TEKST NR 14 1979

BOOKS ABOUT MATHEMATICS:

History, Philosohy, Education,

Models, System Theory,

and Works of Reference etc.

A BIBLIOGRAPHY.

By Else Høyrup.

TEKSTER fra

IMFUFA ROSKILDE UNIVERSITETSCENTER
INSTITUT FOR STUDIET AF MATEMATIK OG FYSIK SAMT DERES FUNKTIONER I UNDERVISNING, FORSKNING OG ANVENDELSER

TEKSTER fra IMFUFA Roskilde universitetscenter.

1/78 "TANKER OM EN PRAKSIS" - et matematikprojekt
Anne Jensen, Marianne Kesselhahn, Lena Lindenskov og Nicolai Lomholt.
Vejleder: Anders Madsen.

2/78 "OPTIMERING" - Menneskets forøgede beherskelsesmuligheder af natur og samfund.
Projektrapport af Tom J. Andersen, Tommy R. Andersen, Gert Kreinøe og Peter H. Lassen. Vejleder: Bernhelm Booss

3/78 "Opgavesamling", breddekursus i fysik.
Lasse Rasmussen, Aage Bonde Krømmer, Jens Højgaard Jensen.

4/78 "Tre essays" - om matematikundervisning, matematiklæreruddannelsen og videnskabsrindalismen.
Mogens Niss.

5/78 "BIBLIOGRAFISK VEJLEDNING til studiet af DEN MODERNE FYSIKS HISTORIE"
Helge Kragh.

6/78 "Nogle artikler og debatindlæg om - læreruddannelse og undervisning i fysik, og - de naturvidenskabelige fags situation efter studenteroprøret"
Karin Beyer, Jens Højgaard Jensen, Bent C. Jørgensen.

7/78 "Matematikkens forhold til samfundsøkonomien"
B.V. Gnedenko.

8/78 "DYNAMIK OG DIAGRAMMER". Introduktion til energy-bond-graph formalismen.
Peder Voetmann Christiansen.

9/78 "OM PRAKSIS' INDFLYDELSE PÅ MATEMATIKKENS UDVIKLING"
Motiver til Kepler's: "Nova Stereometria Doliorum Vinarioum"
Projektrapport af Lasse Rasmussen.
Vejleder: Anders Madsen.

10/79 "TERMODYNAMIK I GYMNASIET"
Projektrapport af Jan Christensen og Jeanne Mortensen
Vejledere: Karin Beyer og Peder Voetmann Christiansen.

11/79 "STATISTISKE MATERIALER"
red. Jørgen Larsen.

12/79 "Lineære differentialligninger og differentialligningssystemer"
Mogens Brun Heefelt.

13/79 "CAVENDISH'S FORSØG I GYMNASIET". Projektrapport af Gert Kreinøe.
Vejleder: Albert Chr. Paulsen.

14/79 "Books about Mathematics: History, Philosophy, Education, Models, System Theory, and Works of Reference etc. A Bibliography".
Else Høyrup.

BOOKS ABOUT MATHEMATICS:

History, Philosohy, Education,

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By Else Høyrup.

Roskilde University Center

P.O. Box 260

DK 4000 Roskilde Denmark

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PREFACE

The content of this bibliography is books ABOUT mathematics (which are difficult to survey) and not "technical" textbooks or research monographs on mathematics (which are more easy to find in ordinary mathematics libraries). Which groups are covered can be seen in the contents and how the groups are covered can be seen by looking at possible comments in the beginning of a group. Because the bibliography covers so many different topics, it only (with a few exceptions) covers books, and not articles or reports.

The purpose of the bibliography is two-fold:

1) to help with the building up of good mathematics libraries, which cover not only "technical" mathematics books, and
2) to give reference material in special fields for individuals.

The origin of the bibliography comes from my own professional interests: As a mathematician who has also worked with the subjects "mathematics and society" (see p.66) and "women and mathematics" (see p.71) - and as research librarian in mathematics at a new Danish university, where the mathematics profile is much directed towards the subjects covered in this bibliography. So I shall use this bibliography in my own work of building up a good mathematics library, but I hope that it can also be of help to other persons.

In August 1978 there was a workshop "Mathematics and the Real World" at Roskilde University Center, Denmark, where I had a small exhibition of "about"-books, and here the idea was conceived that I should make a bibliography of "about"-books. The bibliography is made in two versions: a small one for the Proceedings from the workshop, which will be published by Birkhäuser Verlag in 1979, and this larger one.

I have found the titles from the following sources:

1) Books in the libraries of individuals and universities
2) Bibliographies
3) Mentions in journals (unfortunately not so much used because of time pressure)
4) Catalogues from publishers
5) "Books in Print"s from different countries.

The size of the bibliography is rather large (about 1400 titles), but the bibliography is of course not comprehensive in the subjects covered. The limits have been time and the systematics. There are so many topics covered that it has been impossible to be an expert in all topics, and therefore there may be problems in the selection of books and in the classification of the material.

The bibliography is almost not annotated because of the extent of the subjects covered and time problems (I have not had time to get and look over all the books).

I have chosen not to repeat titles and this of course gives rise to classification problems. But I have used cross-references in the beginning of some groups.

Because of the language orientation of Denmark and the type of books, most titles are in English. Some are in German or French and a few are in Scandinavian languages (with English translations of titles).

I have tried to give rather much technical information about the books:

1) If it is possible for me, I mention date and sometimes town of early editions (not necessarily the first edition).
2) With a few exceptions I mention town, publisher and date of the latest edition I know of (not necessarily the latest edition). (When I mention "reprint", I do not mention of which edition).
3) Often a possible series title is mentioned and sometimes there are notes about translations.

In some groups most books are new and still available from the publishers. In other groups (for instance history, philosophy and recreational mathematics) many books are old and out of print, but sometimes reprints are made.

More titles (also reports and articles) in these subjects are welcome - also in other languages than English.

Else Høyrup, February 1979.

PART I

History and Philosophy of Mathematics and Mathematics Education etc.

1. HISTORY OF MATHEMATICS

1.1 HISTORY OF MATHEMATICS IN GENERAL

1.1.1 Works of reference

Bouveresse,J; Itard,J; and Sallé,E:
Histoire des mathématiques. Bibliographie.
Paris: Larousse, 1977.

Gillispie, Charles Coulston et al (eds.):
Dictionary of Scientific Biography. 14 vols.
New York: Charles Scribner's Sons, 197o-76.

Krafft, Fritz and Meyer-Abich, Adolf:
Grosse Naturwissenschaftler. Biographisches Lexikon.
Frankfurt/M: Fischer, 197o.
(Fischer Taschenbücher 6olo).

May, Kenneth O:
Bibliography and Research Manual of the History of Mathematics.
Toronto: University of Toronto Press, 1973.

Meschkowski, H:
Mathematiker-Lexikon.
Mannheim: Bibliographisches Institut, 1973 (2nd ed).

Poggendorff, J.C:
Biographisch-Literarisches Handwörterbuch zur Geschichte der exacten Wissenschaften. 7 vols.
Leipzig: J.A.Barth, 1863-19o4.

Sarton, George:
The Study of the History of Mathematics and The Study of the History of Science.
1936. New York: Dover, 1957 (reprint of two originally separate volumes).

Whitrow, Magda (ed.):
ISIS Cumulative Bibliography 1913-65. A Bibliography of the History of Science Formed from ISIS Critical Bibliographies 1-9o. 3 vols.
Vol.1: Personalities A-J

Vol.2: Personalities K-Z and Institutions A-Z
Vol.3: Subjects
London: Mansell in conjunction with the History of Science Society, 1971-76. *The bibliography is continued by yearly issues of ISIS: Critical Bibliographies.*

1.1.2 Surveys

Archibald,R.C:
Outline of the History of Mathematics.
1932. Washington,D.C: Mathematical Association of America, 1949 (6th ed).

Ball, W.W.Rouse:
A Short Account of the History of Mathematics.
1888. New York: Dover, 196o (reprint).

Becker, Oskar and Hofmann, Joseph E:
Geschichte der Mathematik.
Bonn: Athenäum, 1951.

Bell, Eric Temple:
The Queen of the Sciences.
Baltimore: Williams and Wilkins, 1931.

Bell, Eric T:
Men of Mathematics.
New York: Simon and Schuster, 1937.

Bell, Eric Temple:
The Handmaiden of the Sciences.
New York: Reynal and Hitchcock, 1937.

Bell, Eric T:
The Development of Mathematics.
New York: Mc Graw-Hill, 194o, 1945 (2nd ed).

Bell, Eric Temple:
Mathematics, Queen and Servant of Science.
New York: Mc Graw-Hill, 1951.

Bense, Max:
Konturen einer Geistesgeschichte der Mathematik. 2 vols.

Hamburg: Claassen & Goverts, 1946, 1949.

Bourbaki, N:
Eléments d'histoire des mathématiques.
Paris: Hermann, 196o, 1974. (Histoire de la pensée, Vol.4).

Boyer, Carl B:
A History of Mathematics.
New York: Wiley, 1968.

Boyer, Jacques:
Histoire des mathématiques.
Paris: Gauthier-Villars, 19oo.

Cajori, Florian:
A History of Mathematics.
New York: Macmillan, 1919,1929.

Callandreau, Edouard:
Célèbres problèmes mathématiques.
Paris: Editions Albin Michel, 1949.

Cantor, Moritz:
Vorlesungen über Geschichte der Mathematik. 4 vols.
Leipzig: B.G.Teubner, 19oo-19o8. New York: Johnson Reprint, 1965.

Coolidge, Julian L:
The Mathematics of Great Amateurs.
Oxford, 195o. New York: Dover, 1963 (reprint).

Dedron, P. and Itard, J:
Mathématiques et mathématiciens.
Paris: Editions Magnard, 1959. Translated into English: Mathematics and Mathematicians. Milton Keynes: Open University Press, 1978.

Dziobek, Otto:
Mathematical Theories.
1892. New York: Dover, 1962.

Eves, H:
An Introduction to the History of Mathematics.
1953. New York: Holt, Rinehart and Winston, 1969.

Fang, Joong:
Mathematicians from Antiquity to Today. Vol.1.
Memphis, Tennesee: Paideia Press, 1972.

Fink, Karl:
Kurzer Abriss einer Geschichte der Elementar-Mathematik.
Tübingen: H.Laupp, 189o. Translated into English: A Brief History of Mathematics. Chicago: The Open Court, 19oo.

Freebury, H.A:
A History of Mathematics.
1958. New York: Macmillan, 1961.

Friedrichs, K.O:
From Pythagoras to Einstein.
Washington, D.C: MAA=Mathemathical Association of America, 1965. (New Mathematical Library, No.16).

Gittleman, Arthur:
History of Mathematics.
Columbus, Ohio: A.Bell & Howell, 1975 (2nd ed).

Gross, Herbert I. and Miller, Frank L:
Mathematics: A Chronical of Human Endeavour.
New York: Holt, Rinehart & Winston, 1971.

Günther, Siegmund:
Vermischte Untersuchungen zur Geschichte der mathematischen Wissenschaften.
Leipzig, 1876. Wiesbaden: Martin Sändig Reprint, 1968.

Günther, S:
Geschichte der Mathematik.
Leipzig: Göschen, 19o8. (Sammlung Schubert, Vol.18).

Histoire des Mathématiques et de la Mécanique depuis l'Antiquité.
Actes du XII Congrès International d'Histoire des Sciences.
Tome IV. Paris, 1968. Paris: A.Blanchard.

Hofmann, Joseph E:
Geschichte der Mathematik. 3 vols.
Berlin: Walter de Gruyter, 1953, 1963 (2nd ed). (Sammlung Göschen).
Translated into English:"The History of Mathematics"and
"Classical Mathematics: A Concise History of the Classical

Era in Mathematics". New York: Philosophical Library, 1957-59.

Kästner, Abraham Gotthelf:
Geschichte der Mathematik seit der Wiederherstellung der Wissenschaften bis an das Ende des 18. Jahrhunderts. 4 vols. Göttingen, 1796-1800. Hildesheim: Georg Olms Reprint, 1970.

Kline,M:
Mathematics in Western Culture.
1953. Oxford: Oxford Univ. Press, 1971. Penguin, 1972.

Kline, Morris:
Mathematical Thought from Ancient to Modern Times.
New York: Oxford Univ. Press, 1972.

Kowalewski, Gerhard:
Grosse Mathematiker. Eine Wanderung durch die Geschichte der Mathematik vom Altertum bis zur Neuzeit.
München: Lehmann, 1938.

Kramer, Edna:
The Main Stream of Mathematics.
1951. New York: Oxford Univ. Press, 1955.

Kropp, Gerhard:
Geschichte der Mathematik. Probleme und Gestalten.
Heidelberg: Quelle u. Meyer, 1969.

Kropp, Gerhard:
Vorlesungen über die Geschichte der Mathematik.
Mannheim: Bibliographisches Institut, 1969. (BI Hochschultaschenbuch 413/13a).

La Cour, Poul:
Historisk matematik. *In Danish. (Historical Mathematics).*
Copenhagen: Rosenkilde and Bagger, 1962.

Lecat, Maurice Marie Albert:
Erreurs de mathématiciens des origines à nos jours.
Brussels: Castaigne, 1935.

Lebesgue, H:
Notices d'histoire des mathématiques.
Genève: Institut de Mathématiques, Université de Genève, 1958.

(Monographies de l'Enseignement Mathématique, Vol.4).

Lorenzen, Paul:
Die Entstehung der exakten Wissenschaften.
Berlin: Springer, 1960.

Malsch, F:
Geschichte der Mathematik.
Leipzig: Quelle and Meyer, 1928. (Wissenschaft und Bildung, 242).

Marie, Maximilien:
Histoire des Sciences Mathématiques et Physiques. 12 vols.
Paris, 1883-1888.Liechtenstein: Kraus Reprint, 1978.

Meschkowski, Herbert:
Ways of Thought of Great Mathematicians.
San Francisco: Holden-Day, 1964.

Meschkowski, Herbert:
Evolution of Mathematical Thought.
San Francisco: Holden-Day, 1965.

Montucla, Jean-Etienne:
Histoire des Mathématiques. 4 vols.
1799-1803 (2nd ed). Paris: A.Blanchard: 1969 (reprint).

Morgan, Bryan:
Men and Discoveries in Mathematics.
London: John Murray, 1972. Levittown, N.Y: Transatlantic Arts, 1972.

Moritz, Robert Edouard:
On Mathematics and Mathematicians.
1914. New York: Dover, 1958.

