profile by McWatters appeared); that scores of scholars (in half a dozen of countries) followed its example in searching for an axiomatic basis of accounting; that it broke with the need for *absolute* magnitudes of value, income, etc.; that it was the first major work to promulgate modern analytical and simulation methods in our discipline; and, above all, that its chapter 9 (together with its companion volume)⁶⁶ was the first systematic presentation and thorough analysis of computerized spreadsheet (or matrix) simulation in accounting which ultimately conquered accounting practice in a quite spectacular way. The latter fact is admitted by McWatters (1994, end note 11, p. 37), but she obviously does not deem it important enough in the evaluation of AAM - perhaps because this theoretical insight proved of mere *practical* relevance. She even believes that "While AAM may not be declared a classic, RVM's insights into early record keeping will have long-lasting influence upon the accounting discipline" (McWatters 1994, p. 26). Was it the professional bias of an historian that tempted McWatters to favour minor historical insights over a whole series of much more wide-ranging contributions, as for example, the pioneering of computerized spreadsheet simulation?

If a historian, like McWatters, who is obviously favourably disposed toward my writings, fails to see the significance of such evidence (as listed above), is this not proof that, after thirty years or more, AAM has still not really been understood? Indeed, here might be the key to the many self-references, quotations, etc., in the present memoirs and other recent publications of mine. It is the struggle for *full* recognition of AAM. As its author, I not only have the right but the duty to fight for it - no less than a mother fights for her child. That AAM has many limitations, I myself have repeatedly emphasized. Above all, this book lacks the self-contained architecture so characteristic of Edwards and Bell's classic on *The Theory and Measurement of Business Income* (1961) - on the other hand, some might regard this latter work as emphasizing too much "current entry-values", and thus as being dogmatic, just as the medieval Gothic cathedrals are impressive

⁶⁶ This Chapter 9 (of AAM as well as the companion volume) were based on my article on "Budgeting Models and System Simulation", (TAR, July 1961, pp. 384-394) which was the very first publication to advance the idea of computerized spreadsheet simulation of accounting transactions in such a way that the accounting entries are not mere figures but are to be determined by entire formulas, just as did decades later the best selling computer spreadsheet programmes. But is the fact that in the 1960s only few people saw the significance of this insight, sufficient reason for denying recognition of priority? If this were so, one would have to strip Gregory Mendel of the priority to the laws of inheritance because his insight was appreciated only after De Vries re-discovered those laws over three decades after Mendel's publications and six years after Mendel's death.

statements of belief. In spite of its impressive achievements, Edwards and Bell's (1961) book is still purely normative and does not apply a conditional-normative approach. A deeper probing of AAM might not only reveal that the latter presents a more tolerant and, to my mind, *neutral* position, but also that its complexity hides one gem or the other, which some colleagues may either have missed or believed to be nothing but glittering rubble. Perhaps AAM can be better understood in the light of my forthcoming book *Critique of Accounting* - the latter, certainly, can be comprehended better in the light of AAM.

But whichever way an author may want his work to be understood, only posterity can decide whether his visions will prove to be genuine or whether they were but nebulous fantasies. Besides, one should be aware that the history of philosophy and even of science manifests repeated cyclical fluctuations in popularity, even of the most prominent contributions. Yet all such considerations are much less important than a researcher's integrity, and his courage to pursue or defend his findings whatever the cost or risk may be of being misunderstood or slighted.

After this detour, I still owe the reader an explanation of the third category of statements, namely *interpretations*. These too cannot be made in a vacuum but require a factual basis. For instance, take the statement "AAM is not without limitations. First, RVM's terminology does not distinguish clearly between axioms and definitions (AAM, 1964: 446) with the result that many of the proposed axioms are conditional definitions" (McWatters 1994, p. 25). There can be no doubt that her first sentence is correct; but the second sentence is a misinterpretation that takes a definite advantage for a limitation. The strategy employed in AAM makes not merely the axioms but even the definitions axiomatic. To realize this, one has to be familiar with the *predicative form* of axiomatization which nowadays is used in most mathematical as well as philosophical-logical presentations. Whether it is the best selling text by G. Birkhoff and S. MacLane on *A Survey of Modern Algebra* (1977, 4th ed.); the truly monumental, eight volume *Treatise on Basic Philosophy* by Mario Bunge (1974-88); or the no less monumental *Probleme und Resultate der Wissenschaftstheorie und Analytischen Philosophie* (1969-84) by Stegmüller, they all use this predicative form which I characterized in the "Preface to the Reprint Edition" of AAM (p. xix) as follows:

one requires a special kind of axiomatization, one in which the axioms become constituents of the definition of a set-theoretical predicate. But precisely this kind of axiomatization was chosen in AAM (whether by sheer luck or sound intuition is left to others to judge). Here (p. 19) the axioms are neither propositions nor propositional forms but structural constituents of the definitions of our discipline - exactly as required by Sneed and Stegmüller.

It is crucial to realize that *conditional definitions* are something entirely different from *nominal definitions*; and that predicative axiomatization does not entail the lack of differentiation between axioms and (nominal) definitions, which I have previously criticized (in Chapter 6) in

connection with Chambers' *Accounting, Evaluation and Economic Behavior* (1966).

The above mentioned examples should not be misunderstood but must be seen in the right light. Few biographers will be able to hit the mark in every respect. Minor errors and misinterpretations are almost inevitable, particularly when working under time-constraints or not having the freedom to consult the subject-person himself. The above mentioned references to McWatters (1994) must not be understood as a criticism of the competence or seriousness of this scholar. The best proof for the sincerity of my words is the fact that she and I have agreed to collaborate on my next project (on Academic Accounting Research in Canada).⁶⁷ I am very much looking forward to her help and advice, as that of a *trained* accounting historian who, in addition, resides in the East of Canada, thus having much better personal access to many persons and sources - something indispensable for this particular project.

17. REMARKS ON THE CRITIQUE OF ACCOUNTING

In October of 1994 the manuscript of the *Critique of Accounting - Examination of the Foundations and Normative Structure of an Applied Discipline* was finally completed. And this may be an opportune place to say a few words about this forthcoming book. The increasing gap between the theory and practice of accounting should be taken as a warning that academics have emphasized too much the "economics of accounting" while neglecting accounting proper, i.e., the "applied science of accounting". The present trend, to cast accounting in the image of a pure science, may need to be modified and extended to accommodate explicit value judgments and the means-end relations so indispensable for any applied approach. The *Critique* points a way out of the present dilemma. It emphasizes that *accountability* has been the ultimate task of accounting for some ten-thousand years and continues to do so; it thus pleads for paying greater heed to the role which moral issues, and value judgments in general, play in this discipline. In a way, this book may be considered a *protest* against four aspects prevailing in modern accounting: (1) the relative neglect of ethics and other norms, and (2) the methodological intolerance of PAT, (3) the continuing search for an *absolute* value notion instead a context-oriented one, and (4) the refusal to regard academic accounting as an applied instead of a positive science. In general, the *Critique* is concerned with the professional and theoretical foundations as well as the *normative* structure of accounting (as its subtitle conveys). It is a critical examination of the extent to which accounting can represent social reality, and attempts a somewhat daring synthesis of the two major opposing camps of present-day academic accounting, the "Critical-Interpretive Perspective" of Great Britain,

⁶⁷ Whether this project can be extended to Canadian efforts in MIS (as originally intended), will depend on the judgment of another possible collaborator, Al Dexter. It will be up to him to decide whether, in this particular area and locale, enough interesting material exists for such an extension.

on one side, and the "Positive Accounting Theory" of America, on the other. In other words, I have tried to demonstrate that academic accounting is not a pure but an applied science which can neither be satisfied by a positive nor a purely normative approach. It requires, instead, a *conditional-normative methodology*. The kernel of this idea is already present in AAM; there, purpose-orientation plays an important role, as do the related placeholders for pragmatic hypotheses (or instrumental hypotheses, as called in IRSM as well as in the *Critique*). Yet, I hope, during the intervening decades these thoughts have matured and grown. Indeed, the *Critique* incorporates or summarizes the essence of ideas expressed in a series of recent articles and relates them to the views expressed in AAM and IRSM.