Ocagne, Maurice d':
Histoire abrégée des sciences mathématiques. Ouvrage recueilli et achevé par René Dugas.
Paris: Vuibert, 1955.

Open University:
History of Mathematics. Course Units, AM 289.Course team chairman: G.Flegg.
Milton Keynes: The Open University Press, 1976.

Pelseneer, Jean:
Esquisse du progrès de la pensée mathématique. Des primitifs au IX Congrès International des Mathématiciens.
Paris: Hermann, 1935.

Poggendorff, J.C:
Lebenslinien zur Geschichte der exacten Wissenschaften seit Wiederherstellung derselben.
Berlin: A.Duncker, 1853.

Popp, Walter:
History of Mathematics. Topics for Schools.
London: Transworld Publishers, 1975. Milton Keynes: Open Univ. Press, 1978.

Queneau, Raymond:
Bords: Mathématiciens, précurseurs, encyclopédistes.
Paris: Hermann, 1963.

Reid, Constance:
A Long Way from Euclid.
New York: T.Y.Crowell, 1963.

Richardson, Moses:
Fundamentals of Mathematics.
New York: Macmillan, 1941.

Sanford, Vera:
A Short History of Mathematics.
Boston: Houghton Mifflin, 193o.

Scott, J.F:
A History of Mathematics. From Antiquity to the Early Nineteenth Century.
1958. London: Taylor & Francis, 1969 (reprint).

Smith, David Eugene:
History of Mathematics. 2 vols.
1923. New York: Dover, 1958.

Struik, Dirk J:
A Concise History of Mathematics.
New York: Dover, 1948, 1967.

Tietze, Heinrich:
Gelöste und ungelöste mathematische Probleme aus alter und neuer Zeit. 2 vols.
München: Biederstein, 1949.

Timerding, H.E:
Die Verbreitung mathematischen Wissens und mathematischer Auffassung.
Leipzig: Teubner, 1914.

Turnbull, H.W:
The Great Mathematicians: A Short Biographical History of Mathematics.
New York: New York Univ. Press, 1961. New York: Simon & Schuster, 1962.

Wieleitner, Heinrich:
Der Gegenstand der Mathematik im Lichte ihrer Entwicklung.
Leipzig: Teubner, 1925.

Wieleitner, Heinrich:
Geschichte der Mathematik. 2 vols.
Berlin: de Gruyter, 1939.

Wilhelm, Ostwald:
Klassiker der Exakten Wissenschaften.
Leipzig: Engelmann, 1889.

Willerding, Margaret:
Mathematical Concepts, A Historical Approach.
Boston: Prindle, Weber & Schmidt, 1967.

Wussing, Hans and Arnold, Wolfgang (eds.):
Biographien bedeutender Mathematiker. Eine Sammlung von Biographien. Erarbeitet von einem Autorenkollektiv.
Berlin: Volk und Wissen, 1975.

Zeuthen, H.G:
Om den historiske udvikling af matematikken som exakt videnskab indtil udgangen af det 18de aarhundrede. *In Danish. (The Historical Development of Mathematics as an Exact Science until 1800).*
Copenhagen: Københavns Universitet, 1896.

1.1.3 Sources

This group does not contain single sources, but collections of sources.

Burckhardt, J.J:
Lesebuch zur Mathematik. Quellen von Euklid bis heute.
Luzern/Stuttgart: Räber, 1968. (Einzelschriften zur Gestaltung des mathematisch-physikalischen Unterrichtes. H5).

Midonick, H:
The Treasury of Mathematics. 2 vols.
Harmondsworth, Middlesex: Penguin, 1965.

Newman, James R.(ed.):
The World of Mathematics. A Small Library of the Literature of Mathematics from A'hmosé the Scribe to Albert Einstein presented with Commentaires and Notes by James R. Newman. 4 vols.
New York: Simon & Schuster, 1956. London: George Allen & Unwin, 196o.

Smith, David E.(ed.):
A Source Book in Mathematics. 2 vols.
New York: Mc Graw-Hill, 1929. New York: Dover, 1959.

Speiser, Andreas:
Klassische Stücke der Mathematik.
Zürich/Leipzig: Art. Inst. Orell Füssl, 1925.

Struik, D.J:
A Source Book in Mathematics, 12oo-18oo.
Cambridge, Massachusetts: Harvard Univ. Press, 1969.

1.2 Special epochs and cultures

See also 1.3 Countries, past (from 15oo) and present.

1.2.1 Ancient Near East

See also 1.2.2 Classical Antiquity.

Becker, Oskar:
Das mathematische Denken der Antike.
Göttingen: Vandenhoeck & Rupprecht, 1957.

Gillings, Richard J:
Mathematics in the Time of the Pharaohs.
Cambridge, Massachusetts: MIT Press, 1972, 1975.

Neugebauer, O:
Vorlesungen über Geschichte der antiken mathematischen Wissenschaften. Vol.1: Vorgriechische Mathematik.
Berlin: Julius Springer, 1934, 1969.

Neugebauer, O:
The Exact Sciences in Antiquity.
1951. New York: Dover, 1969.

Neugebauer,O:
A History of Ancient Mathematical Astronomy. 3 vols.
Berlin: Springer, 1975. (Studies in the History of Mathematics and Physical Sciences, Vol.1).

Struve, W.W:
Mathematischer Papyrus Moskau.
Berlin: Springer, 193o. (Quellen und Studien, Bd. A1).

Vogel, Kurt:
Vorgriechische Mathematik. Vol.1: Vorgeschichte und Ägypten.
Vol.2: Die Mathematik der Babylonier.
Hannover: Hermann Schroedel, 1959.

1.2.2 Classical Antiquity

See also 1.2.1 Ancient Near East.

Aaboe, Asger:
Episodes from the Early History of Mathematics.
New York: Random House, 1964.

Becker, Oskar:
Zur Geschichte der Griechischen Mathematik.
Darmstadt: Wissenschaftliche Buchgesellschaft, 1965.

Brumbaugh, Robert S:
Plato's Mathematical Imagination.
Bloomington, Indiana: Indiana Univ. Press, 1954.

Cantor, Moritz:
Die Römische Agrimensoren und ihre Stellung in der Geschichte der Feldmesskunst.
Leipzig: Teubner, 1875.
Wiesbaden: Martin Sändig Reprint, 1968.

Görland, A:
Aristoteles und die Mathematik.
Marburg: N.G.Elwert, 1899.

Gow, James:
Short History of Greek Mathematics.
New York: Chelsea, 1968.

Heath, T.L:
A History of Greek Mathematics. 2 vols.
Oxford: At the Clarendon Press, 1921.

Heath, T.L:
A Manual of Greek Mathematics.
New York: Oxford Univ. Press, 1931.

Heath, Thomas L:
Mathematics in Aristoteles.
Oxford: Oxford Univ. Press, 1949, 197o.

Hoppe, Edmund:
Mathematik und Astronomie im klassischen Altertum.
Heidelberg, 1911. Wiesbaden: Martin Sändig Reprint, 1966.

Lasserre, Francois:
The Birth of Mathematics in the Age of Plato.
Washington, D.C: American Research Council, 1964.

Michel, Paul-Henri:
De Pythagore à Euclide. Contribution à l'histoire des Mathématiques préeuclidiennes.
Paris: Les Belles Lettres, 195o. (Etudes anciennes).

Pedersen, Olaf:
Matematik og Naturbeskrivelse i Oldtiden. *In Danish. (Mathematics and Science in Antiquity).*
Copenhagen: Akademisk Forlag, 1975.

Simon, Maximilian:
Geschichte der Mathematik im Altertum.
Berlin, 1909. Amsterdam: Philo Press, 1973.

Szabo, Arpad:
Anfänge der griechischen Mathematik.
München: Oldenbourg Verlag, 1969.

Thomas, Ivor (ed.):
Selections Illustrating the History of Greek Mathematics. 2 vols. 1939. Cambridge, Massachusetts and London: Heinemann, 1951, 1967. (Loeb Classical Library, Vol. 335/362).

van der Waerden, Bartel L:
Science Awakening. Vol.1: Egyptian, Babylonian and Greek Mathematics. Originally in Dutch, 1950. Leyden: Noordhoff, 1954, 1975.
Vol.2: The Birth of Astronomy.
Originally in German, 1965. Leyden: Noordhoff and New York: Oxford Univ. Press, 1974.

Wussing, Hans:
Mathematik in der Antike. Mathematik in der Periode der Sklavenhaltergesellschaft.
Leipzig: B.G.Teubner, 1965.

Zeuthen, H.G:
Hvorledes Matematikken i tiden fra Platon til Euklid blev rationel videnskab. *In Danish. (How Mathematics in the Period from Plato to Euclid Became a Rational Science).*
Copenhagen: Høst, 1917.

Zeuthen, H.G:
Forelæsninger over Matematikkens historie. Oldtiden. *In Danish.*
Copenhagen: Høst, 1949. Extended and translated into German: Geschichte der Mathematik im Altertum und Mittelalter. Copenhagen, 1896. New York: Johnson Reprint, 1966.

1.2.3 India

Datta, B:
The Science of the Sulba: A Study in Early Hindu Geometry.
Calcutta: Univ. of Calcutta, 1932.

Datta, B. and Singh, A.N:
History of Hindu Mathematics. 2 vols.
Lahore, 1935-38. Bombay: Asia Publishing House, 1962 (reprint).

Kaye, G.R:
Indian Mathematics.
Calcutta: Simla, 1915.

Kûshyâr Ibn Labbân:
Principles of Hindu Reckoning.
Madison, Wisconsin: Univ. of Wisconsin Press, 1965.

Srinivasiengar, C.N:
The History of Ancient Indian Mathematics.
Calcutta: World Press, 1967.

1.2.4 Islamic culture

Abu al-Hasan & Ahmed-Ibn Ibrahim:
The Arithmetic of Al-Uqlidisi *(Euclid)*.
Dordrecht-Holland: D.Reidel, 1977.

Al-Daffa, Ali Abdullah:
The Muslim Contribution to Mathematics.
Atlantic Highlands, New Jersey: Humanities Press, 1977.

Juschkewitsch, A.P. and Rosenfeld, B.A:
Die Mathematik der Landes des Ostens im Mittelalter.
Berlin: Deutscher Verlag der Wissenschaften, 1963.

Juschkewitsch, A.P:
Les mathématiques arabes (VIIIe-XVe siècles).
French translation. Paris: J.Vrin, 1976. (L'Histoire des Sciences Textes et Etudes).

Levey, Martin (ed):
The Algebra of Abû Kâmil, in a Commentary by Mordecai Finzi.

Madison, Wisconsin: Univ. of Wisconsin Press, 1966.

O'Leary, De Lacy Evans:
How Greek Science Passed to the Arabs.
London: Routledge and Kegan Paul, 1949, 1951.

Omar Khayyam:
The Algebra of Omar Khayyam. Kasir, Daoud S.(ed.).
1931. New York: AMS Press (reprint).

Suter, Heinrich:
Die Mathematiker und Astronomen der Araber und ihre Werke.
Abhandlungen zur Geschichte der mathematischen Wissenschaften,
Vol. 1o. Leipzig: B.G.Teubner, 19oo. New York: Johnson
Reprint, 1972.

1.2.5 Jewish culture

Rabinovich, N.L:
Probability and Statistical Inference in Ancient and Medieval
Jewish Literature.
Toronto: Univ. of Toronto Press, 1973.

Steinschneider, M:
Jewish Mathematicians.
Memphis, Tennessee: Paideia, 1978. Enlarged version of some
articles in German: Die Mathematik bei den Juden. Bibliotheca
mathematica. Neue Folge 7 bis 13, 1893-1899.

1.2.6 China

See also 1.2.7 Japan. After 15oo see also 1.3.6 Countries, China.

Biernatzki, K.L:
Die Arithmetik der Chinesen.
Berlin, 1855. Wiesbaden: Martin Sändig Reprint, 1973.

Lam Lay Yong:
A Critical Study of the Yang Hui Suan Fa, a Thirteenth-Century

Chinese Mathematical Treatise.
Singapore: Singapore Univ. Press, 1977.

Libbrecht, U:
Chinese Mathematics in the Thirteenth Century. The Shu-Shu Chiu-Chang of Ch'in Chiu-Shao.
Cambridge, Massachusetts: MIT Press, 1973. (MIT East Asian Science Series, 1).

Needham, Joseph:
Science and Civilization in China. Vol.3: Mathematics and the Sciences of the Heavens and the Earth.
London: Cambridge Univ. Press, 1959.

Sivin, N:
Cosmos and Computation in Early Chinese Mathematical Astronomy.
Leiden: E.J.Brill, 1969.

1.2.7 Japan

Mikami, Yoshio:
The Development of Mathematics in China and Japan.
Leipzig and Berlin, 1913. New York: Chelsea, 1961 (reprint).

Mikami, Yoshio:
Japanese Mathematics Viewed from the Point of View of Japanese Culture.
Tokyo, 1947.

Mikami, Yoshio:
History of Mathematics in Japan.
Tokyo, 1947.

Smith, David Eugene and Mikami, Yoshio:
History of Japanese Mathematics.
Chicago: The Open Court, 1914.

1.2.8 Later periods

Bochner, Salomon:
The Role of Mathematics in the Rise of Science.
Princeton: Princeton Univ. Press, 1966.

Dieudonné, J.(ed.):
Abrégé d'histoire des mathématiques, 17oo-19oo. 2 vols.
Paris: Hermann, 1978.

Dubbey, J.M:
Development of Modern Mathematics.
London: Butterworths, 197o.

Hankel, H:
Zur Geschichte der Mathematik im Altertum und Mittelalter.
Leipzig: B.G.Teubner, 1874.

Juschkewitsch, A.P:
Geschichte der Mathematik im Mittelalter.
Leipzig: B.G.Teubner, 1964.

Klein, Felix:
Vorlesungen über die Entwicklung der Mathematik im 19ten Jahrhundert. 2 vols.
Berlin: Springer, 1926-27. New York: Chelsea, 1967 (reprint).
Berlin: Springer microform reprint.

Taton, René (ed.):
Histoire générale des sciences. Tome III: L'Epoque contemporaine. Vol.I: Le XIX^{e} siècle. 1^{e} partie: Les mathématiques (p.7-92). Vol.II: Le XX^{e} siècle. 1^{e} partie: Les mathématiques (p.11-127).
Paris: Presses Universitaires de France, 1957-58.

Zeuthen, H.G:
Geschichte der Mathematik im 16. und 17. Jahrhundert.
19o3. New York: Johnson Reprint, 1966.