This holds particularly for the conditional-normative accounting methodology (CoNAM)⁶⁸ developed in my AOS-1995 paper (see preceding chapter) and, to some extent before - for an excellent review of my earlier contributions to CoNAM, see Thornton's previously quoted review article in *Contemporary Accounting Research*, Fall 1985, pp. 124-142). The *Critique* makes it possible to better illustrate and integrate this idea with previous ones. It demonstrates, on one side, the development of my thinking and, on the other side, shows a consistency with ideas expressed in the 1960s and 1970s. Such a conditional-normative methodology is supposed to determine the means required for attaining specific information objectives and related goals of a firm. That this is to be accomplished not only by analytical but also empirical means (i.e., testable instrumental hypotheses) I have tried to show in RSM. In contrast to the traditional normative approach this methodology is not purely subjective but possesses two objective aspects: first, it insists on revealing the goals pursued and their underlying value judgments; second, it recommends the search for empirical evidence supporting means-end relations (not unlike positive accounting theory tries to submit evidence for *presumed* cause and effect relations).

In Chapter 11 of the *Critique*, I offered four major reasons for regarding accounting as an applied and not a positive science. Yet, a fifth reason has to be added. This is *the greater sensitivity of the applied sciences in general to vested interests*. It is best illustrated by a recent example from medicine that is particularly striking. In 1979, Dr. Robin Warren of Australia discovered that, in contrast to traditional belief, there exists a bacterium (now called helicobacter pylori, shortly H-pylori) that can stand the high acidity of peptic acid and thus can thrive in the stomach of humans. Two years later, another Australian, the physician Dr. Barry Marshall (from Perth) made the momentous discovery that these bacteria exist in the stomach of some ninety percent of all people

⁶⁸ A previous draft of this paper bears the term "conditional-normative accounting theory". Although the term "theory" is still mentioned in the AOS-1995 paper as well as the *Critique*, both of these publications stressed the distinction between a methodology and the theories that follow from it. But what I offer there is definitely not a theory but a methodology. Indeed, due to my philosophical bias I have always been, for better or worse, more of a methodologist than a theorist.

suffering from peptic ulcer, and are its major cause as well as that of gastritis. Later it one discovered that stomach cancers may also be caused by H-pylori, and that these cancers have an association with heart decease. Thus, persons harbouring these bacteria seem to have twice the risk of heart problems compared to persons not habouring those bacteria. Hence, a good deal of heart attacks might possibly be prevented by eliminating those helicobacter pylori.

So far most of this is pure science; but Barry Marshall (who is now at the University of Virginia, USA) also noticed in 1981 or 1982 that, in the majority of cases, these illnesses can be cured by a simple and inexpensive two-weeks administration of antibiotics (such as tetracycline or amoxicillin, etc.) *together with bismuth*. According to a CBC television programme,⁶⁹ this discovery is neither to the financial advantage of the pharmaceutical industry nor to some members of the medical profession. Not only yield such best-selling ulcer drugs (as Tagamet, Zantac and others) many hundred-millions of dollars every year, but the latter merely suppress peptic ulcers temporarily, without being able to heal them, thus requiring repeated purchases of these drugs by the patients. The new treatment, however, is not only incomparably cheaper, but also able to cure this decease for good (provided no new infection occurs). Even members of the medical community might not be interested in promoting the novel treatment, although it renders many gastric operations unnecessary. According to this CBC programme, the result was that for more than a decade, physicians ignored theses momentous discoveries, promoting instead the much less effective but much more expensive drugs. Only most recently, after recognition of these new insights by the prestigious National Institute of Health in the USA, attention seems to be paid to this "new treatment" by the medical community. If vested interests can delay the application of important discoveries in one of the most progressive sciences, such as medicine, we should not be surprised if such interests can effectively block insights in more modest disciplines such as accounting.

At any rate, the advantage of CoNAM over traditional normative theories consists in greater objectivity and tolerance. No longer would it be possible to claim, for example, that current entry values (or current exit values, or present values, etc.) are absolutely correct. One would have to recognize that, depending on the objective, each of these value bases could be acceptable (as illustrated in the *Critique* for different capital maintenance objectives). One would then be able to specify under what circumstances one valuation method is to be preferred over another. This is neither possible under the traditional normative approach nor under the positive scientific one - the former is *postulating* absolute values, the latter tries to infer them from other premises. Hence the advantage of CoNAM over a positive approach would be that value judgments could be

⁶⁹ For details see the Canadian Broadcasting Corporation (CBC) television programme "The Nature of Things" (of March 2, 1995) with David Suzuki (Professor of Biology, University of British Columbia, Vancouver, B.C.).

incorporated into the theory proper, which in turn is the prerequisite for any applied science. No longer would the practitioner be obliged to apply a positive theory by converting it herself or himself into an applied theory. On the contrary, CoNAM would ensure that a theory generates accounting models for a variety of purposes, tailor-made, or at least customized (standardized) to frequently encountered needs (similar as suites, automobiles, etc., are being customized).

This gives occasion to clarify further confusions about the difference between a positive and normative approach. Feltham, in a recent lecture (presented at UBC) popularized the distinction between the applied and the positive science approach as that between asking how should something (he uses the example of a 'mouse-trap') be built? He juxtaposes this to the question "what consequences will the device have for its user (perhaps even for the mouse)?" This is an excellent comparison; but looking closer at the accounting literature one notices that even the disciples of positive accounting theory (PAT) claim to be able to solve policy issues and often ask the first type of question (e.g., "how should proper accounting standards be formulated?"). This may be the reason why McWatters (1994, p. 33) says: "Unfortunately, RVM dismisses the more fundamental argument that PAT is positive in name only and needs to be revised or renamed in a more appropriate manner". But this is a misconception. First, I would never dismiss the need to revise and then rename PAT; on the contrary, such a revision is the very purpose of CoNAM. And I have stressed in my AOS-paper, as well as the *Critique*, that the proponents of PAT cannot have their cake and eat it at the same time. They have to make up their mind whether their pursuit is truly positive or whether they want to tackle policy issues. Second, the decisive criterion is whether PAT uses value judgments *as factual descriptions* of persons, or *as premises* of the theory proper. If the latter is *not* the case, neither McWatters nor anyone else can seriously claim that PAT is normative. Of course, one could argue - as radical-critical accountants seem to do - that a science is not positive as long as it possesses hidden, pre-scientific value judgments. But then all science is normative, and the argument that PAT is not positive becomes vacuous.

The *Critique* also offers some historical glimpses, reaching from the very beginning of token accounting (some ten-thousand years ago) to a survey of research during this century. Furthermore, it repeatedly returns to reality issues and illuminates several aspects in detail. It emphasizes that, in contrast to other applied sciences, accounting attempts to represent reality. Yet, contrary to the positive sciences, such representation is always a pragmatic one, i.e., constrained by a series of value judgments (considerations of cost-benefits, conservatism and others). Furthermore, it tries to explain why the conceptual representation of economic reality in the accounts and financial statements usually seems so "unrealistic".

Above all, the *Critique* distinguishes explicitly between *positive* and *pragmatic* representations of reality. The positive representation (e.g., in the case of valuation) might use a present value method (be it deterministic or probabilistic); but such an approach yields indeterminate solutions in many realistic situations (e.g., under imperfect and incomplete markets). In other

words, except for relatively simple and usually unrealistic situations, it may be impossible to illuminate the entire picture. The pragmatic representation, in contrast, does not focus on the entire picture but on a specific aspect (e.g., real financial capital maintenance). But, when required, this pragmatic procedure can be repeated for different aspects (e.g., physical capital maintenance, nominal capital maintenance, etc.), and thus may ultimately shed more light on the entire picture than the positive approach could ever do. This leads to the insight that pragmatic representations in financial statements can offer only purpose-oriented values (dependent on specific situations, information requirements, cost/benefit criteria, and so on) but not absolute ones. Such a perspective reveals not only the difference between positive and pragmatic representations of reality, but also offers the possibility of analyzing the transition from one to the other. Such a link is to be found in the value judgments and means-end relations (both of them sandwiched between the two types of conceptual depictions) that lead from the positive to the pragmatic representation.

I have no illusions about the *reception of the Critique*; its ideas will not be readily embraced by all accountants. The disciples of positive accounting theory, for example, will find this book and the suggested methodology unacceptable. Both run counter to their basic creed that accounting could be anything but a positive science. Yet, even more moderate empirical as well as analytical accountants may find it difficult to accept a methodology so very different from what they have been taught and used throughout their career. The law of inertia will force most of them to prefer the familiar - even if it has proven incapable of resolving long-standing, fundamental accounting problems - rather than venturing into the uncertainties of a novel methodology. Not to speak of the imagined loss of "prestige" (or injured pride) which many might feel by admitting accounting to be a "mere" applied science.

However, the greatest impediment in further developing the main ideas outlined in the *Critique* lies in the fact that young academics in North-America are greatly discouraged to "experiment" with new ideas of this sort. If I can afford to present something like CoNAM, it is only because I am established and even retired, but a young assistant professor, who struggles to be promoted or to get tenure, can hardly afford to do this in the present academic climate - particularly not at leading universities. If such a person would present in his work the consequences resulting from the insight that accounting is an applied science, his advancement is likely to be in great jeopardy. Such academic petrification is dangerous. It may well postpone the kind of future accounting research needed to bridge town and gown. Yet in the long-run even those difficulties may not be able to stop what becomes increasingly evident - namely, the need for a thorough analysis of purpose-oriented accounting systems.

Of course, the reader may rightly ask: what is the ultimate justification for preferring CoNAM to other accounting approaches, particularly those presently under consideration? My answer is quite realistic: Look at accounting as it has been practiced during this century. Do practitioners attempt to represent reality in a way that comes close to a pure science, or do they try

to represent it in a purely pragmatic way? Who can seriously argue in favour of the former? Thus the conclusions are: first, that the academic analysis of accounting must be conducted on the basis of the applied and not the positive sciences; and second, that an applied science can neither ban norms from its premises nor disregard the relationship between means and ends. Whoever misses this basic premise, and its major conclusions, is bound to misunderstand an approach that would make little sense for a pure science.

Furthermore, to look at the *Critique* from the point of view of immediate acceptance, particularly of CoNAM, would also be misdirected. Above all, this methodology itself is not yet fully developed. Its fundamental, unresolved problem is the empirical determination and testing of instrumental hypotheses - something that not merely requires the expertise of empirical accountants, but a second empirical revolution. After all, our first empirical revolution was but one of the "economics of accounting". Critics will point out that, despite pertinent illustrations and suggestions, my book does *not* really show in which way instrumental hypotheses (i.e., formalized means-end relations) can be empirically determined and tested in any *direct* fashion. But a direct way to do this would require an empirical breakthrough so enormous that it would affect applied sciences in general - and this is not likely to happen overnight.

Already Bertrand Russell pointed out that it is much easier to determine truth than usefulness; and even as to the first, i.e., as regards cause and effect relations, we have to infer the causal nexus on the basis of statistical associations, hence in an indirect way. On the other hand, in everyday life and accounting practice we constantly try to find the best possible means for achieving a specific end - and sometimes we succeed in such endeavour. So why should it not be possible to investigate scientifically those practical ways, learn from them, and formalize them? The *Critique* is a call to arms for such a battle, not a victory celebration. Thus I am only pointing the way toward, but not presenting, a final solution. Certainly, I am not claiming to be the Messiah of accounting; at best I am a latter-day "Lion roaring in the desert". Just as John the Baptist got the axe from the "establishment" (King Herod Antipas and his family) when his criticism became too much for them, so I might run analogous risks. The ideas presented in the *Critique* may, indeed, haunt academic accounting for some time, but the day may come when it will dawn upon its disciples that, for an applied science, the approach suggested is a reasonable one. Obviously, it is not enough to pay mere lip service without drawing the consequences: one can hardly accept accounting as an applied science but continue to regard, for example, current exit-value as the only "legitimate" valuation basis.

Sooner or later accountants will also realize that, in spite of the present limitations, CoNAM admits analytical means and informal arguments to attain *preliminary* solutions to the acceptance of certain means-end relations without excluding normative premises (as PAT does). Nevertheless, to materialize CoNAM in full measure would require a concerted effort of the entire accounting community. Above all, it is important to avoid a grave misunderstanding that is analogue to the one

mentioned by André Malraux in a very different context:

disdain for Gothic art which prevailed in the seventeenth century was due, not to any authentic conflict of values, but to the fact that the Gothic statue was regarded at the time, not as what it really is, but as a botched attempt to be something quite different. Starting from the false premise that the Gothic sculptor aimed at making a classical statue, critics of those days concluded that, if he failed to do so, it was because he could not. (The Voices of Silence, translated by Stuart Gilbert. New York: Doubleday & Co., 1953, pp.19-20).

To appreciate the *Critique*, one must take into consideration its different viewpoint and, furthermore, concentrate on its critical analysis rather than on immediate results. Although such analysis can hardly be summarized in a few strokes, its basis might be stated as follows:

(1) For thousands of years *accountability* has been the major function of our discipline. The neglect of this function during the last decade or two (in theory no less than in practice - with the exception of agency theory) falls in line with the moral decline, as manifested in government and business practices as well as society in general.

(2) There is an obvious need for putting greater emphasis on ethical and other value judgments in accounting, and on incorporating such value judgments into the premises of accounting theories. To avoid the subjective bias which a normative theory (in the traditional sense) would create, one has to aim for a methodology that enables the construction of conditional-normative theories. Such theories are objective to the extent that they clearly reveal the underlying value judgments. They also should permit, in principle at least, the empirical testing of the relationship between desirable ends and efficient means to attain such ends.

(3) To outline the prerequisites for comprehending the foundations, structure, and possibilities of accounting as an applied discipline, and to search for the appropriate methodology are two of the main goals of the *Critique*.

As to the long-run response to this book, any speculation is futile; I rather prefer to quote a passage from a most stimulating book by Friedell:

The fates of books are hardly less illogical and irrational than are the fates of people....They follow a dark innate law which nobody knows....We see authors who for years struggle with a problem...without being noticed by the world. They despair and deem their life's work to be naught; suddenly, in some recess of their mind, their appears a thought to which they had never attributed any significance. And

*this tiny idea lights up and moves through the centuries.*⁷⁰

18. WHAT I CAN BELIEVE AND WHAT I CANNOT

Dear reader, whether you have kept faith with me through all of these memoirs, or whether you just skimmed a few pages, you now deserve some words from heart to heart. And I shall try to spice them with a few grains of humour. If one is interested in someone's career, it may be enough to taste merely the icing, but if one wishes to comprehend the person behind it, this will not do. Approaching the end of this biographical sketch, I become painfully aware of how much it is merely a sketch, and how inadequate it is as a biography. To probe deeper, to see what lies beneath all this commotion, much more would have to be said. And since this is not possible - at least not at this stage - let me offer a consolation prize. Let me convey my answers to a few fundamentally important questions. In other words, let me reveal, in an aphoristic fashion, the foundations of my "belief system" which grew and sustained me during this Odyssey of some seven decades. Those beliefs are the children of my curiosity rather than of my imagination; as sketchy or as speculative as they may appear to be, they are the fruits of deep probing and long soul searching - they are in the spirit of Socrates who taught that a life not reflected upon may not be worth living.