1.3 Countries, past (from 15oo) and present

See also 1.2 Special epochs and cultures and 9.7 Mathematics education: History and countries.

1.3.1 Africa

Gay, John and Cole, Michael:
The New Mathematics and an Old Culture. A Study of Learning among the Kpelle of Liberia.
New York: Holt, Rinehart & Winston, 1967.

Raum, O.F:
Arithmetic in Africa.
London: Evan Bros., 1938.

Zaslavsky, Claudia:
Africa Counts. Number and Pattern in African Culture.
Boston: Prindle, Weber & Schmidt, 1973.

1.3.2 Belgium

Godeaux, Lucien:
Esquisse d'une histoire des sciences mathématiques en Belgique.
Brussel: Office de Publicité, 1943.

1.3.3 Britain

Mac Farlane, Alexander:
Lectures on Ten British Mathematicians of the Nineteenth Century.
New York: Wiley, 1916.

Taylor, E.G.R:
The Mathematical Practitioners of Tudor and Stuart England.
London: Cambridge Univ. Press, 1954.

Taylor, E.G.R:
The Mathematical Practitioners of Hanoverian England 1714-1840.
London: Cambridge Univ. Press, 1966.

1.3.4 Bulgaria

Iliev, Ljubomir:
On the Development of Mathematics in the People's Republic of Bulgaria.
Sofia: Publishing House of the Bulgarian Academy of Sciences, 1975.

1.3.5 Canada

Beltzner, Klaus P; Coleman, A.John; and Edwards, Gordon D:
Mathematical Sciences in Canada.
Ottawa: Science Council of Canada, 1976.

1.3.6 China

Fitzgerald, A. and MacLane, S:
Pure and Applied Mathematics in the People's Republic of China.
Washington, D.C: National Academy of Sciences, 1977.

Sivin, Nathan (ed.):
Science and Technology in East Asia.
New York: Science History Pub., 1977.

Tsao, C.K:
Contemporary Chinese Research Mathematics. Vol.1: Bibliography of Mathematics Published in Communist China During the Period 1949-1960.
Providence, Rhode Island: American Mathematical Society, 1961.

Yuan, T'ung Li:
Bibliography of Chinese Mathematics, 1918-1960.
Washington, D.C: The Author, 1963.

1.3.7 Denmark

Christensen, S.A:
Matematikkens Udvikling i Danmark og Norge i det 18. Aarhundrede. En matematisk-historisk undersøgelse. *In Danish. (The Development of Mathematics in Denmark and Norway in the 18th Century. A Mathematical-Historical Investigation).*
Odense, Denmark: Hempels Boghandel, 1895.

Nielsen, Niels:
Matematikken i Danmark. Bidrag til en bibliografisk-historisk Oversigt. 2 vols. *In Danish. (Mathematics in Denmark. Contributions to a Bibliographical-Historical Survey).*
Vol.1: 1528-1800. 2 parts. Copenhagen: Gyldendal, 1912-16.
Vol.2: 1801-1908. Copenhagen: Gyldendal, 1910.

Sveistrup, Poul; Naur, Peter; Hansen, H.B; and Gram, Chr. (eds.):
Niels Ivar Bech - En epoke i edb-udviklingen i Danmark.
In Danish. (Niels Ivar Bech - An Epoch in the Computer Development in Denmark).
Copenhagen: Data, 1976.

1.3.8 France

Drach, J:
Histoire des Sciences Mathématiques en France, au XIX Siècle.
Leipzig, 19o3.

Nielsen, Niels:
Franske matematikere under revolutionen. *In Danish.*
Festskrift udg. af Københavns Universitet i Anledning af Universitetets Aarsfest, November 1927. Translated into French: Géomètres francais sous la révolution. Copenhagen: Levin & Munksgaard, 1929.

1.3.9 GDR=German Democratic Republic (in German DDR)

Sachs, Horst (ed.):
Entwicklung der Mathematik in der DDR.
Berlin: VEB Deutscher Verlag der Wissenschaften, 1974.

1.3.1o Germany before 1945

Biermann, K.R:
Die Mathematik und ihre Dozenten an der Berliner Universität 181o-192o.
Berlin: Akademie Verlag, 1973.

Gerhardt, Karl Immanuel:
Geschichte der Mathematik in Deutschland.
München, 1877. New York: Johnson Reprint, 1965.

1.3.11 Italy

Libri, Guglielmo:
Histoire des sciences mathématiques en Italie. Depuis la renaissance des lettres jusqu'à la fin de dix-septième siècle.
4 vols. Paris: Renouard, 1838-1841. New York: Johnson Reprint, 1966. Hildesheim: Georg Olms Reprint, 1967.

Rose, Paul Lawrence:
The Italian Renaissance of Mathematics. Studies on Humanists and Mathematicians from Petrarch to Galileo.
Genève: Librairie Droz, 1975.

1.3.12 Latin America

Pastor, Julio Rey:
Modern Mathematics in Latin America.
Montevideo, 1954.

1.3.13 Poland

Jordan, Zbigniev A:
The Development of Mathematical Logic and Logical Positivism in Poland between the Two Wars.
Oxford: Oxford Univ. Press, 1945.

Kuzawa, M.G:
Modern Mathematics. The Genesis of a School in Poland.
New Haven: College & Univ. Press, 1968.

1.3.14 Portugal

Guimaraes, Rodolphe:
Les mathématiques en Portugal. 2 vols (including Appendice I) + Appendice II: La période 19o9-1o.
Coimbra: Imprimerie de l'Université and Paris: Gauthier- Villars, 19o9-11 (2nd ed.).

1.3.15 Rumania

Sergescú, Petre:
Le développment des sciences mathématiques en Roumaine.
Bucharest, 1937.

1.3.16 Soviet Union

See also the journal Russian Mathematical Surveys, London.

Forsythe, George E:
Bibliography of Russian Mathematical Books.
New York: Chelsea, 1956.

1.3.17 Switzerland

Fueter, Eduard:
Geschichte der exakten Wissenschaften in der Schweizerischen Aufklärung (168o-178o).
Aarau- Leipzig: Sauerländer, 1941.

Isely-Delisle, L:
Histoire des sciences mathématiques dans la Swisse Francaise.
Neuchatel: Impr. Nouvelle, 19o1.

1.3.18 USA

Archibald, Raymond C:
A Semicentennial History of the American Mathematical Society 1888-1938 with Biographies and Bibliographies of the Past Presidents.
Providence, Rhode Island: American Mathematical Society, 1938.

Cajori, Florian:
The Teaching and History of Mathematics in the United States.
Washington, D.C: Government Printing Office, 189o. Reprint 1974.

May, Kenneth O.(ed.):
The Mathematical Association of America- Its First Fifty Years.
Washington, D.C: MAA= Mathematical Association of America, 1972.

Smith, D.E. and Ginsburg, Jekuthiel:
A History of Mathematics in America before 19oo.
Chicago: Open Court, 1934.

Tarwater, Dalton (ed.):
The Bicentennial Tribute to American Mathematics.
Washington, D.C: MAA=Mathematical Association of America, 1978.

Tarwater, J.Dalton; White, John T; and Miller, John D:
Men and Institutions in American Mathematics.
Lubbox, Texas: Texas Tech. University, 1976. (Graduate Studies, No. 13).

1.4 Special topics

1.4.1 Elementary mathematics

See also 9.7 Mathematics education: History and countries.

Baumgart, J.K. et al (eds.):
Historical Topics for the Mathematics Classroom.
Thirty-First Yearbook of the National Council of Teachers of Mathematics. Washington,D.C. and Reston, Virginia: NCTM= National Council of Teachers of Mathematics, 1969.

Beckmann, P:
A History of π (pi).
1971. Boulder, Colorado: Golem, 1977.

Boldt, Benjamin:
Fameous Problems of Mathematics. A History of Constructions with Straight Edge and Compass.
New York: 1969.

Braunmühl, Anton von:
Vorlesungen über die Geschichte der Trigonometrie. 2 vols.
Leipzig: B.G.Teubner, 1900-03. Wiesbaden: Martin Sändig Reprint, 1970.

Bubnov, N:
Arithmetische Selbstständigkeit der Europäischen Kultur. Ein Beitrag zur Kulturgeschichte.
Translated from Russian. Berlin: Friedländer, 1914.

Bunt, Lucas N.H; Jones, Phillip S; and Bedient, Jack D:
The Historical Roots of Elementary Mathematics.
Englewood Cliffs, N.J: Prentice-Hall, 1976.

Cajori, Florian:
History of Elementary Mathematics with Hints on Methods of Teaching.
New York: Macmillan, 1897, 1917.

Conant, L.L:
The Number Concept, Its Origin and Development.
New York: Macmillan, 1923.

Dörrie, Heinrich:
Triumph der Mathematik. Hundert berühmte Probleme aus zwei Jahrtausenden mathematischer Kultur.
1933. Breslau: Hirt, 194o. Translated into English: One Hundred Great Problems of Elementary Mathematics: Their History and Solution. New York: Dover, 1965.

Fettweis, E:
Das Rechnen der Naturvölker.
Leipzig and Berlin: B.G.Teubner, 1927.

Gericke, Helmuth:
Geschichte des Zahlbegriffs.
Mannheim: Bibliographisches Institut, 197o.

Ginzel, F.K:
Handbuch der mathematischen und technischen Chronologie. Das Zeitrechnungswesen der Völker. 3 vols.
Leipzig: J.C.Hinrichs, 19o6-14.

Groza, Vivian S:
A Survey of Mathematics. Elementary Concepts and their Development.
New York: Holt, Rinehart & Winston, 1968.

Guitel, Geneviève:
Histoire comparée des numérations écrites.
Paris: Flammarion, 1975.

Hultsch, Friedrich:
Die Elemente der Ägyptischen Theilungsrechnung.
Leipzig: S.Hirzel, 1897.

Karpinski, Louis C:
The History of Arithmetic.
Chicago: Rand McNally, 1925. New York: Russel & Russel, 1965.

Loeffler, Eugen:
Ziffern und Ziffernsysteme.
Leipzig and Berlin: B.G.Teubner, 1912.

Menninger, K:
Zahlwort und Ziffer. Eine Kulturgeschichte der Zahl. 2 vols.
Göttingen: Vandenhoeck & Ruprecht, 1958 (2nd ed), 1978. Trans-

lated into English: Number Words and Number Symbols: A Cultural History of Numbers. Cambridge, Massachusetts: MIT Press, 1969.

Meschkowski, Herbert:
Hundert Jahre Mengenlehre.
München: Deutscher Taschenbuch Verlag, 1973.

Moon, Parry:
The Abacus. Its History, Its Design, Its Possibilities in the Modern World.
New York: Gordon and Breach, 1971.

Naux, Ch:
Histoire des logarithmes de Neper à Euler. 2 vols.
Paris: A.Blanchard, 1966, 1971.

Neugebauer, O:
Die Grundlagen der ägyptischen Bruchrechnung.
Berlin: Springer, 1926.

Popp, Walter:
Geschichte der Mathematik im Unterricht. 2 vols.
München: Bayerischer Schulbuch-Verlag, 1968. (Beiträge für den mathematischen Unterricht, Bd. 1-2).

Pullan, J.M:
The History of the Abacus.
London: Hutchinson, 1968. New York: F.A.Praeger, 1969.

Scriba, C.J:
The Concept of Number. A Chapter in the History of Mathematics with Applications of Interest to Teachers.
Mannheim: Bibliographisches Institut, 1968.

Sethe, Kurt:
Von Zahlen und Zahlworten bei den alten Ägyptern und was für andere Völker und Sprachen daraus zu lernen ist.
Strassburg: Karl J. Trübner, 1916.

Smith, D.E. and Karpinski, L.C:
The Hindu-Arabic Numerals.
Boston: Ginn, 1911.

Stammler, Gerhard:
Der Zahlbegriff seit Gauss.
New York: Georg Olms, 1965.

Tropfke, J:
Geschichte der elementar-Mathematik in systematischer Darstellung. 7 vols.
1921-24 (2nd ed). Berlin: W. de Gruyter: 1979 (4 vols).

Unger, Friedrich:
Die Methodik der praktischen Arithmetik in historischer Entwickelung.
Leipzig: B.G.Teubner, 1888.

Vogel, Kurt:
Die Grundlagen der ägyptischen Arithmetik in ihrem Zusammenhang mit der 2:n-Tabelle des Papyrus Rhind.
München, 1929. Wiesbaden: Martin Sändig Reprint, 197o.

Wilder, Raymond L:
The Evolution of Mathematical Concepts: An Elementary Study.
New York: Wiley, 1968. London: Transworld, 1974.

Yeldham, F.A:
The Story of Reckoning in the Middle Ages.
London: G.G. Harrap, 1926.

1.4.2 Logic and the foundations of mathematics

Ashworth, E.J:
Language and Logic in the Post Medieval Period.
Dordrecht-Holland: Reidel, 1974.

Becker, Oskar:
Grundlagen der Mathematik in geschichtlicher Entwicklung.
Freiburg: Karl Alber, 1954, 1964.

Bochenski, I(J)M:
Formale Logik. *(Source material).*
Freiburg/München: Alber, 1956, 197o. In English: A History of Formal Logic. New York: Chelsea, 197o.

Enriques, Federigo:
The Historical Development of Logic.
New York: Henry Holt, 1929.

Jørgensen, Jørgen:
A Treatise of Formal Logic, Its Evolution and Main Branches, with Its Relations to Mathematics and Philosophy. Vol.1: Historical Development.
New York: Russel and Russel, 1962.

Kneale, William & Martha:
The Development of Logic.
Oxford: Clarendon Press, 1962.

Mostowski, Andrzej:
Thirty Years of Foundational Studies.
Oxford: Blackwell, 1966.

Pinborg, J:
Logik und Semantik im Mittelalter. Ein Überblick.
Stuttgart: Frommann, 1974.

Risse, W:
Die Logik der Neuzeit. 2 vols.
Stuttgart: Frommann, 1964-7o.

Scholz, Heinrich:
Abriss der Geschichte der Logik.
1931. Freiburg: K.Alber, 1959. Translated into English: Concise History of Logic. New York: Philosophical Library, 1961.

Styazhkin, N.I:
History of Mathematical Logic from Leibniz to Peano.
Cambridge, Massachusetts: MIT Press, 1969.

Surma, Stanislaw J.(ed.):
Studies in the History of Mathematical Logic.
Warszawa: Polish Academy of Sciences - Institute of Philosophy and Sociology, 1973.