Do I believe in God? Certainly I do. For me this hallowed name signifies the total hierarchy of all levels of reality together with the creative forces and the information or laws governing them. I do not even hesitate to believe in a personal God. Since we all are part of this Godhead, humanity represents such a personal aspect of Him, Her and It all wrapped together. Is it not the meaning of Christ - the representative of humanity, his compassion and suffering - *to be part of God*? Did not he who was condemned to the cross because he called himself "son of God", call his audience "brothers and sisters"? For me the revelation that humanity is part of the Godhead is the essence of my belief - but this runs counter to *St. Augustin's De Civitate Dei*. Yet apart from such disagreement, St. Augustine was a Neo-Platonist while I am more of an Aristotelian; and beyond the belief in a prime mover, I think that creation and creator, though not identical, should be thought of as two inseparable facets of the same coin. This is not to say that the *atman* and the *brahman* are *ultimately* identical (as some Indian and other philosophers seem to have suggested); it merely means that the energy and information of the former is *a constituent* of the energy and information of the latter. Just as a drop of sea water has different *holistic* properties than an entire ocean, so *atman* must have different *holistic* properties than *brahman*. But why speculate about connections that seem to transcend the comprehension of our mind as well as our senses? Through-

⁷⁰ Translated from Egon Friedell, *Kulturgeschichte der Neuzeit* (Cultural History of Modern Times), Vol. 2 (Barock und Rokoko). London: Poseidon Press, 1947), p. 274.

out history, thinkers have tried to search for the best possible answers to sheer unanswerable questions, and in doing so anticipated, sometimes by millennia, such things as atoms, planetary systems, and many other occurrences that nowadays are common-sense. However, the emphasis lies here less on the correctness of the answer than on what a person can really believe after having, for the sake of his own identity and integrity, deeply probed those problems and scrutinized the available evidence. Thus, we have returned to Socrates' words about the importance of thoughtful contemplation.

Do I believe that God created or evolved the cosmos out of chaos? Yes I do. This creative force not only seems to have split nothingness into twain, but must have acted as an accountant *debiting* one half (the forces of matter) to the "positive" energy account, and *crediting* the other half (the forces of expansion in the space-time continuum) to the "negative" energy account.⁷¹ This belief is reinforced by recent conjectures of physics as described by none less than the eminent Stephen Hawking:

The total energy of the universe is exactly zero. The matter in the universe is made out of positive energy. However, the matter is all attracting itself by gravity. Two pieces of matter that are close to each other have less energy than two pieces a long way apart, because you have to expend energy to separate against the gravitational force that is pulling them together. Thus in a sense, the gravitational field has negative energy. In the case of the universe that is approximately uniform in space, one can show that this negative gravitational energy exactly cancels the positive energy represented by matter.

(A Brief History of Time, 1988), p. 129.

Since I occasionally dabble in poetry, I have tried to put these thoughts succinctly into verse form (leaning on the Negro Song "I have plenty of nothing"):

*God has plenty of "nothing",
and "nothing" is pretty galore,
For Him to make a whole universe,
Or two, or three, or more.*

If this "potential nothingness", out of which everything else seems to grow, is pure *infor-*

⁷¹ But this is not the only duality involved. On a higher level the split between matter (positive) and anti-matter (negative) occurs, and on an even higher level that between electro-magnetic charges, and so on. On each of these levels the terms "positive" and "negative" have a somewhat different meaning, and confusion must be avoided.

mation (some might even call it "the mind of God"), then our freshly hatched information age has hardly scraped the surface in exploring the essence of this notion.

Do I believe in existence after death? Certainly I do; are the fungi and bacteria not excellent evidence that there is life after death? I believe that the energy in each system (including us) will survive for eons until the positive and negative energies reunify into its original fluctuating nothingness (the physicists' "cosmic quantum fluctuation") that is but another state of the Godhead.

Do I believe in the existence of souls? I do, provided this expression refers to the "totality of emergent properties" that arise in every genuine system, on whatever reality level it might be found. But the notion of emergent or holistic properties is still greatly misunderstood and too much neglected in scientific research. Just as subatomic particles are being created and disappear, with their energy being converted into other particles, so human beings and their emergent properties come and go. And, if modern physics is correct, even that energy may, ultimately, be dissolved into nothingness - or as Shakespeare's Prospero says:

*The solemn temples, the great globe itself,
Yea, all which it inherit, shall dissolve,
And, like this insubstantial pageant faded,
leave not a rack behind. We are such stuff
As dreams are made on; and our little life
Is rounded with a sleep.*

*And my ending is despair,
Unless I be relieved by prayer,
Which pierces so, that it assaults
Mercy itself, and frees all faults.
As you from crimes would pardon'd be,
Let your indulgence set me free.⁷²*

Nothing seems to be more unbearable to humankind than personal mortality, and we have invented all kinds of tales to relieve us of this anxiety. Perhaps we have to make a choice of either escaping this anxiety or accepting what we honestly believe to be true.

Do I believe in the transmigration of souls? If a system breaks into its parts, and exactly the same system is created either from those or other parts, the totality of its emergent properties (i.e., its "soul") would be identical to that of the broken system. This situation comes closest to such a transmigration. But the more complex a system is, the more unlikely a perfect replication becomes;

⁷² The actual words are, indeed, "mad on" (and not as often quoted "made of") - The Tempest, Act.IV, Sc. 1, and Epilogue.

and in human beings the probability is virtually zero. Occasionally, I have been inspired by religious thoughts as well as Indian philosophy, but I can accept neither the idea of souls being rewarded or punished in any hereafter nor the notion of their transmigration as a penalty for not attaining ultimate enlightenment in this world.

What is the meaning of life? Insofar as a life can have the property of meaning - many would say that meaning is limited to propositions, sentences and similar representations - I suggest that you and everything you do, believe, love and even hate, makes life meaningful. And once a person can no longer give meaning to life, he or she must depend on others for obtaining such meaning (and there exists enough evidence that this can lead to disaster). A good deal of such meaning lies in striving for our ideas and ideals. We give meaning to our lives by doing the very best we can, irrespective of criticism or applause of the masses, leaving it up to time to rank our merits and count our faults. Such a life is often called an "authentic" one; it is a life that pursues *uncompromisingly* the ultimate goal and very essence of a person, whether he is such an unrepenting, though fictional, figure as Don Juan or a great soul as Mohandas K. Gandhi.

What is the meaning of art? Mankind has discovered many roads to "salvation", be it from the tribulations of everyday life or the anxieties of mind. The two most important ways, religion and art, were once inseparable. And for many people today, religion is still an art, while for others art has become their religion. In art we can lose ourselves, find solace, and penetrate depths of feeling that are hardly otherwise attainable. Art can reach the greatest heights and the deepest depths, it can be heaven and it can be hell. And, as the contrast between classical music versus rock music manifests, many more people prefer to be in hell than in heaven - a profound insight which Bernard Shaw formulated so brilliantly in his *Man and Superman* (1903, Act III, when "the Devil" talks about the "angelic and the diabolic temperament"). And music, the highest and most mysterious of arts, does it not penetrate to the deepest nook of our essence? Is it not ultimately based on *vibration*? This phenomenon seems to dominate the universe in so many forms.

What are my philosophic roots? I have been educated at home and in school in a fairly *idealistic* fashion - my elementary schooling was with the Piarists, a Catholic order devoted to education and learning. And I hope that the majority of my attitudes and actions have always been anti-materialistic. I also admit that my mentality leans more toward the artistic-philosophical than the empirical-scientific. Perhaps this is the reason why philosophy has such a strong grip on me, even without any formal university training in this subject. But my philosophic bent runs along realistic lines because I not only believe in a reality beyond the prison of our mind, but also in the ability of our nervous system to represent or approximate conceptually essential aspects of this reality. I consider it unfortunate that so many scholars (including such giants as Immanuel Kant) get stuck with the phenomena as they present themselves to our mind, and refuse to deal with the reality that lies behind those phenomena. Of course, the latter can only be vaguely grasped through the steamed up glasses of our senses and reasoning processes, but reality can be somewhat better

known with the help of the technical extensions to our senses. Even if its ultimate secret may be shrouded forever, I do not believe that the different levels of reality, their properties and structures, elude us completely.

What do I think is knowledge and truth? For me knowledge is the possession (ultimately a mind's possession) of an "adequate" conceptual representation of a segment of reality. Truth (or true knowledge) is the best knowledge available (by scientific and similar "objective" means) at a specific stage in history. Obviously, our truth is relative and merely approximates the evasive "absolute truth". The latter seems to be attainable only when a segment of reality becomes its own representation, when the duality between mind and matter dissolves, when they become one within the creative universe or the Universal Creator (both of which I take to be the two Janus faces of the cosmos). Above all, for me there is no knowledge without belief, but even belief must be based on evidence (otherwise it is mere fantasy); and it is the strength of evidence on which belief must be based.

Do I believe in the recently conceived duality of energy and information as the two fundamental constituents? Yes, I do. For me, energy is basically *the potential to change*, but so is information. Yet this does not make energy and information identical; at best they may be conceived as two aspects of a common event. Just as *diversification* seems to express the dynamics of cosmic evolution, so the *duality of energy and information* seems to stand for cosmic foundation. In this universe, everything seems to be either congealed energy or free energy, but everything can also become information, whether it is a person's footprint on a sandy beach, a quotation in the *Wall Street Journal*, a sound wave, or a magnetic dot on a tape coated with rust. Indeed, Schopenhauer in *The World as Will and Representation* (1818) came pretty close to the modern duality notion of energy and information - it is no coincidence that Frederick Copleston (in his monumental *History of Philosophy*, Vol.7, Part II, 1965, p.37) asks in reference to Schopenhauer's notion of Will: "why call it 'Will'? Would not 'Force' or 'Energy' be a more appropriate term...?" Take, for example, two approaching electrons: they "sense" their vicinity by an *information* consisting of an exchange of photons which requires *energy* (i.e., power or "Will"), the *representation* of which is the deflection of the path of each electron. Perhaps this duality may one day be able to reconcile the material aspects with the mental or conceptual aspects - a problem that gave much headache to philosophers.

Do I believe that the *law statements* of science are true? Such statements may be deemed to be true, but provisionally -- they can hardly be taken as absolute truth. They merely describe conceptual structures for which sufficient evidence exists that they resemble empirical structures rooted in the more evasive *laws of nature themselves*. Science *represents* and *approximates* conceptually through law statements and similar devices, whereas reality *possesses* natural laws (i.e., static and dynamic structures and related properties).

Do I believe that prediction is the hallmark of science? Although prediction is an important

criterion of some scientific activity, I must reject it as the decisive criterion of good science. The Ptolemaic model has long served as a counterexample: it could well predict the planetary motions but could not correctly explain them, thus ultimately it had to be abandoned. Today, in the age of "catastrophe theory" and an empirically confirmed "theory of chaos", we have even stronger arguments against this criterion, namely the "jumpiness" and inherent unpredictability of complex structures. We may be able to predict fairly well in physics and chemistry, but when it comes to biology and the social sciences prediction becomes even more precarious.

What do I deem to be the essence of mathematics and its relation to the empirical sciences? For me, mathematics is based on logic and is the most precise way of describing structures, any structures: whether static or dynamic ones, whether found in nature or merely imagined. The empirical sciences, on the other side, use mathematics to represent and approximate the structures encountered in segments of reality. They also stimulate mathematics to describe structures not yet formalized or even envisaged. Thus it seems important to distinguish *conceptual structures which describe* (and by means of which we represent), from *real or empirical structures which exist in nature*.⁷³

And why do we need philosophy? To save ourselves and the world from a kind of rationality that is becoming more and more irrational. Science and technology without philosophical wisdom is bound to destroy our world, but in unison with philosophy, combining knowledge with wisdom and compassion, they might be our only chance of salvation. Above all, philosophy helps to form a well-rounded picture of the cosmos and, thus for each of us to find him- or herself. Since the times of ancient Greece, we realize that the attempt of knowing oneself is the key to a meaningful life. Even Einstein's revolutionary discoveries arose out of philosophical reflections about the essence and speed of light and its limitations. The act of knowing usually involves some kind of speculation, whether it is scientific or philosophic. The main difference between the two is (in cases of empirical phenomena) the degree of supporting evidence; obviously, the latter is weaker in philosophic knowledge. Yet even this knowledge must "fit" and be based on evidence - it cannot be based on "unfounded" speculation. Scientific knowledge cannot offer a *guarantee* to truth, even if it has a higher likelihood of approaching it closer. And a scientist who disregards the philosophic foundations of science resembles a clerk in charge of counting a bundle of banknotes, but stops in mid-stream with the argument, it was correct so far, let us hope it will be correct to the very end.

Do I believe in "free will"? This question is complex and precarious. A fuller answer would have to be given in light of both the randomness of quantum theory and the new uncertainties recently revealed in chaos theory. Concisely speaking, I believe that - from the viewpoint of our fragmentary frame of reference - we are free to choose, but within relatively narrow boundaries.

⁷³ Of course, a concept or sentence also *has* a structure (e.g., a grammatical structure), but the latter is very different from the structure which that sentence tries to represent.

Yet the more global an outlook one assumes, the more this "freedom" becomes identical with the "combination of randomness and lawfulness inherent in the universe". Perhaps this conjunction is what most people mean by "the will of God".

Do I believe that there are absolute moral laws beyond the laws of nature? I believe that most of our moral maxims are made by persons, be they prophets or priests, lawyers or politicians, philosophers or ordinary citizens. "Thou shalt exist if and as long as thou canst!" seems to be one of the few maxims approaching a normative verity - and not only for living beings but for any kind of matter. Apart from its reference to stability and dynamic equilibrium, and its almost tautological simplicity, it holds for fields of forces and subatomic particles, atoms and molecules, genes and other "natural kinds" no less than for people. Yet evolution, history, or nature seems to exercise "preferences", or at least something similar, by incorporating norms into systems of all kinds. Furthermore, the various levels of reality generate not only positive but also normative emergent properties. On the physical and chemical levels arise some emergent properties that we call (quite arbitrarily) *positive* and *negative* (and the related notions of *attraction* and *repulsion*); on the biological and mental levels emerge such properties as *pleasure* and *pain*, and on various social sub-levels emerge a variety of properties that fall under the common heading of *good* and *evil* (and the related notions of *love* and *hate*). But, obviously, what is good for an individual may be evil for a nation, and what is evil for a nation need not be so for mankind in general, and what is good for the latter, in the short-run, need not be good for the biosphere of our planet. Yet such scepticism neither prevents me, in my own dealings with other persons, from trying to obey "Kant's imperative" (whether it is "categorical" or not) nor from asserting the need for moral standards. Even if some of them are but man-made, others are *rooted* in *general maxims* that are innate or *a priori*. Contrary to Kant, I believe that this innateness is not a general one; it is prior to the experience of individuals, but not to that of species and their precursors. Such experience was acquired through the evolutionary process, and had to be transmitted from generation to generation. Another part of ethics, the more variable one, may have developed through education and short-term environmental circumstances. Yet it appears that, in our time, this part of moral standards (as contrasted to the basic maxims) is being progressively eroded by innumerable forces that range from rampant materialism to the decline of family-sense and religion.