1.4.3 Number theory

Baschmakova, Isabella G:
Diophant und diophantische Gleichungen.
Translated from Russian. Basel/Stuttgart: Birkhäuser, 1975.
(Uni Taschenbücher 36o).

Bell, Eric Temple:
The Last Problem. *(The history of the Fermat conjecture).*
London: Gollancz, 1962.

Dickson, L.E:
History of the Theory of Numbers. 3 vols.
Washington, D.C: Carnegie Institute, 1919-23. New York: Chelsea, 1952 (reprint).

Edwards, H.M:
Fermat's Last Theorem. A Genetic Introduction to Algebraic Number Theory.
Berlin: Springer, 1977.

Nogues, R:
Théorème de Fermat. Son histoire.
Paris: Blanchard, 1966 (new ed).

Ore, Oystein:
Number Theory and its History.
New York: McGraw-Hill, 1948.

Weil, A:
Essais historiques sur la théorie des nombres.
Génève: Monographies de l'Enseignement Mathématique, Vol.22.

1.4.4 Algebra

Dieudonné, Jean:
Cours de géometrie algébrique. 1: Apercu historique sur le développement de la géometrie algébrique.
Paris: Presses Universitaires de France: 1974.

Klein, Jacob:
Greek Mathematical Thought and the Origin of Algebra.
Cambridge, Massachusetts: MIT Press, 1968.

Miller, G.A:
History of the Theory of Groups to 1900. Collected Works, Vol.1.
Urbana, Illinois: University of Illinois Press, 1935.

Muir, Thomas:
The Theory of Determinants in the Historical Order of Development. 4 vols.
London, 1890-1923. New York: Dover, 1960 (reprint).

Muir, Thomas:
Contributions to the History of Determinants 1900-1920.
London: Blackie, 1930. Reprint 1961.

Nový, Luboš:
Origins of Modern Algebra.
Leyden, The Netherlands: Noordhoff, 1973.

Wussing, H.L:
Die Genesis des abstrakten Gruppenbegriffes.
Berlin: VEB Deutscher Verlag der Wissenschaften, 1969.

1.4.5 Geometry

Bonola, R:
Non-Euclidean Geometry. A Critical and Historical Study.
Translated from Italian. New York: Dover, 1955 (reprint).

Boyer, Carl B:
History of Analytic Geometry.
New York: Scripta Mathematica, Yeshiva University, 1956.

Bretschneider, Carl Anton:
Die Geometrie und die Geometer vor Euclides. Ein historischer Versuch.
Leipzig, 1870. Wiesbaden: Martin Sändig Reprint, 1968.

Chasles, M:
Apercu historique sur l'origine et le développement des méthodes en géometrie.
1837. Paris: Gauthier-Villars, 1889. Translated into German: Geschichte der Geometrie, hauptsächlich mit Bezug auf die neueren Methoden. Halle 1839. Wiesbaden: Martin Sändig Reprint, 1968.

Coolidge, Julian L:
A History of Geometrical Methods.
New York: Oxford Univ. Press, 194o. New York: Dover, 1963 (reprint).

Coolidge, Julian L:
A History of the Conic Sections and Quadric Surfaces.
New York: Dover, 1968 (reprint).

Engel, Friedrich and Stäckel, Paul G:
Die Theorie der Parallellinien vom Euclid bis auf Gauss.
Leipzig: Teubner, 1895. New York: Johnson Reprint, 1968.

Engel, Friedrich and Stäckel, Paul G.(eds.):
Urkunden zur Geschichte der nicht-euklidischen Geometrie.
2 vols. Leipzig: B.G.Teubner, 1899-1913. New York: Johnson Reprint, 1972.

Fladt, Kuno:
Geschichte und Theorie der Kegelschnitte und der Flächen des zweiten Grades in elementarer Behandlung.
Stuttgart: Ernst Klett, 1965.

Fuss, P-H:
Correspondance mathématique et physique de quelques celebres geométres du 18. siècle. 2 vols. *(Johann I, Daniel and Nikolaus I. Bernoulli, Euler and Goldbach).*
Sct. Petersbourg, 1843. New York: Johnson Reprint, 1968.

Greenberg, Marvin Jay:
Euclidean and Non-Euclidean Geometries. Development and History.
San Francisco: Freeman, 1974.

Knorr, W.R:
The Evolution of the Euclidean Elements.
Dordrecht-Holland: D.Reidel, 1975.

Lanczos, C:
Space through the Ages: The Evolution of Geometrical Ideas from Pythagoras to Hilbert and Einstein.
New York: Academic Press, 197o.

Pasch, M:
Vorlesungen über neuere Geometrie.

Leipzig: Teubner, 1882. Berlin: Springer, 1976 (reprint).

Reichardt, H:
Gauss und die nicht-euklidische Geometrie.
Leipzig: Teubner, 1976.

Sjöstedt, C.E:
Le axiome de paralleles de Euclides à Hilbert.
Stockholm: Natur och Kultur, 1968.

Smith, David Eugene and Latham, Marcia L:
The Geometry of René Descartes.
Translated from the French and Latin. Chicago: The Open Court, 1925.

Zeuthen, Hieronymus Georg:
Die Lehre von den Kegelschnitten im Altertum.
Translated from Danish. Copenhagen: Høst, 1886.

1.4.6 Topology

Johnson, Phillip E:
A History of Set Theory.
Boston, Massachusetts: Prindle, Weber & Schmidt, 1972.

Manheim, J.H:
The Genesis of Point Set Topology.
New York: Macmillan, 1964.

Pont, Jean-Claude:
La topologie algébrique des origines à Poincaré.
Paris: Presses Universitaires de France, 1974.

1.4.7 Analysis

Bacharach, Max:
Abriss der Geschichte der Potientialtheorie.
Göttingen: Vandenhoeck and Ruprecht, 1883.

Baron, Margaret E:
The Origins of the Infinitesimal Calculus.
Oxford: Pergamon Press, 1969.

Bellman, Richard (ed.):
A Collection of Modern Mathematical Classics: Analysis.
New York: Dover, 1961.

Birkhoff, Garrett (ed.):
A Source Book in Classical Analysis.
Cambridge, Massachusetts: Harvard Univ. Press, 1973.

Boyer, Carl B:
History of the Calculus and Its Conceptual Development.
(Orig. title: Concepts of Calculus). 1949. New York: Dover,
1959 (reprint).

Cajori, Florian:
A History of the Conceptions of Limits and Fluxions in
Great Britain from Newton to Woodhouse.
Chicago: Open Court, 1919.

Crowe, Michael J:
A History of Vector Analysis. The Evolution of the Idea of a
Vectorial System.
Notre Dame, Indiana: Univ. of Notre Dame Press, 1967.

Fleckenstein, J.O:
Der Prioritätsstreit zwischen Leibniz und Newton.
Basel: Birkhäuser Verlag, 1976. (Beihefte zur Zeitschrift
"Elemente der Mathematik", No.12).

Grattan-Guinness, Ivor:
The Development of the Foundation of Mathematical Analysis
from Euler to Riemann.
Cambridge, Massachusetts: MIT Press, 197o.

Grattan-Guinness, I:
From the Calculus to Set Theory, 163o-191o. An Introductory
History.
London: Duckworths, 1978.

Hawkins, T:
Lebesgue's Theory of Integration. Its Origins and Development.
Madison, Wisconsin: Univ. of Wisconsin Press, 197o. New York:
Chelsea, 1975 (2nd ed).

Hintikka, Jaakko and Remes, Unto:
The Method of Analysis. Its Geometrical Origin and Its General Significance.
Dordrecht-Holland: D.Reidel, 1974. (Boston Studies in the Philosophy of Science, Vol.25).

Markuschewitsch, A.I:
Skizzen zur Geschichte der analytischen Funktionen.
Berlin: VEB Deutscher Verlag der Wissenschaften, 1955.

Monna, A.F:
Functional Analysis in Historical Perspective.
Utrecht: Oosthoek, Scheltema and Holkema, 1973, 1975.

Monna, A.F:
Dirichlet's Principle. A Mathematical Comedy of Errors and Its Influence on the Development of Analysis.
Utrecht, The Netherlands: Oosthoek, Scheltema & Holkema, 1975.

Pesin, I.N:
Classical and Modern Integration Theories.
New York: Academic Press, 197o.

Reiff, R:
Geschichte der unendlichen Reihen.
Tübingen: H.Lauppsche Buchhandlung, 1889. Wiesbaden: Martin Sändig Reprint, 1969.

Smail, L.L:
History and Synopsis of the Theory of Summable Infinite Processes.
Eugene, Oregon: Univ. of Oregon Press, 1925.

Todhunter, Isaac:
A History of the Progress of the Calculus of Variations during the Nineteenth Century.
1861. New York: Chelsea, 1962 (reprint).

Toeplitz, Otto:
Die Entwicklung der Infinitesimalrechnung. Eine Einleitung in die Infinitesimalrechnung nach der genetischen Methode.
Berlin: Springer, 1949.

van Dalen, D. and Monna, A.F:
Sets and Integration. An Outline of the Development.
Groningen: Wolters-Noordhoff, 1972.

Woodhouse, Robert:
A History of the Calculus of Variations in the Eighteenth Century.
18lo. New York: Chelsea, 1964 (reprint).

1.4.8 Graph theory

Biggs, Norman L; Lloyd, E.Keith; and Wilson, Robin J:
Graph Theory 1736-1936.
Oxford: Clarendon Press, 1976.

1.4.9 Probability theory and statistics

Adams, William J:
The Life and Times of the Central Limit Theorem.
New York: Kaedmon, 1974.

David, F.N:
Games, Gods and Gambling: The Origins and History of Probability and Statistical Ideas from the Earliest Times to the Newtonian Era.
London: Griffin, 1962.

Giere, R. and Westfall, R.(eds.):
Foundations of Statistical Method in the 19th Century.
Bloomington, Indiana: Indiana Univ. Press, 1973.

Gouraud, Charles:
Histoire du calcul des probabilités depuis ses origines jusqu'à nos jours, avec une thèse sur la légimité des principes et des applications de cette analyse.
Paris: A.Durand, 1848.

Hacking, Ian:
The Emergence of Probability. A Philosophical Study of Early Ideas about Probability, Induction and Statistical Inference.
London: Cambridge Univ. Press, 1975.

John, Vincenz:
Geschichte der Statistik.
Stuttgart: F.Enke, 1884.

Kendall, M.G. and Pearson, E.S. (eds.):
Studies in the History of Statistics and Probability.
London: Griffin, 197o.

Kendall, Maurice G. and Plackett, R.L. (eds.):
Studies in the History of Statistics and Probability. Vol.2.
London: Griffin, 1977.

King, Amy C. and Read, Cecil B:
Pathways to Probability. History of the Mathematics of Certainty and Chance.
New York: Holt, Rinehart and Winston, 1963.

Koren, John (ed.):
The History of Statistics, Their Development and Progress in Many Countries.
New York, 1918. New York: B.Franklin, 197o.

Mairesse, J. et al:
Pour une histoire de la statistique.
Paris: INSEE, 1977.

Maistrov, L.E:
Probability Theory. A Historical Sketch.
Translated from Russian. New York: Academic Press, 1974.

Meitzen, August:
Geschichte, Theorie und Technik der Statistik.
Berlin, 1886. Stuttgart: J.G.Cotta, 19o3. Translated into English: The History, Theory and Technique of Statistics.
Philadelphia: American Academy of Political and Social Science, 1891.

Owen, D.B.(ed.):
On the History of Statistics and Probability. Proceedings of a Symposium at the Southern Methodist University, May 1974.
New York: M.Dekker, 1976. (Statistics: Textbooks and Monographs, Vol.17).

Pearson, Karl:
The History of Statistics in the 17th and 18th Centuries against the Changing Background of Intellectual, Scientific and Religious Thought. Lectures by Karl Pearson given at University College, London during the academic sessions 1921-1933. Edited by E.S.Pearson.
London: Griffith, 1978.

Todhunter, I:
A History of the Mathematical Theory of Probability from the Time of Pascal to that of Laplace.
Cambridge and London, 1865. New York: Chelsea, 1965 (reprint).

Walker, H.M:
Studies in the History of Statistical Method with Special Reference to Certain Educational Problems.
Baltimore: Williams and Wilkins, 1929. New York: Arno Press, 1975 (reprint).

Westergaard, H:
Contributions to the History of Statistics.
London: P.S.King, 1932. Brooklyn Heights, N.Y: Beekman Publs, 197o (reprint).

1.4.1o Numerical analysis

Goldstine, Herman H:
A History of Numerical Analysis from the 16th through the 19th Century.
Berlin: Springer, 1977. (Studies in the History of Mathematics and Physical Sciences, Vol.2).

1.4.11 Computers

Beauclair, W.de:
Rechnen mit Maschinen. Eine Bildgeschichte der Rechentechnik.
Braunschweig: Vieweg, 1968.

Dubbey, John Michael:
The Mathematical Work of Charles Babbage.
London: Cambridge Univ. Press, 1978.

Eames, C. and R:
A Computer Perspective.
Cambridge, Massachusetts: Harvard Univ. Press, 1973.

Franksen, Ole Immanuel:
Fra kugleramme til elektronregnemaskine. De regnetekniske hjælpemidlers udvikling. *In Danish. (From the Abacus to the Computer)*.
Copenhagen: Akademisk Forlag, 1965.

Goldstine, Herman H:
The Computer from Pascal to von Neumann.
Princeton: Princeton Univ. Press, 1972.

Knuth, D.E. and Pardo, L.T:
The Early Development of Programming Languages.
Publ. by Stanford University, School of Humanities and Sciences, Computer Science Department; Stanford, California, 1976.

Randell, Brian (ed.):
The Origins of Digital Computers - Selected Papers.
Berlin: Springer, 1973, 1975. *(Contains a good annotated bibliography)*.

Sammet, J.E:
Programming Languages: History and Fundamentals.
Englewood Cliffs, New Jersey: Prentice Hall, 1969.

Thomas, S:
Computers: Their History, Present Applications and Future.
New York: Holt, Rinehart and Winston, 1964.

1.4.12 Miscellaneous

Cajori, Florian:
A History of Mathematical Notations. 2 vols.
Chicago: Open Court, 1928-3o.

Hilbert, David et al:
Die Hilbertschen Probleme.Uber einen Vortrag gehalten in Paris 19oo.
Leipzig: Geest & Portig, 1971. (Ostwalds Klassiker der exakten Wissenschaften, Vol.252).