What is my political creed? I have lived under several dictatorial regimes (the Austro-fascism of Dollfuß, the Nazi-regime of Hitler, and Stalin's Soviet occupation of Vienna and Lower Austria) as well as under several democracies (the oldest living one in Switzerland, parliamentary democracies in Austria, Canada, and Germany, and the presidential-congressional republic of the USA). Among all of those I would prefer the Swiss system of government. Under this constitution the people have a better chance to express their will than under any other known to me. I also believe that this system may lend itself somewhat less to the manipulation by politicians and lobbying interest groups. But I have no political illusions, and believe that the ruling class, in the broadest

sense of the word, (whether it is that of a dictatorship, democracy or any other political system) will always exploit the rest of the populace. The difference is merely whether this exploitation is extreme or more moderate, whether it is crude or subtle, short-sighted or guided by a shrewd long-term outlook. It seems that on this continent the trend towards political, economic as well as ecological myopia has greatly accelerated during the last decades. Most of us, but particularly the coming generations, will have to pay a heavy price for the past ineptitude, corruption and insatiable greed of the political and business establishment.

What do I think about the last four decades and the future? The second half of this century will undoubtedly be regarded as the most "progressive" one from a scientific and technological point of view, so far. Never before have so many people had such a high standard of living. Yet, it is also true that never before have so many people lived in utter misery and on the brink of starvation (officially estimated as thousand millions of persons). Above all, the last four decades will enter history as the greatest opportunity lost from an ecological point of view. During this time our mother earth has been raped as never before, and all in the name of progress, economic growth, and even freedom. The political and economic leaders may occasionally bask in the artificial light of temporary popularity, but they will be condemned by history for their myopia and incompetence, above all, for missing the unique opportunity of saving our planet from a catastrophe that may dwarf the two world wars. Indeed, it is most likely that the next century will engender fearful events, the dimensions of which few of us can surmise. But this realistic scepticism need not lead us into pessimism (which I consider the most paralysing of all attitudes). I firmly believe that *homo sapiens* is tough and adaptable enough to survive for quite a while to come.

Why do I deem accounting to be so important and one of the most crucial social activities? Because no complex system can endure without a cybernetic feedback. And accounting provides, or at least is supposed to provide, such an indispensable control mechanism for most, if not all our economic entities and systems. Wherever this feedback fails to work, be it due to technical or human deficiencies, great economic damage or even chaos are likely to ensue. Thus accounting is, ultimately, less about "short-term efficiency" as it is about survival in the long run. Yet there is an even deeper reason for concerning oneself with accounting and duality in general. Beyond the more "earthly" dualities of assets and equities, revenues and expenses, day and night, pleasure and pain, good and bad, love and hate, birth and death, there are also those of existence and nothingness, of positive and negative electric charges, the polarities of magnetism, of energy and information, and so on. Is not *duality* the name of the game, and God its master accountant? For such thoughts some colleagues, who have difficulty distinguishing between imagination and mysticism, might wrongly attribute the latter to me.

Do I believe that there are positive empirical laws *originating* from accounting activity (beyond those borrowed from economics and the other behavioural or even natural sciences)? I have grave doubts about this; at least I do not know of anyone who has demonstrated reliably that

such laws exist. Give me a hint about a genuine accounting law (in the positive, scientific sense) and I may well reconsider this answer.

What do I think are the basic objectives of accounting? To my mind they are the monitoring of stewardship, the practice of assigning values to economic objects on the basis of context and purpose, the creation of decision-relevant financial information, and, not least, the creation of order out of chaos by means of transactional analysis. Luca Pacioli already said: "where there is no order, there is confusion". All of these activities refer to economic resources and related phenomena; they must be based on cost/benefit considerations in the widest sense.⁷⁴

Why is foundational accounting research important, yet so unrewarding? Let me answer this through a parable: The foundational researcher, like an earthworm, prepares the ground and makes it fertile for plants to grow. The birds, however, are more interested in those plants and their fruits; and when an earthworm ventures to the surface to enjoy the sunshine, the creatures of the sky pick on him and tear him to pieces. So it might seem that everything was for the birds.

Do I believe that academic accounting (as a whole) is or can be a science? Yes, but not a pure or "positive" one, merely an applied one. First, one must distinguish the economics and sociology of accounting (assumed to be positive) from the applied science of accounting which is definitely normative. A discipline which (1) has no scientific laws of its own, which (2) has specific goals to fulfil (beyond mere acquisition of scientific knowledge), and (3) which is bound to cost/benefit considerations, can hardly be regarded to be a pure science. If accounting possesses law statements of its own, they are based on man-made norms, not unlike those of medicine, engineering, law and other applied sciences, and it certainly is no coincidence that academic accounting research is predominantly carried out in "professional schools". However, I do admit that all these disciplines rely not only on their norms, but also on positive empirical laws. But these laws are embedded in and derived from the positive disciplines that range from the physical and biological sciences to such pure social sciences as sociology and economics. This answer may not appeal to many academic accountants because it may hurt their pride - perhaps as much as our grandparents' or great-grandparents' pride was hurt when the Darwinians revealed to them that humanity must have a common ancestor with the apes. The major difference between accounting and other applied sciences is that a fundamental task of accounting is the *representation* of segments of reality (not unlike that of a pure science). Yet this is not a scientific representation but a pragmatic one, subject to cost/benefit constraints. I may add that foundational research is by no means reserved for the pure sciences.

Do I believe that a genuine and comprehensive theory of accounting is possible? The

⁷⁴ One may be tempted to say instead "based on efficiency considerations". But certain aspects or levels of efficiency already belong to economics and even to thermodynamics (e.g., Gossen's laws and the entropy law respectively).

prerequisite for such a theory may depend on the possibility of developing an even more general theory for all applied sciences, in which the logic and epistemology of *means-end relations* are clearly stated. Presently we are far from such a theory, though some groundwork has been laid. Thus neither medicine nor engineering, nor any other applied discipline possesses as yet a comprehensive theory. This is the reason why, for a decade or so, I shifted my research activity from accounting to the philosophy of applied science. It is also why I believe that, at this stage, clearing the underbrush and fortifying the foundations are the most important tasks we can perform for future generations of accountants.

What is my attitude towards economics? Since the time of my university studies, economics has had a special place in my heart. Its theoretical presentation always fascinated me, and I greatly admire its subtle and fascinating analytical achievements. But I had hopes that in my lifetime economics would become a truly empirical science, which hardly turned out to be the case. As to the area of econometric predictions, for example, they usually are disappointing. This is not for lack of trying by empirical economists but because of the immense complexity of social reality. The status of economics has also been undermined by the often contradictory diversity of expert opinions and, above all, by the disregard with which most policy makers treat the advice of economists (even on such basic matters as the fiscal policy for mitigating the ups and downs of business cycles).

Thus I cannot but agree with the disciples of the "Austrian Tradition" (which since the seventies made some comeback on the American continent)⁷⁵ that the present "usefulness" of economics lies more in the area of analysis or, as I prefer to say, this subject is not yet a full-fledged empirical science, merely a potential or quasi-empirical one. But speaking of the "Austrian Tradition", it may well be that the "way of the middle", so typical for it, and Ludwig von Mises' emphasis on the *purposeful* individual, as well as his framework for an *applied* economic theory has (together with my engineering background), more or less subconsciously, influenced my own outlook. I also believe that the tragedy of modern economics began when, due to the operational difficulties of the utility notion, economists concentrated less on the optimization of the latter but relied more on wealth maximization.

This brings us back to the problem of "good vs. evil". First, is this a valid or meaningful dichotomy? It seems that for the lower layers of reality - which I deem to be beyond good and evil - this is not at all a useful distinction. Yet for the higher echelons, i.e., from the biological and psychological levels onward, this dichotomy becomes increasingly important; it, certainly, is crucial from a purely human point of view. But how about the notion of original sin or our eating from the tree of knowledge? This, in my view, involves one of the most tragic misunderstandings,

⁷⁵ See, for example, *Method, Process, and Austrian Economics - Essays in Honour of Ludwig von Mises*, edited by Israel M. Kirzner (MA: Lexington Books, 1982).

and brings us to the very essence of my creed. Although the acquisition of knowledge may have put the greatest moral and intellectual burden on mankind, knowledge, by itself, cannot be evil. For what could be a purer form of worshipping God than trying to better understand His world? Unfortunately, this use of knowledge is, for most people, a very secondary one. The predominant purpose of knowledge is the domination - often enough the brutalization - of the environment and other people. Thus, the cardinal sin of our age has become the maximization of wealth in the most narrow sense of the word; though even a milder version, as for example, aiming toward unlimited riches for an unlimited number of people (which might bring Bentham's hedonism to its logical conclusion) is no longer acceptable. The positive sciences may be pure, but the applied ones and technology are loaded with value judgments; and it is for this reason that we have to concentrate more on the latter - here the control mechanism of *accountability* is needed more urgently than anywhere else. Let us never forget the tragic fate of such a truly Faustian figure as J. Robert Oppenheimer, who handed the most "explosive" fruits of science to the technocrats and politicians - but afterwards, when his conscience spoke out belatedly, he was scorned and derided by those whom he served.

This leads to my last two points. First, what makes me tick? The motivations of a person are always manifold - except in fictions. Everybody has various kinds of ambitions that drive him or her. In my own case, it hardly ever has been money; an overriding component has been a great curiosity and the desire to separate the true from the false; another factor may have been the need to manifest my preference for a global and ethical rather than an atomistic and materialistic view of life; a further element has perhaps been the wish to show that a gentle attitude can be at least as successful in academia as an aggressive or arrogant one. However, there may well have been an additional motive: If my self-analysis is correct, a major factor was - and this may sound bromidic or even hypocritical - to redeem the tragic fate of both of my dear parents; all their suffering and difficulties may not have been in vain if some of my thoughts can endure. But this requires an honest search for truth, and since there is no doubt in my mind that accounting is first and foremost an *applied* science, this search has not been so much one for true cause and effect relations as for a methodology that helps clarify goals as well as finding the proper means for attaining those ends. This too, is a search for truth, though one with which some of my colleagues, particularly those who are eager to make a *positive* science out of accounting, might disagree.

Second, and finally, what do I consider important in life? Health is more important than wealth. A harmonious marriage is better than the richest dowry. A genuine calling ranks above the loftiest office. Dedication to work is more rewarding than a high salary. A simple lifestyle is worth more than the greatest luxury. Contemplation and meditation have a better yield than restless diversion. Tolerance and tranquillity of mind is a safer guarantor of peace than intolerance or the strongest international accord. A happy home, good health, and a fulfilling profession, these I consider the greatest rewards one can expect in this world. To be cheerful one may also need the

humility to believe in a higher creative force, the wisdom to accept the inevitable, the confidence to trust one's own judgment and, foremost, the luck to have another person in whom to confide. I also think one should try to follow some guiding principles of which three seem to me particularly important: consistent reasoning, sound intuition, and passionate as well as compassionate action. Beyond that, I am grateful that I received recognition enough to encourage my research but did not have so much success to become arrogant. Above all, however, fate granted me the blessing of neither being dictated by others nor of dictating to others, or as Abraham Lincoln - reiterating sentiments of Ralph W. Emerson and Walt Whitman - expressed it succinctly by saying: "as I would be no slave, so I would be no master".

19. RESEARCH AND PUBLICATIONS BY RICHARD MATTESSICH (in chronological order, up to 2006)

1943:

Kostenstelle Kraftzentrale (manuscript only) Vienna 1943: Master thesis (Diplomarbeit). A cost analysis of power centres in manufacturing industries.

1945:

Die industrielle Produktionsumstellung, Vienna, 1945: Doctoral Dissertation. An analysis of changes in the industrial structure of Germany.

From December, 1945 to June, 1947, regular monthly contributions on Foreign Trade and International Economy in the *Monatsberichte, Österreichisches Institut für Wirtschaftsforschung* 13, 14, and 15 (Monthly Reports of the Austrian Institute of Economic Research).

From 1945 to 1954, irregular contributions to *Der Österreichische Volkswirt* (The Austrian Economist). My last publication in it is "Volkswirtschaftslehre als Wissenschaft" (A few thoughts on J. A. Schumpeter, with perspectives on his posthumous *History of Economic Analysis*), 40 (December 1954), pp. 3-6.

1956:

"The Constellation of Accountancy and Economics", *The Accounting Review* 31 (October 1956), pp. 551-564, (USA).

1957:

"Towards a General and Axiomatic Foundation of Accountancy", *Accounting Research* 8 (October 1957), pp. 328-355, (London, UK).

"Extrapolation der Wirtschaftsentwicklung Kanadas", *Außenwirtschaft* 12 (December 1957), pp. 234-246, (University of St. Gallen, Switzerland).

1958:

Spanish Translation of "Towards a General and Axiomatic Foundation of Accountancy", *Tecnica Economica* (April 1958), pp. 106-127.

"Mathematical Models in Business Accounting", *The Accounting Review* 33 (July 1958), pp. 472-481.

"Prolegomena zu einer universalen Rechnungswissenschaft", *Zeitschrift für Betriebswirtschaft* 28 (October 1958), pp. 601-613, (Germany).

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APPENDIX A

A Tribute to Jerry (G.A.) Feltham

On Occasion of his Retirement Party (Vancouver 2003)

I have no special gift for small talk, so let me state some facts. I have known Jerry for nearly half of my lifetime - and, as you know, I am a fairly old guy. So I am aware of a whole kaleidoscope of aspects of Jerry's personality, and we could talk about them for hours.

Just to mention a few: There is or was the PhD.-student (in Berkeley) who writes a doctoral dissertation out of which, during the next forty years, grow branches of fertile research like an oak tree from an acorn; there is the loving husband of "June" and the active Christian; there is the devoted father of three lovely and talented daughters, and now even a grandfather; there is the economizing *paterfamilias* whose preferred shopping times are those when things are on sale; there is or was the powerful squash player whose physical and mental energy I very much used to admire; there is the true patriot who leaves such a prestigious place as Stanford University to return to his native Canada; there is the idealist who forgoes more lucrative offers from other Canadian universities, just to remain with us in our Faculty; there is the faithful friend who edits a scholarly book in memory of his best friend, John Butterworth, who died so prematurely; there is the superb teacher who juggles economic and financial relations, just as an adept puppeteer manipulates his marionettes (I know this because I took Jerry's PhD-seminar twenty years after he took my seminar on analytical accounting in Berkeley); there is the accommodating colleague who contributes a paper to one of my CGA Research Foundation monographs (which, by the way, was called the "flag ship" of this foundation and attained three editions - perhaps because of Jerry's contribution); there is the stern scholar who is quite skeptical about non-mathematical and philosophical research, but who, instead, ascends, undauntedly the steep and narrow path to mathematical heights where few accountants can breathe; there is the Chartered Accountant and Fellow of the B.C. Institute who reminds himself, from time to time, that he actually is an "accountant" and not only an information economist; and, finally, there is the recipient of innumerable recognitions, among which are such outstanding accolades as the AAA awards "for accounting education" and for "seminal contributions to accounting theory" and, most recently, the membership in the Royal Society of Canada.