Todhunter, Isaac:
A History of the Mathematical Theories of Attraction and the Figure of the Earth.
1873. New York: Dover, 1962 (reprint).

1.5 Biographies, autobiographies and letters

A selection of mathematicians has been made. For women mathematicians, see 6.2 Women and mathematics, Biographies and autobiographies. For mathematical and philosophical work of mathematicians, see also History of mathematics: 1.2. Special epochs and cultures, 1.3 Countries, 1.4 Special topics and Philosophy of mathematics: 2.3 About particular philosophers + Author index. The titles below are arranged alphabetically after the mathematicians.

1.5.1 Niels Henrik Abel

Bjerknes, C.A:
Niels Henrik Abel. Eine Schilderung seines Lebens und seiner Arbeit.
Berlin: Springer, 193o.

Mittag-Leffler, G:
Niels Henrik Abel.
Paris: Revue du mois, 19o7.

Ore, Oystein:
Niels Henrik Abel (18o2-29).
Basel: Birkhäuser Verlag, 195o. (Beihefte zur Zeitschrift "Elemente der Mathematik", No.8).

Ore, O:
Niels Henrik Abel, Mathematician Extraordinary.
Minneapolis, Minnesota: Univ. of Minnesota Press, 1957. New York: Chelsea, 1974.

1.5.2 Apollonius

Heath, Thomas L:
Apollonius of Perga.
New York: Barnes and Noble, 1961 (reprint).

1.5.3 Archimedes

Dijksterhuis, E.J:
Archimedes.
Copenhagen: Ejnar Munksgaard, 1956.

Heath, Thomas L:
The Works of Archimedes.
New York: Dover, 1953 (reprint).

1.5.4 Charles Babbage

Babbage, Charles:
Passages from the Life of a Philosopher.
183o. Folkestone, Kent: Dawson, 1968 (reprint). New York: Kelley, 1969 (reprint).

Morrison, Phillip & Emily (eds.):
Charles Babbage and his Calculating Engines. Selected Writings by Charles Babbage and Others.
New York: Dover, 1961.

Moseley, Maboth:
Irascible Genius, the Life of Charles Babbage.
London: Hutchinson, 1964. New York: A.M.Kelley, 1965 (reprint).

1.5.5 The Bernoullis

Fleckenstein, J.O:
Johann & Jakob Bernoulli (1654-1748).
Basel: Birkhäuser Verlag, 1949, 1977. (Beihefte zur Zeitschrift "Elemente der Mathematik", No.6).

Spiess, Otto (ed.):
Der Briefwechsel von Johann Bernoulli. Vol.1
Basel: Birkhäuser, 1955.

Wollenschläger, Karl (ed.):
Der mathematische Briefwechsel zwischen Johann I. Bernoulli und Abraham de Moivre.
Basel: Verhandl. Naturforsch. Ges. Basel, 1933.

1.5.6 Friedrich Wilhelm Bessel

See 1.5.25 Gauss.

1.5.7 I.J.Bienaymé

Heyde, C.C. and Seneta, E:
I.J.Bienaymé. Statistical Theory Anticipated.
Berlin: Springer, 1977. (Studies in the History of Mathematics and Physical Sciences, Vol.3).

1.5.8 The Bolyais

See also 1.5.25 Gauss.

von David, L:
Die beiden Bolyai (1775-186o).
Basel: Birkhäuser Verlag, 1951. (Beihefte zur Zeitschrift "Elemente der Mathematik", No.11).

1.5.9 Bernard Bolzano

Winter, Eduard:
Bernard Bolzano und sein Kreis. Dargestellt mit erstmaliger Heranziehung der Nachlässe Bolzanos und seiner Freunde.
Leipzig: Hegner, 1933.

1.5.1o Emile Borel

Frechet, M:
La vie et l'oeuvre d'Emile Borel.
Genève: Monographies de 1'Enseignement Mathématique, 1965.

1.5.11 Georg Cantor

Dauben, Joseph Warren:
Georg Cantor: His Mathematics and Philosophy of the Infinite.
Cambridge, Massachusetts: Harvard Univ. Press, 1977.

Meschkowski, Herbert:
Probleme des Unendlichen: Werk und Leben Georg Cantors.
Braunschweig: F.Vieweg, 1967.

Noether, E. and Cavaillès, J:
Briefwechsel Cantor-Dedekind.

Paris: Hermann, 1937.

1.5.12 Gerolamo Cardano

Cardano, Gerolamo (Jerome):
The Book of my Life.
New York: Dover, 1962 (reprint).

Morley, Henry:
Life of Cardan. 2 vols.
London: Chapman and Hall, 1854.

Ore, Oystein:
Cardano: The Gambling Scholar.
Princeton, N.J: Princeton Univ. Press, 1953.

1.5.13 Augustin Louis Cauchy

Valson, C-A:
La vie et les travaux du Baron Cauchy.
Paris: Gauthier- Villars, 1868. Paris: A.Blanchard, 197o.

1.5.14 Richard Courant

Reid, Constance:
Courant in Göttingen and New York. The Story of an Improbable Mathematician.
New York and Berlin: Springer, 1976.

1.5.15 Abraham de Moivre

See 1.5.5 The Bernoullis.

1.5.16 Richard Dedekind

See also 1.5.11 Cantor.

Dugac, P:
Richard Dedekind et les fondements des mathématiques.
Paris: Vrin, 1976. (L'Histoire des Sciences Textes et Etudes,24).

1.5.17 René Descartes

Montras, H:
Descartes.
Paris: Gauthier-Villars, 1969.

Scott, J.F:
The Scientific Work of René Descartes.
London: Taylor and Francis, 1952. Reprinted 1976.

Tannery, P.(ed.):
La correspondance de Descartes dans les inédits du fonds Libri.
Paris: Gauthier-Villars, 1893.

Vrooman, Jack R:
René Descartes: A Biography.
London: G.P.Putnam, 197o.

Vuillemin, Jules:
Mathématiques et métaphysique chez Descartes.
Paris: Presses Universitaires de France, 196o.

1.5.18 Diophantus

Heath, Sir Thomas L:
Diophantus of Alexandria.
London: Cambridge Univ. Press, 191o (2nd ed). New York: Dover, 1964 (reprint).

1.5.19 J.P.G.Lejeune Dirichlet

Tannery, J. (ed.):
Correspondance entre Lejeune Dirichlet et Liouville.
Paris: Gauthier-Villars, 191o.

1.5.2o Leonhard Euler

Fueter, Rudolf:
Leonhard Euler (17o7-1783).
Basel: Birkhäuser Verlag, 1948. (Beihefte zur Zeitschrift "Elemente der Mathematik", No.3).

Habicht, W; Juskevic, A; and Smirnov, V. (eds.):
Leonhardi Euleri Opera Omnia, Series Quarta A. Commercium Epistolicum, Volumen Primum, Descriptio Commercii Epistolici.
In German. (A survey of about 3ooo letters to and from Euler; later volumes will publish the letters).
Basel: Birkhäuser, 1975.

Pasquier, L.-G. du:
Leonhard Euler et ses amis.
Paris: J.Hermann, 1927.

1.5.21 Pierre Fermat

Itard, Jean:
Pierre Fermat (16o1-1665).
Basel: Birkhäuser Verlag, 195o. (Beihefte zur Zeitschrift "Elemente der Mathematik", No.1o).

Mahoney, M.S:
The Mathematical Career of Pierre de Fermat 16o1-1665.
Princeton, N.J: Princeton Univ. Press, 1973.

1.5.22 Joseph Fourier

Grattan-Guinness, I. and Ravetz, J.R:
Joseph Fourier 1768-183o.
Cambridge, Massachusetts: MIT Press, 1972.

1.5.23 Gottlob Frege

Frege, G:
Nachgelassene Schriften und wissenschaftlicher Briefwechsel.
2 vols. Hamburg: Felix Meiner, 1969 - 1976.

1.5.24 Evariste Galois

Galois, Evariste:
Ecrits et mémoires mathématiques.
Paris: Gauthier-Villars, 1962.

Infeld, Leopold:
Whom the Gods Love: The Story of Evariste Galois.
New York: McGraw-Hill, 1948.

Kollros, L:
Evariste Galois (1811-1832).
Basel: Birkhäuser Verlag, 1949. (Beihefte zur Zeitschrift "Elemente der Mathematik", No.7).

1.5.25 Carl Friedrich Gauss

Dunnington, G.W:
Carl Friedrich Gauss: Titan of Science.
New York: Hafner, 1955.

Gauss, C.F:
Mathematisches Tagebuch 1796-1814.
Leipzig: Geest & Portig, 1976. (Ostwalds Klassiker der exakten Wissenschaften, Vol.256).

Gauss, C.F. and Bessel, F.W:
Briefwechsel zwischen Gauss und Bessel.
Leipzig: W.Engelmann, 188o.

Gerardy, T.(ed.):
C.L.Gerling an C.F.Gauss. Sechzig bisher unveröffenlichte Briefe.
Göttingen: Vandenhoeck & Ruprecht, 1964.

Hänselmann, Ludwig:
Karl Friedrich Gauss. Zwölf Kapitel aus seinem Leben.
Leipzig: Duncker & Humblot, 1878.

Reichardt, Hans:
C.F.Gauss, Leben und Werke.
Berlin: Haude und Spenersche, 196o.

Schäfer, Clemens (ed.):
Briefwechsel zwischen C.F.Gauss und C.L.Gerling.
Berlin: Elsner, 1927.

Schmidt, Franz and Staeckel, Paul:
Briefwechsel zwischen Carl Friedrich Gauss und Wolfgang Bolyai.
Leipzig: B.G.Teubner, 1899. New York: Georg Olms Reprint, 197o.

von Walterhausen, W. Sartorius:
Carl Friedrich Gauss.
S.Hirzel, 1856. Berlin: Springer, 1965 (reprint).

Worbs, E:
Carl Friedrich Gauss. Ein Lebensbild.
Leipzig, 1955 (2nd ed).

Wussing, Hans:
Carl Friedrich Gauss.
1974. Leipzig: Teubner, 1976 (2nd ed). (Biographien hervorragender Naturwissenschaftler, Techniker und Mediziner, Vol.15).

1.5.26 Christian Ludwig Gerling

See 1.5.25 Gauss.

1.5.27 William Rowan Hamilton

Graves, Robert Percival:
Life of Sir William Rowan Hamilton. 3 vols.
1882-89. New York: Arno Press, 1975 (reprint). (History, Philosophy & Sociology of Science Series).

1.5.28 Godfrey Harold Hardy

Hardy, G.H:
A Mathematician's Apology.
London: Cambridge Univ. Press, 194o, 1973.

1.5.29 Charles Hermite

Baillard, B. and Bourget, H. (eds.):
Correspondance d'Hermite et de Stieltjes. 2 vols.
Paris: Gauthier-Villars, 19o5.

1.5.3o David Hilbert

Minkowski, H. and Rydenberg, L. (eds.):
Briefe an David Hilbert.
Berlin: Springer, 1973.

Reid, Constance:
Hilbert.
New York and Berlin: Springer, 197o.

1.5.31 Philip E.B.Jourdain

See 1.5.4o Russel.

1.5.32 Gottfried Wilhelm Leibniz

Gerhardt, C.I. (ed.):
Briefwechsel zwischen Leibniz und Chr. Wolff.
Halle, 1860. Hildesheim: Georg Olms Reprint, 1963.

Gerhardt, C.I:
Der Briefwechsel von Gottfried Wilhelm Leibniz mit Mathematikern.
Berlin: Mayer und Müller, 1899. New York and Hildesheim: Georg Olms Reprint, 1962.

Gerland, E. (ed.):
Leibniz' und Huygens' Briefwechsel mit Papin, nebst der Biographie Papin's und einigen zugehörigen Briefen und Achtstücken.
Berlin, 1881. Wiesbaden: Martin Sändig Reprint, 1966.

Hofmann, J.E:
Leibniz' mathematischen Studien in Paris.
Berlin: Walter de Gruyter, 1948. Translated into English: Leibniz in Paris 1672-76. London: Cambridge Univ. Press, 1974.

1.5.33 Joseph Liouville

See 1.5.19 Dirichlet.

1.5.34 Gaspard Monge

Taton, René:
Gaspard Monge (1746-1818).
Basel: Birkhäuser Verlag, 1950. (Beihefte zur Zeitschrift "Elemente der Mathematik", No.9).

1.5.35 John Napier

Hobson, E.W:
John Napier and the Invention of Logarithms.
London: Cambridge Univ. Press, 1914.

1.5.36 Isaac Newton

Brewster, David:
Memoirs of the Life, Writings and Discoveries of Sir Isaac Newton. 2 vols.
1855. New York: Johnson Reprint, 1965.

De Morgan, Augustus:
Essays on the Life and Work of Newton.
Chicago: Open Court, 1914.

More, Louis T:
Isaac Newton.
New York: Dover, 1962 (reprint).

Turnbull, H.W. and Scott, J.F:
The Correspondence of Isaac Newton. 4 vols.
London: Cambridge Univ. Press, 1959-67.

Wussing, Hans:
Isaac Newton.
Leipzig: B.G.Teubner, 1977.

1.5.37 Omar Khayyam

Lamb, Harold:
Omar Khayyam, a Life.
New York: Doubleday, 1936.

1.5.38 Giuseppe Peano

Kennedy, Hubert:
Giuseppe Peano (1858-1932).
Basel: Birkhäuser Verlag, 1974. (Beihefte zur Zeitschrift "Elemente der Mathematik", No.14).

1.5.39 Srinivasa Ramanujan

Hardy, Godfrey Harold:
Ramanujan. Twelve Lectures on Subjects Suggested by His Life and Work.
London: Cambridge Univ. Press, 194o. New York: Chelsea, 1959 (reprint).

1.5.4o Bertrand Russel

Grattan-Guinness, I:
Dear Russel - Dear Jourdain: A Commentary on Russel's Logic, Based on His Correspondence with Philip Jourdain.
London: Duckworth, 1977. New York: Columbia Univ. Press, 1977.

Russel, B:
The Autobiography of Bertrand Russel. 2 vols.
London: Allen & Unwin, 1967-68.

1.5.41 Thomas Jan Stieltjes

See 1.5.29 Hermite.

1.5.42 S.M.Ulam

Ulam, S.M:
Adventures of a Mathematician.
New York: Charles Schribner, 1976.

1.5.43 Norbert Wiener

Wiener, Norbert:
Ex-Prodigy. My Childhood and Youth.
Cambridge, Massachusetts: MIT Press, 1953, 1964.