However, for me the most fascinating aspect of Jerry is his being the instigator and co-author of a recent book that I dubbed "The Principia Mathematica of Accounting". It is a two-volume work that contains some 250 propositions (actually, theorems, corollaries and lemmas) with most rigorous proofs. It constitutes the Mount Everest of analytical thinking in our discipline, and I have already embarked on climbing it - though I doubt whether I ever will reach its top. But what is particularly remarkable is that Jerry had the wisdom and patience to wait until this work was mature enough. Some of you might know that already a quarter of a century ago,

Jerry and Joel Demski intended to write such a book. Yet, they realized the time was not ripe and they were not yet ready to do it. Too many gaps and holes were still glaring from the fabric of information theory, too many problems had to be solved first. And this wisdom paid off and led to the mountain top I mentioned before.

As a modest token, I should like to give Jerry a publication of mine that was recently (though belatedly) published *in tribute* to him and Jim Ohlson. The paper appeared in *Energeia - The international Journal of Philosophy and Methodology of Economics*. It is in English with a full Spanish translation of the text to make his and Ohlson's contributions known to the vast realm of the Spanish tongue. And finally, I want to express, in my and in Hermi's name, our very best wishes to Jerry's retirement - though we are confident that he will remain an *active* member of our Faculty for years to come.

R.M.

APPENDIX B

A Selection of Aphoristic and Poetic Experiments by R.M.

Nuggets, Mined from the Mind

These nuggets,
Mined from my mind,
Are small and crude.
But some may be good.

Rhythm and Rhyme

Rhythm or beat,
All poems need;
And if you have time,
Add a bit rhyme.

Time's Mystery

There was no time ere this universe was sown.
I had no time before I came into my own.
Where is the time of yesteryear?
Where is the time of morrow?
How fast is time when luck is here,
How slow in times of sorrow?

Time is fastest when we measure light.
It stops when riding on its beam into the night.
Time is joy in love and in fraternity;
But when the bells are tolled, it enters God's eternity.

Friendship

Friendship, a wonderful thing,
Needs care and cultivation.
Many a fellow, with careless fling
Cast it away in blind evasion.

To keep it great and well secure,
No wealth nor gold can here prevail.
Mere truth and reason may ensure
A constancy that nothing can assail.

The Throwaway-Society

The throwaway society -
It began with the shaving blade,
But ends with humanity and its world.

History

History is a paradise,
Where the dead get resurrected,
Where the past is reality,
And reality becomes eternity.
Still more,
It is the key to the here and now.

History, Believing and Knowing

To live history, know what to believe.
To write history, sift 'what to know' from 'what to believe'.
To read history, heed what the author believes to know.

Man and Nature

What nature,
In three billion years has built,
In human hands can quickly wilt.

Learning More and More

We learn more and more about less and less.
We learn more and more about the small and the smallest;
We learn more and more about the large and the largest;
We learn more and more about the distant and the most distant.

We learn more and more about the good and the best;
We learn more and more about the healthy and the healthiest;
We learn more and more about the bad and the worst;
We learn more and more about the destructive
And the most destructive.

Yet, have we bettered mankind?

Love, Duty and Work

Love, duty and work;
Be they your life's content.
Great reward has been bestowed already.

Philosophy and Science

Science aims at truth, philosophy at wisdom.
Philosophy without science may be incomplete,
But science without philosophy may destroy the world.
Why not listen to both, and find our salvation?

Europe versus America

In Europe, humanism lingers on.
In America, science has triumphed;
But what is science without a human face?

The Alphabet of Arts and Science

Architecture, frozen music;
Belle-lettres, great vehicle of language;
Dramaturgy, speech brought to life;
Music, goddess of solace;
Painting, colourful source of inspiration;
Philosophy, well of wisdom and enlightenment;
Poetry, gold nuggets and pearls in a shell.
Science, fountainhead of knowledge;
Sculpture, tangible form;
All Olympic jewels, celestial and proud,
Yet cast into the gutter by the crowd.

Favourite Composers

Bach: form that soars to heaven;
Handel: music of the grandiose;
Haydn: warmth, humour and religiosity;
Mozart: aesthetic perfection and heavenly beauty;
Beethoven: might and power of revolution;
Schubert: bitter-sweet greatness and silent suffering;
Schumann: gentleness and dreams;
Chopin: apotheosis of the piano;
Rossini: genius of operatic humour;
Bellini and Donatello: the height of "bell canto";
Verdi: Unforgettable melodies and greatness of Italy;
Tchaikovsky: a Russian romantic in Western dress;
Musorkski: force and mystery of mother Russia;
Wagner: music as drama and mythology;
Brahms: outpost of romantic harmony;
Dwořák and Smetana: Slavonic voice of Central Europe;
Richard Strauss: genial bridge of two centuries;
Mahler: intellectual pantheism striving in the shade of death;
Schoenberg: transcendence of European harmony;
Stravinsky: "enfant terrible" of modernity;
Orff: revival of mediaeval rhythm.
Menotti: Italian inspiration in American opera.

Truth and Knowledge

Cleaving truth from knowledge,
Sends the first to heaven, the second to hell.

Knowledge without truth?
A devil but no God?

Not even Ivan Karamazov, the atheist,
Could accept it.

Thus knowledge must be true,
As truth must be knowledge.

Old Wisdom Re-cast

Honours are make believe,
Deeds are more real -
Yet, who doesn't like great make believe?

Old Age and 'ewige Geborgenheit'

Old Age is a time bomb;
We don't know when it goes off.
To continue, pretend to be immortal,

But the 'Reaper' got sterner advice,
Putting us to rest;
Not for a while, but the Rest.
Isn't that Paradise?

To Hermi at our 50th Anniversary

I saw your lovely face
And smelled the fragrance of your hair,
I touched the goodness of your heart
And felt the greatness of your soul;
And then I knew,
Down to the marrow my bones,
That thou art mine,
And I am thine.
Not for a year, or fifty even,
In all eternity
Will ich Dich lieben.

Where from? Where to?

We did not care
Where we were
Before we were.

Why should we care
Where we were
After we were?

But should you dare to ask,
To answer is a simple task:

We merely borrow our mortal coil,
And leave it at the door
In ending our worldly toil.

Appendix C

R. M. from 1924 to 2006, in Pictures



Ricco, disappointed with the photographer - no birdy! (Vienna 1924)



Ricco's first Ball, as maharaja (Vienna 1927)



R. M., student at the Hochschule für Welthandel (Vienna 1943)



R.M., Ordinarius, Ruhr - Universität, Bochum (1967)



R.M., Ordinarius, Technische Universität (Vienna 1977)



R.M., Plenary Speaker. EAA Congress (Venice 1994)



Gathering at the Arthur Andersen Center
(Saint Charles, IL, 1996 or 1997)
From left to right: (former students and friends)
Mrs. T. J. Mock, G. A. Feltham, W.E. McCarthy, T.J. Mock with R.M.



50th (Golden) Wedding Anniversary of Hermi and Ricco
(Vancouver 2002)



R.M. with Prof. D. Carrasco Díaz.
R.M. receiving his third *honorary doctoral degree*
(Universidad de Málaga 2006)