Wiener, Norbert:
I am a Mathematician.
London: Victor Gollancz, 1956. Cambridge, Massachusetts: MIT Press, 1956.

1.5.44 Christian Wolff

See 1.5.32 Leibniz.

2. PHILOSOPHY OF MATHEMATICS

2.1 PHILOSOPHY OF MATHEMATICS IN GENERAL

Becker, O:
Grösse und Grenze der mathematischen Denkweise.
München: Alber, 1959.

Becker, Oskar:
Die Grundlagen der Mathematik in geschichtlicher Entwicklung.
Freiburg and München, 1964. Frankfurt: Suhrkamp, 1975.

Benacerraf, P. and Putnam, H. (eds.):
Philosophy of Mathematics. Selected Readings.
Oxford: Blackwell, 1964. Englewood Cliffs, N.J: Prentice-Hall, 1964. (Prentice-Hall Philosophy Series).

Bernays, Paul:
Abhandlungen zur Philosophie der Mathematik.
Darmstadt: Wissenschaftliche Buchgesellschaft, 1976.

Beth, E.W:
The Foundations of Mathematics: A Study in the Philosophy of Science.
Amsterdam: North-Holland, 1959, 1965.

Beth, E.W:
Mathematical Thought. An Introduction to the Philosophy of Mathematics.
Dordrecht-Holland: D.Reidel, 1965. New York: Gordon & Breach, 1965.

Böhm, Walter:
Die metaphysischen Grundlagen der Naturwissenschaft und Mathematik.
Wien: Herder, 1965.

Boutroux, Pierre:
L'Ideal scientifique des mathématiciens.
Libraire Felix Alcan, 1920. Translated into German: Das Wissenschaftsideal der Mathematiker. Leipzig: Teubner, 1927. Wiesbaden: Martin Sändig Reprint, 1968.

Brand, Deutschbein W:
Einführung in die philosophischen Grundlagen der Mathematik.
Frankfurt: Diesterweg, 1929.

Brunschvicg, L:
Les étapes de la philosophie mathématique.
Paris: Presses Universitaires de France, 1947. Paris: A. Blanchard, 1972.

Bruter, C.P:
Sur la nature des mathématiques.
Paris: Gauthier-Villars, 1973. (Discours da la méthode).

Carnap, R:
The Foundations of Logic and Mathematics.
Chicago: International Encyclopedia of Unified Science 4:3, 1939.

Castonguay, C:
Meaning and Existence in Mathematics.
Berlin and Wien: Springer, 1972.(Library of Exact Philosophy, 9).

Cavaillès, Jean:
Philosophie mathématique.
Paris: Hermann, 1962.

Fang, Joong:
Towards a Philosophy of Modern Mathematics. Vol.1: Bourbaki. Vol.2: Hilbert.
Memphis, Tennessee: Paideia, 197o.

Frey, G:
Einführung in die philosophischen Grundlage der Mathematik.
Schöningen: Schrödel, 1968.

Gerlach, J.E:
Kritik der mathematischen Vernunft.
Bonn, Cohen, 1922.

Gonseth, Ferd.:
Les fondements des mathématiques. De la géometrie d'Euclide à la relativité générale et à l'Intuitionisme.
Préface de Jacques Hadamard. Paris: A.Blanchard, 1977 (new ed).

Goodstein, R.L:
Essays in the Philosophy of Mathematics.
Leicester: Leicester Univ. Press, 1965.

Heitsch, W:
Mathematik und Weltanschauung.
Berlin: Akademie-Verlag, 1976.

Hilbert, D. and Bernays, P:
Grundlagen der Mathematik. 2 vols.
1928. Berlin: Springer, 1968-7o.

Hintikka, J. (ed.):
The Philosophy of Mathematics.
London: Oxford Univ. Press, 1969.

Hölder, Otto:
Die mathematische Methode. Logisch erkenntnistheoretische Untersuchungen im Gebiete der Mathematik, Mechanik und Physik.
Berlin: J.Springer, 1924. Wiesbaden: Martin Sändig Reprint.

Hönigswald, R:
Zum Streit über die Grundlagen der Mathematik.
Heidelberg: Winter, 1912.

Kleene, S.C:
Introduction to Metamathematics.
Amsterdam: North-Holland, 1952.

Kneebone, G.T:
Mathematical Logic and the Foundations of Mathematics.
New York: Van Nostrand, 1963.

Körner, S:
Philosophy of Mathematics. An Introductory Essay.
London: Hutchinson University Library, 196o, 1971.

Kraft, Victor:
Mathematik, Logik und Erfahrung.
1947. Berlin: Springer, 197o. (Library of Exact Philosophy, 2).

Lakatos, I. (ed.):
Problems in the Philosophy of Mathematics. Vol.3 of Proceedings of the International Colloquium in the Philosophy of Science,

London, 1965.
Amsterdam: North- Holland, 1968, 1972.

Lakatos, I:
Proofs and Refutations. The Logic of Mathematical Discovery.
London: Cambridge Univ. Press, 1976.

Lakatos, I:
Philosophical Papers. 2 vols.
London: Cambridge Univ. Press, 1978.

Lankes, O. and Baumgartner, L:
Wirklichkeit und Formel.
Bamberg: Buchner, 1935.

Lautmann, A:
Essai sur l'Unité des mathématiques et divers écrits.
Paris: Union Génerale d'Édition, 1977.

Les Mathématiques et la Réalité. Actes du Colloque, 17-18 mai 1974.
Centre Universitaire de Luxembourg, 162 A, Avenue de la Faïencerie, Luxembourg, 1974.

Meschkowski, H:
Wandlungen des mathematischen Denkens. Eine Einführung in die Grundlagenprobleme der Mathematik.
1956. Braunschweig: Vieweg, 1969 (4th ed).

Meschkowski, H:
Richtigkeit und Wahrheit in der Mathematik.
Mannheim: Bibliographisches Institut, 1976.

Molodschi, W.N:
Studien zu philosophischen Probleme der Mathematik.
Berlin: VEB Deutsch. Vlg. der Wissenschaften, 1977.

Natorp, Paul:
Die logischen Grundlagen der exakten Wissenschaften.
1921. Wiesbaden: Martin Sändig Reprint, 1969.

Planck, M:
Sinn und Grenzen der exakten Wissenschaft.
München: Kindler, 1971.

Putnam, Hilary:
Mathematics, Matter and Method.
London: Cambridge Univ. Press, 1975. (Philosophical Papers, 1).

Russel, B:
The Principles of Mathematics.
Cambridge, 1903. London: George Allen & Unwin, 1972.

Russel, B:
Introduction to Mathematical Philosophy.
London: George Allen & Unwin, 1919, 1948.

Ruzavin, G.I:
Die Natur der mathematischen Erkenntnis. Studien zur Methodologie der Mathematik.
Berlin: Akademie Verlag, 1977. Translated from the Russian original Moskva: Myslye, 1968.

Schöndorfer, Ulrich:
Philosophie der exakten Wissenschaften.
Wien: Franz Deuticke, 1957.

Sicha, J:
Metaphysics of Elementary Mathematics.
Amherst, Massachusetts: Univ. of Massachusetts Press, 1974.

Speiser, Andreas:
Elemente der Philosophie und der Mathematik.
Basel: Birkhäuser, 1952. (Wissenschaft und Kultur, Vol:6).

Stewart, Ian and Tall, David:
The Foundations of Mathematics.
Oxford: Oxford Univ. Press, 1977.

Stuyveart, M:
Introduction à la méthodologie mathématique.
Paris: A.Blanchard, 1923.

van Heijenoort, Jean (ed.):
From Frege to Gödel: A Source Book in Mathematical Logic, 1879-1931.
Cambridge, Massachusetts: Harvard Univ. Press, 1967, 1977.
(Source Books in the History of the Sciences Series).

Wagner, Joh. Jakob:
Mathematische Philosophie.
Ulm, 1851. Wiesbaden: Martin Sändig Reprint, 1969.

Wang, Hao:
From Mathematics to Philosophy.
London: Routledge & Kegan Paul, 1974. New York: Humanities Press, 1974.

Waismann, F:
Einführung in das mathematische Denken. Die Begriffsbildung der modernen Mathematik.
Wien: Gerold, 1947 (2nd ed).

Weyl, Hermann:
Philosophie der Mathematik und Naturwissenschaft.
Enlarged version of an article from 1928. München: Oldenbourg Verlag, 1976 (4th ed). Translated into English: Philosophy of Mathematics and Natural Science. New York: Atheneum, 1963.

Whitehead, A.N:
Philosophie und Mathematik.
Wien: Humblot, 1949.

Wilder, R.L:
Introduction to the Foundations of Mathematics.
New York: Wiley, 1952, 1965.

Wittgenstein, Ludwig:
Wittgenstein's Lectures on the Foundations of Mathematics, Cambridge, 1939.
Ithaca, New York: Cornell Univ. Press, 1976.

Wittgenstein, L:
Bemerkungen über die Grundlagen der Mathematik.
Frankfurt: Suhrkamp, 1974.

2.2 Special schools

Baldus, Richard:
Formalismus und Intuitionismus in der Mathematik.
Karlsruhe: G.Braun, 1924.

Bishop, Erret:
Foundations of Constructive Analysis.
New York: Mc Graw-Hill, 1967.

Brouwer, L.E.J:
Collected Works. Vol.1: Philosophy and Foundations of Mathematics.(Ed: A.Heyting).Vol.2: Geometry, Analysis, Topology and Mechanics.(Ed: H.Freudenthal).
Amsterdam: North-Holland, 1975-76.

Curry, H.B:
Outlines of a Formalist Philosophy of Mathematics.
Amsterdam: North-Holland, 197o.

Dummett, Michael:
Elements of Intuitionism.
Oxford: Clarendon Press, 1977.

Heyting, A:
Intuitionism: An Introduction.
Amsterdam: North-Holland, 1966 (2nd ed), 1971.

Kino, A; Myhill, J; and Vesley, R.E. (eds.):
Intuitionism and Proof Theory.
Amsterdam: North-Holland, 197o.

Robinson, Abraham:
Non-Standard Analysis.
Amsterdam: North-Holland, 1966. (Studies in Logic and the Foundations of Mathematics).

Troelstra, Anne Sjerp:
Principles of Intuitionism.
Berlin: Springer, 1969. (Lecture Notes in Mathematics, Vol.95).

2.3 About particular philosophers

Apostle, H.G:
Aristotle's Philosophy of Mathematics.
Chicago: Univ. of Chicago Press, 1952.

Cantor - Goedel - Cohen: A Philosophical Survey.
Memphis, Tennessee: Paideia, 1979. (Paideia Studies in the

Nature of Modern Mathematics).

Cohen, Hermann:
Platos Ideenlehre und die Mathematik.
Marburg: N.G.Elwert, 1879.

Maziarz, Edward A. and Greenwood, Thomas:
Greek Mathematical Philosophy.
New York: F.Unger, 1968.

Wedberg, Anders:
Plato's Philosophy of Mathematics.
Stockholm: Almqvist & Wiksell, 1955.

2.4 Special topics

2.4.1 Miscellaneous

Anderson, A.R; Rudner, R.S; White, L.A. et al:
Mathematical Existence: A New Orientation.
Memphis, Tennessee: Paideia, 1978. (Paideia Studies in the Nature of Modern Mathematics).

Badiou, Alain:
Le concept de modèle. Introduction à une épistémologie matérialiste des mathématiques.
Paris: Maspero, 1972.

Blalock, H.M:
Theory Construction. From Verbal to Mathematical Formulation.
Englewood Cliffs, N.J: Prentice-Hall, 1969.

Bridge, Jane:
Beginning Model Theory. The Completeness Theorem and some Consequences.
Oxford: Clarendon Press, 1977.

Butts, Robert E. and Hintikka, Jaakko (eds.):
Logic, Foundations of Mathematics, and Computability Theory.
Dordrecht-Holland: D.Reidel, 1977.

Carnot, Lazare:
Réflexions sur la métaphysique du calcul infinitésimal.

Paris, 1797. Paris: A.Blanchard, 197o.

Cohen, Hermann:
Das Prinzip der Infinitesimalmethode und seine Geschichte.
1883. Frankfurt am Main: Suhrkamp, 1968.

Cohen, M.R. and Nagel, E:
An Introduction to Logic and Scientific Method.
New York, 1934. New York: Harcourt Brace Jovanovich, 1962.

Davis, M:
Computability and Unsolvability.
New York: McGraw-Hill, 1958.

Dingler, Hugo:
Die Grundlagen der angewandten Geometrie. Eine Untersuchung über den Zusammenhang zwischen Theorie und Erfahrung in den exakten Wissenschaften.
Leipzig: Akadem. Verlagsgesellschaft, 1911.

Dingler, Hugo:
Philosophie der Logik und Arithmetik.
München: Reinhardt, 1931.

Frege, Gottlob:
Die Grundlagen der Arithmetik. Eine logisch-mathematische Untersuchung über den Begriff der Zahl.
1884. Darmstadt: Wiss. Buchges., 197o. Translated into English: The Foundations of Arithmetic. A Logico-Mathematical Enquiry into the Concept of Number. Oxford, 195o.

Gonseth, Ferd.:
Les mathématiques et la réalité. Essai sur la méthode axiomatique.
Paris: A.Blanchard, 1977 (new ed.).

Helmholtz, H. von:
Zählen und Messen, erkenntnistheoretisch betrachtet.
Darmstadt: Wiss. Buchgesellschaft, 1959.

Hermes, H:
Aufzählbarkeit, Entscheidbarkeit, Berechenbarkeit.
Berlin: Springer, 1961, 1978. (Heidelberg Taschenbücher, 87).

Hilbert, David:
Grundlagen der Geometrie.
1899. Leipzig and Berlin: B.G.Teubner, 1968.

Klüver, J:
Operationalismus - Kritik und Geschichte einer Philosophie der exakten Wissenschaften.
Stuttgart: Problemata - Fried. Fromman-Holzboog, 1971.

Kuntze, F:
Denkmittel der Mathematik im Dienst der exakten Darstellung erkenntniskritischer Probleme.
Berlin: Reuther & Reichard, 1912.

Kuyk, W:
Complementarity in Mathematics: A First Introduction to the Foundations of Mathematics and its History.
Dordrecht-Holland: D.Reidel, 1977. (Mathematics and Its Applications, Vol.1).

Lorenzen, P:
Metamathematik.
Mannheim: Bibliographisches Institut, 1962.

Lorenzen, Paul and Schwemmer, Oswald:
Konstruktive Logik, Ethik und Wissenschaftstheorie.
Mannheim: Bibliographisches Institut, 1973.

Rasiowa, Helena and Sikorski, Roman:
The Mathematics of Metamathematics.
Warszawa: Polish Scientific Publishers, 1970.

Raurech, B:
Mathematische und transzendentale Identität.
München and Wien: Oldenbourg, 1973.

Russel, Bertrand:
An Essay on the Foundations of Geometry.
1897. New York: Dover, 1956 (reprint).

Siegfried, P:
Abstraktion, Mathematik, mathematische Modellierung gesellschaftlicher Systeme und Prozesse. Ausgewählte philosophische und methodologische Probleme.

Dresden, 1972.

Stachowiak, Herbert:
Rationalismus im Ursprung: Die Genesis des axiomatischen Denkens.
Wien and Berlin: Springer, 1971. (Library of Exact Philosophy, 4).

Stachowiak, Herbert:
Allgemeine Modelltheorie.
Berlin: Springer, 1973.

Stegmüller, Wolfgang:
Unvollständigkeit und Unentscheidbarkeit.Die metamathematischen Resultate von Gödel, Church, Kleene, Rosser und ihre erkenntnistheoretische Bedeutung.
Berlin: Springer, 1973.

Stegmüller, W:
The Structure and Dynamics of Theories.
Translated from German. Berlin: Springer, 1976.

Stephanitz, Dieter von:
Exakte Wissenschaft und Recht. Der Einfluss von Naturwissenschaft und Mathematik auf Rechtsdenken und Rechtswissenschaft in zweieinhalb Jahrtausenden. Ein historischer Grundriss.
Berlin: Walter de Gruyter, 197o.

Stoff, V.A:
Modellierung und Philosophie.
Translated from Russian. Berlin: Akademie Verlag, 1969.

Suppes, Patrick (ed.):
Space, Time and Geometry.
Dordrecht-Holland: D.Reidel, 1973.

Tarski, Alfred:
Introduction to Logic and to the Methodology of Deductive Sciences.
Oxford: Oxford Univ. Press, 1965.

Thiel, Rainer:
Quantität oder Begriff. Der heuristische Gebrauch mathematischer Begriffe in Analyse und Prognose gesellschaftlicher Prozesse.
Berlin: VEB Deutscher Verlag der Wissenschaften, 1967.

Thiel, R:
Mathematik - Sprache - Dialektik.
Berlin: Akademie Verlag, 1975.

Tőth, Imre:
Die nicht-euklidische Geometrie in der Phänomenologie des Geistes. Wissenschaftstheoretische Betrachtungen zur Entwicklungsgeschichte der Mathematik.
Frankfurt am Main: Horst Heiderdorff, 1972.

2.4.2 Infinity

Couturat, Louis:
De l'infini mathématique.
Paris: A.Blanchard, 1971 (new ed.).

Fang, J:
The Illusory Infinite: A Theology of Mathematics.
Memphis, Tennessee: Paideia, 1976. (Paideia Studies in the Nature of Modern Mathematics).

Kaufmann, Felix:
The Infinite in Mathematics. Logico-Mathematical Writings.
Ed: McGuinness, Brian. Dordrecht-Holland: D.Reidel, 1978.

Meschkowski, H.(ed.):
Das Problem des Unendlichen. Mathematische Texte von Bolzano, Cantor, Dedekind.
München: Deutscher Taschenbuch Verlag, 1974.

2.4.3 Statistics

Boldrini, Marcello:
Scientific Truth and Statistical Method.
London: Griffin, 1972.

Broad, C.D:
Induction, Probability, and Causation.
Dordrecht-Holland: D.Reidel, 1969.

Burks, Arthur W:
Chance, Cause, Reason. An Inquiry into the Nature of Scientific Evidence.

Chicago: Univ. of Chicago Press, 1963, 1977.

Carnap, R:
Logical Foundations of Probability.
Chicago: Univ. of Chicago Press, 195o, 1962 (2nd ed). London: Routledge & Kegan Paul, 1971.

Hacking, Ian:
Logic of Statistical Inference.
London: Cambridge Univ. Press, 1965, 1974.

Harper, W.L. and Hooker, C.A. (eds.):
Foundations of Probability Theory, Statistical Inference, and Statistical Theories of Science. 3 vols.
Dordrecht-Holland: D.Reidel, 1976.

Kyburg, Henry E, Jr:
The Logical Foundations of Statistical Inference.
Dordrecht-Holland: D.Reidel, 1974.

Laplace, Pierre Simon de:
Essai philosophique sur les probabilités.
Paris: Gauthier-Villars, 1814, 1921. Translated into English: A Philosophical Essay on Probabilities. New York: Wiley, 1917. New York: Dover, 1952 (reprint).

Leiser, Eeckart:
Einführung in die statistischen Methoden der Erkenntnisgewinnung.
Köln: Pahl-Rugenstein, 1978.

Reichenbach, Hans:
Wahrscheinlichkeitslehre. Eine Untersuchung über die logischen und mathematischen Grundlagen der Wahrscheinlichkeitsrechnung.
Leiden, The Netherlands: A.W.Sijthoff, 1935. Translated into English: The Theory of Probability: An Inquiry into the Logical and Mathematical Foundations of the Calculus of Probability. Berkeley: Univ. of California Press, 1947, 1965.

Savage, J:
The Foundations of Statistics.
New York, 1954.

Schnorr, Claus Peter:
Zufälligkeit und Wahrscheinlichkeit. Eine algorithmische Begründung der Wahrscheinlichkeitstheorie.
Berlin: Springer, 1971.

Suppes, Patrick:
Probabilistic Metaphysics. 2 vols.
Uppsala: Filosofiska Studier utgivne af Filosofiska Föreningen och Filosofiska Institutionen vid Uppsala Universitet, Sweden, No.22, 1974.

von Mises, R:
Wahrscheinlichkeit, Statistik und Wahrheit.
1936. Wien and Berlin: Springer, 1972. (Library of Exact Philosophy, Vol.7).

Wisdom, John Oulton:
Foundations of Inference in Natural Science.
London: Methuen, 1952.

2.4.4 Cybernetics

Guillaumaud, Jacques:
Cybernétique et Matérialisme Dialictique.
Paris: Éditions Sociales, 1965. (Petite Encyclopédie Marxiste).

Klaus, Georg:
Kybernetik in philosophischer Sicht.
Berlin: Dietz, 1965.

Klaus, G:
Kybernetik und Erkenntnistheorie.
Berlin: VEB Deutscher Verlag der Wissenschaften, 1972.

Stachowiak, Herbert:
Denken und Erkennen im kybernetischen Modell.
Wien and Berlin: Springer, 1969 (2nd ed).

3. PSYCHOLOGY OF MATHEMATICS

This group is about "Psychology of mathematics", not "Mathematical psychology". See also 9. Mathematics education.

3.1 Mathematics

See also 7.1 Miscellaneous, Mathematics.

Adler, Irving:
Mathematics and Mental Growth.
1962. New York: John Day, 1968 (new ed).

Auerbach, Felix:
Die Furcht vor der Mathematik und ihre Überwindung.
Jena, 1924. Wiesbaden: Martin Sändig Reprint, 1967.

Gullasch, Reinhard:
Denkpsychologische Analysen Mathematischer Fähigkeiten.
Berlin: Volk und Wissen, 1973. (Psychologische Beiträge, 14).

Hadamard, Jacques:
An Essay on the Psychology of Invention in the Mathematical Field.
Princeton: Princeton Univ. Press, 1945, 1949. Dover Reprint.
Translated into French: Essai sur la psychologie de l'invention dans le domaine des mathématiques. Paris: Blanchard, 1959.

Honsberger, Ross:
Ingenuity in Mathematics.
Washington, D.C: MAA=The Mathematical Association of America, 197o. (MAA: New Mathematical Library, No.23).

Krutetskii, V.A:
The Psychology of Mathematical Abilities in Schoolchildren.
Translated from Russian. Kilpatrick, Jeremy et al (eds.).
Chicago: Univ. of Chicago Press, 1976. (Survey of Recent East European Mathematical Literature).

Lovell, K:
The Growth of Basic Mathematical and Scientific Concepts in Children.
London: Univ. of London Press, 1962 (2nd ed).

Möbius, P.J:
Ueber die Anlage zur Mathematik.
Leipzig: Johann Ambrosius Barth, 19oo.

Newell, A. and Simon, H.A:
Human Problem Solving.
Englewood Cliffs, N.J: Prentice-Hall, 1972.

Piaget, Jean and Szeminska, Alina:
La genèse du nombre chez l'enfant.
Lausanne, Switzerland: Delachaux and Niestlé, 1941, 1964 (5th ed). Translated into English: The Child's Conception of Number. London: Routledge & Kegan Paul, 1952, 1969. (International Library of Psychology, Philosophy and Scientific Method).

Piaget, Jean and Inhelder, Bärbel:
La répresentation de l'éspace chez l'enfant.
Paris: Presses Universitaires de France, 1948. (Bibliotèque de philosophie contemporaine). Translated into English: The Child's Conception of Space. London: Routledge, 1956. (International Library of Psychology, Philosophy and Scientific Method).

Piaget, Jean; Inhelder, Bärbel; and Szeminska, Alina:
The Child's Conception of Geometry.
Translated from French. London: Routledge, 196o. (International Library of Psychology, Philosophy and Scientific Method).

Pippig, Günter:
Zur Entwicklung mathematischer Fähigkeiten.
Berlin: Volk und Wissen, 1971. (Psychologische Beiträge, 12).

Poincaré, Henri:
"Mathematical Creation" in The Foundations of Science. Translator G.Bruce Halsted. New York: The Science Press, 1924. First published in "Science et méthode". Paris: Flammarion, 19o8. Also published in Vernon, P.E.(ed.): Creativity. Harmondsworth, Middlesex: Penguin, 197o.

Polya, G:
How to Solve It. A New Aspect of Mathematical Method.
Princeton: Princeton Univ. Press, 1945. Garden City, New York: Doubleday Anchor Books, 1957.

Polya, George:
Mathematics and Plausible Reasoning. Vol.1: Induction and

Analogy in Mathematics. Vol.2: Patterns of Plausible Inference.
Princeton, New Jersey: Princeton Univ. Press, 1954.

Polya, George:
Mathematical Discovery. On Understanding, Learning, and Teaching Problem Solving. 2 vols.
New York: Wiley, 1962-65.

Stanley, Julian C; Keating, Daniel P; and Fox, Lynn H.(eds):
Mathematical Talent. Discovery, Description, and Development.
Baltimore and London: The Johns Hopkins Univ. Press, 1974.

Tobias, Sheila:
Overcoming Math Anxiety.
New York: Norton, 1978.

van der Waerden, B.L:
Einfall und Überlegung. Drei kleine Beiträge zur Psychologie des mathematischen Denkens.
Basel: Birkhäuser, 1968, 1973.

Werdelin, Ingvar:
The Mathematical Ability. Experimental and Factorial Studies.
Lund, Sweden: Gleerup and Copenhagen: Munksgaard, 1958.
(Studia psychologica et paedagogica, Series altera, Investigationes IX).

Wickelgren, W.A:
How to Solve Problems.
San Francisco: Freeman, 1974.

3.2 Computers

See also 7.3 Miscellaneous, Computers.

Banerji, R:
Theory of Problem Solving: An Approach to Artificial Intelligence.
New York: American Elsevier, 1969.

Banerji, R. and Mesarovic, M.(eds):
Theoretical Approaches to Non-Numerical Problem-Solving.
New York and Berlin: Springer, 197o.

Nilsson, Nils J:
Problem-Solving Methods in Artificial Intelligence.
New York: McGraw-Hill, 1971.

Weinberg, Gerald M:
The Psychology of Computer Programming.
New York: Van Nostrand Reinhold, 1971.

Winston, P.H. et al:
The Psychology of Computer Vision.
New York: McGraw-Hill, 1975.

4. Sociology of mathematics

Fang, J:
Sociology of Mathematics and Mathematicians.
Memphis, Tennessee: Paideia, 1975. (Paideia Studies in the Nature of Modern Mathematics).

5. Mathematics and society

5.1 Mathematics

Alker, H.R:
Mathematics and Politics.
London: Macmillan, 1965.

Condorcet, M.J.A.N. de Caritat:
Mathématique et société.
Choix de textes et comment. par Rashed, R. Paris: Hermann, 1974.

Høyrup, Else and Jens:
Matematikken i samfundet. Elementer af en analyse: historie/undervisning/ideologi. *In Danish. (Mathematics in Society. Elements of an Analysis: History / Teaching / Ideology).*
Copenhagen: Gyldendal, 1973. Translated into English by John Lamperti, Dartmouth College, USA; not printed, but copies were circulated. Part of it roughly translated into German and printed in Bielefeld: Materialien zur Analyse der Berufspraxis des Mathematikers, 1974, Heft 12. Jens Høyrup is now writing

a new thoroughly revised edition in English.

Moissejew, Nikita Nikolajevic:
Mathematik, Steuerung, Planung, Prognose.
Berlin: Akademie Verlag, 1973.

Münzinger, Wolfgang:
Moderne Mathematik, Gesellschaft und Unterricht. Zur soziologischen Begründung der modernen Mathematik in der Schule.
Weinheim: Beltz, 1971.

Neander, J:
Mathematik und Ideologie. Zur politischen ökonomie des Mathematikunterrichts.
Starnberg: Raith, 1974.

Politics of Mathematics: A Prolegomenon.
(A revised reprint of Phil. Math., Vol.15). Memphis, Tennessee: Paideia, 1979. (Paideia Studies in the Nature of Modern Mathematics).

Samuel, Pierre (ed.):
Mathématiques, mathématiciens et société.
Université Paris XI, UER Mathématique, Orsay, France, 1974.

5.2 Statistics

Fairley, William B. and Mosteller, Frederick:
Statistics and Public Policy.
Reading, Massachusetts: Addison-Wesley, 1977.

5.3 Computers

See also 7.3 Miscellaneous, Computers.

Adams, J. Mack:
Social Effects of Computer Use & Misuse.
New York: Wiley, 1976.

Annerstedt, Jan et al:
Datorer och politik: studier i en ny tekniks politiska effekter på det svenska samhället. *In Swedish. (Computers and Politics: Studies in the Political Impacts of a New Technique on the*

Swedish Society).
Lund, Sweden: Bo Cavefors, 197o.

Foy, N:
The Sun Never Sets on IBM.
New York: William Morrow, 1975.

George, F:
Machine Takeover. The Growing Threat to Human Freedom in a Computer-Controlled Society.
Oxford: Pergamon, 1977.

Gottlieb, C.C. and Borodin, A:
Social Issues in Computing.
New York: Academic Press, 1973.

Greenberger, Martin (ed.):
Computers, Communications and the Public Interest.
Baltimore: Johns Hopkins, 1971.

Hamming, R:
Computers and Society.
New York: McGraw-Hill, 1972. (Computer Science Series).

Hoffman, Lance J:
Security and Privacy in Computer Systems.
Los Angeles: Melville, 1973.

Holoien, M.O:
Computers and Their Societal Impact.
New York: Wiley, 1977.

Hondius, F.W:
Emerging Data Protection in Europe.
Amsterdam: North-Holland, 1975.

Janco, Manuel and Furjot, Daniel:
Informatique et capitalisme.
Paris: Francois Maspero, 1972. (Economie et Socialisme, No.18).

Kyng, Morten - DSF=Danske Studerendes Fællesråd:
EDB-rapporten. Studier i datateknikkens udvikling og indflydelse på det danske samfund. *In Danish. (The Computer Report. Studies in the Development of Computer Technique and Its Im-*

pact on the Danish Society).
Copenhagen: DSF, 1974.

Laudon, Kenneth C:
Computers and Bureaucratic Reform. The Political Functions of Urban Information Systems.
New York: Wiley, 1974.

Laver, Murray:
Computers, Communications and Society.
Oxford: Oxford Univ. Press, 1975.

Martin, James:
Security, Accuracy, and Privacy in Computer Systems.
Englewood Cliffs, N.J: Prentice-Hall, 1973.

Martin, James and Norman, Adrian R.D:
The Computerized Society. An Appraisal of the Impact of Computers on Society over the Next Fifteen Years.
Englewood Cliffs, N.J: Prentice-Hall, 197o.

McKnight, G:
Computer Crime.
London: Michael Joseph, 1973.

Naur, Peter:
Datamaskinerne og samfundet. *In Danish. (Computers and Society).*
Copenhagen: Munksgaard, 1967.

Nygaard, Kristen and Bergo, Olav Terje:
Planleggning, styring og databehandling. Grunnbok for fagbevegelsen. 2 vols. *In Norwegian. (Planning, Control and Data Processing. A Textbook for the Labour Movement).*
Oslo: Tiden Norsk Forlag, 1974.

Parker, D.B:
Crime by Computer.
New York: Schribner, 1976.

Quiniou, J.C:
Marxisme et informatique.
Paris: Editions Sociales, 1971. Translated into German: Marxismus und Informatik. Berlin: Akademie Verlag, 1974.

Rothman, S. and Mosmann, C:
Computers and Society.
Chicago: Science Research Associates, 1972.

Sanders, Donald H:
Computers in Society. An Introduction to Information Processing.
New York: McGraw-Hill, 1973.

Sanders, Donald H:
Computers and Management in a Changing Society.
New York: McGraw-Hill, 1974.

Sanders, Donald and Neeley, M.J:
Computers in Society.
New York: McGraw-Hill, 1977.

Simon, Herbert A:
Automationens betydelse för samhälle och företagsledning.
In Swedish. (The Influence of Automation on Society and Management).
Stockholm: Wahlström & Widstrand, 197o.

Sveistrup, Poul:
Edb og samfund. *In Danish. (Computers and Society).*
Copenhagen: Gad, 1972.

Taviss, Irene (ed):
The Computer Impact.
Englewood Cliffs, N.J: Prentice Hall, 197o.

Westin, Alan F.(ed):
Information Technology in a Democracy.
Cambridge, Massachusetts: Harvard Univ. Press, 1971.

5.4 Cybernetics

Klaus, G:
Kybernetik und Gesellschaft.
Berlin: Deutscher Verlag der Wissenschaften, 1973.

6. WOMEN AND MATHEMATICS

6.1 WOMEN AND MATHEMATICS IN GENERAL

AMS=American Mathematical Society (ed.):
Directory of Women Mathematicians.
Providence, R.I: American Mathematical Society, 1973-.

Fox, Lynn H; Fennema, Elizabeth; and Sherman, Julia:
Women and Mathematics: Research Perspectives for Change.
The National Institute of Education, US Department of Health, Education, and Welfare; Washington, D.C; Nov. 1977. (NIE Papers in Education and Work, No.8).

Høyrup, Else:
Women, Mathematics, Science and Engineering. A Partially Annotated Bibliography with Emphasis on Mathematics and with References on Related Topics.
Roskilde, Denmark: Roskilde University Library, 1978.

King, A.C; Grinstein, L.S; and Campbell, P.J:
Women and Mathematics: A Critical Inquiry.
(A revised reprint of Phil. Math., Vol. 13/14). Memphis, Tennessee: Paideia, 1978. (Paideia Studies in the Nature of Modern Mathematics).

Osen, Lynn M:
Women in Mathematics.
Cambridge, Massachusetts: MIT Press, 1974.

Perl, T:
Math Equals. *(Biographies of women mathematicians).*
Menlo Park, Calif: Addison-Wesley, 1978.

Schildkamp-Kündiger, Erika:
Frauenrolle und Mathematikleistung.
Düsseldorf: Pädagogischer Verlag Schwann, 1974.

Werdelin, Ingvar:
Geometric Ability and the Space Factors in Boys and Girls.
Lund, Sweden: Gleerup and Copenhagen: Munksgaard, 1961. (Lund Studies in Psychology and Education, Series altera, Investigationes X).

Women's Bureau in Canada:
Domaines de travail accessibles aux femmes: sciences physique, geosciences, mathématique.
Ministère du Travail du Canada, Ottawa: Imprimeur de la Reine, 1966.

6.2 Biographies and autobiographies

The titles are arranged alphabetically after the mathematicians.

6.2.1 Marquise du Châtelet

Maurel, André:
La marquise du Châtelet, amie de Voltaire.
Paris: Hachette, 1930.

6.2.2 Sophie Germain

Germain, Sophie:
Oeuvres philosophiques de Sophie Germain. Suivies de Pensées et de Lettres Inédites et précédées d'une Etude sur sa Vie et ses Oeuvres par H.Stupuy.
1879. Paris: Firmin-Didot, 1896.

6.2.3 P.Y.Kochina

Kochina, P.Ya:
Memoirs. (Vospominanya).
Moscow: Science (Nauka), 1974.

6.2.4 Sonia Kovalevskaya

Kovalevskaya, Sonia:
Biography and Autobiography.2 parts. I: Memoir, by Anna C. Leffler. II: Reminiscences of Childhood written by herself. London: Walter Scott, 1895. A new edition of the autobiography is:"A Russian Childhood. With an Analysis of Kovalevskaya's Mathematics by P.Y.Kochina". Berlin: Springer, 1979.

Polubarinova-Kochina, P:
Sophia Vasilievna Kovalevskaya.
Moscow: Foreign Languages Publishing House, 1957.

6.2.5 Ada Lovelace

Moore, Doris Langley:
Ada, Countess of Lovelace: Byron's Legitimate Daughter.
(Babbage's friend and assistant). New York: Harper & Row, 1977.

6.2.6 Emmy Noether

Dick, Auguste:
Emmy Noether, 1882-1935.
Basel: Birkhäuser Verlag, 197o.

6.2.7 Mary Somerville

Somerville, Mary (Ed. by Somerville, Martha):
Personal Recollections from Early Life to Old Age.
London: John Murray, 1874. New York: AMS Press, 1973 (reprint).

7. MISCELLANEOUS ABOUT MATHEMATICS

See also 8. Untraditional mathematics books.

7.1 Mathematics

Aleksandrov, A.D; Kolmogorov, A.N; and Lavrentjev, M.A. (eds.):
Mathematics: Its Content, Methods and Meaning. 3 vols.
Translated from Russian. Cambridge, Massachusetts: MIT Press, 1969.

Aumann, Georg:
Ad Artem Ultimam. Eine Einführung in die Gedankenwelt der Mathematik.
München: Oldenbourg Verlag, 1974.

Carleson, Lennart:
Matematik för vår tid. En presentation och ett debattinlägg.
In Swedish. (Mathematics for Our Time. A Presentation and a Contribution to Discussion). Stockholm: Prisma, 1968.

Churgin, J:
Formeln - und was dann?
Berlin: VEB Verlag Technik, 197o.

Cohen, R.S; Stachel, J.J; and Wartofsky, M.W:
For Dirk Struik. Scientific, Historical and Political Essays in Honor of Dirk J. Struik.
Dordrecht-Holland: D.Reidel, 1974. (Boston Studies in the Philosophy of Science, Vol.15).

COSRIM=Committee on Support of Research in the Mathematical Sciences of the National Research Council (ed.):
The Mathematical Sciences: A Report.
Washington, D.C: National Academy of Sciences, 1968.

COSRIM=Committee on Support of Research in the Mathematical Sciences (ed.):
The Mathematical Sciences. A Collection of Essays.
Cambridge, Massachusetts: MIT Press, 1968, 1969.

Court, N.A:
Mathematics in Fun and Ernest.
New York: New American Library/Signet, 1935, 1958.

Denjoy, Arnaud:
Hommes, formes et le nombre.
Paris: A.Blanchard, 1964.

Dieudonné, Jean:
Panorama des mathématiques pures. Le choix bourbachique.
Paris: Gauthier-Villars, 1978. (Discours de la méthode).

Félix, L:
The Modern Aspect of Mathematics.
New York: Basic Books, 1960.

Félix, Lucienne:
Dessi-Mati-Logi. Dialogues sur la géométrie.
Paris: A.Blanchard, 1971.

Hogben, L:
Mathematics for the Millions. A Popular Self Educator.
London: Allen & Unwin, 1936. New York: Norton, 1937.

Hogben, L:
Mathematics in the Making.
London: Rathbone, 1960. Garden City, N.Y: Doubleday, 1960.

Hogben, Lancelot:
Wonderful World of Mathematics.
Garden City, N.Y: Doubleday, 1968.

Ivins, W.M:
Art and Geometry.
Cambridge, Massachusetts: Harvard Univ. Press, 1946. New York: Dover, 1965 (reprint).

Jaffe, G:
Drei Dialoge über Raum, Zeit und Kausalität.
Berlin: Springer, 1954.

Jammer, Max:
Concepts of Space.
Cambridge, Massachusetts: Harvard Univ. Press, 1954.

Jourdain, P.E.B:
The Nature of Mathematics.
London: T.C. & E.C. Jack, 1913, 1929.

Klein, Felix:
Das Erlanger Programm.
Leipzig: Teubner, 1974 (reprint).

Kuntzmann, Jean:
Où vont les mathématiques? Réflexions sur l'enseignement et la recherche.
Paris: Hermann, 1967.

Lebesgue, Henri:
Message d'un mathématicien. (Philosophie, histoire, enseignement mathématique). Introduction et extraits choisis par Lucienne Félix.
Paris: A.Blanchard, 1974, 1977.

Le Lionnais, Francois (ed.):
Les grands courants de la pensée mathématique.
Paris: Blanchard, 1962 (2nd ed). Translated into English: Great Currents in Mathematical Thought. 2 vols. New York: Dover, 1971.

Levy, Paul:
Quelques aspects de la pensée d'un mathématicien.
Paris: A.Blanchard, 197o.

Meschkowski, Herbert:
Mathematik als Grundlage. Ein Plädoyer für ein rationales Bildungskonzept.
München: Deutscher Taschenbuch Verlag, 1973.

Montague, Harriett Frances and Montgomery, Mabel D:
The Significance of Mathematics.
Columbus, Ohio: C.E.Merrill, 1963.

Moritz, Robert Eduard:
On Mathematics and Mathematicians.
1942. New York: Dover, 1958.

Otte, Michael (ed.):
Mathematiker über die Mathematik.
Berlin: Springer, 1974.

Otte, M; Steinbring, H; and Stowasser, R:
Mathematik die uns angeht.
Gütersloh, FRG (BRD): Bertelsmann Lexikon-Verlag, 1977.

Queneau, R:
Mathematik von Morgen.
München: Nymphenburger Verlagshandlung, 1967.

Rapport, Samuel and Wright, Helen (eds.):
Mathematics.
New York: New York Univ. Press, 1963.

Reichmann, W.J:
The Spell of Mathematics.
London: Chapman & Hall, 1967.

Reidemeister, K:
Raum und Zahl.
Berlin: Springer, 1957.

Rényi, Alfréd:
Dialoge über Mathematik.
1967. Berlin: VEB Deutscher Verlag der Wissenschaften, 1972.

Resnikoff, R.L. and Wells, R.O:
Mathematics in Civilization.
New York: Holt, Rinehart and Winston, 1973.

Rusza, I:
Die Begriffswelt der Mathematik.
Berlin: Volk und Wissen, 1976.

Saaty, T.L. and Weyl, F.J. (eds.):
The Spirit and the Uses of the Mathematical Sciences.
New York: McGraw-Hill, 1969.

Schröter, Karl:
Mathematik im System der Wissenschaften.
Berlin: Akademie Verlag, 1973. (Sitzungsberichte des Plenums und der Klassen der Akademie der Wissenschaften der DDR, 1972, No.11).

Smeltzer, Donald:
Man and Number.
New York: Emerson Books, 1958.

Smilga, V:
In the Search of Beauty.
USSR: MIR Publishers, 197o.

Spottiswoode, W:
Die Mathematik in ihren Beziehungen zu den anderen Wissenschaften.
Leipzig: Quandt & Händel, 1879.

Steen, L.A. (ed.):
Mathematics Today - Twelve Informal Essays.
Berlin: Springer, 1978.

Steiner, M:
Mathematical Knowledge.
Ithaca, New York: Cornell Univ. Press, 1975.

Sutton, O.G:
Mathematics in Action. An Account of Applied Math & Its Influence on Modern Ideas.
New York: Harper & Row, 196o.

7.2 Statistics

Bartlett, M.S:
Essays on Probability and Statistics.
London: Halsted Press, 1956, 1962.

Bartlett, Maurice Stevenson:
Probability, Statistics and Time. A Collection of Essays.
London: Chapman and Hall, 1975.

Byrne, Edmund F:
Probability and Opinion.
The Hague: Nijhoff, 1968.

Reichmann, W.J:
Use and Abuse of Statistics.
London: Chapman and Hall, 1961.

Rényi, Alfréd:
Letters on Probability.
Translated from Hungarian. Detroit: Wayne State Univ. Press, 1972.

7.3 Computers

Adams, J.Mack and Haden, Douglas H:
Computers: Appreciation, Applications, Implications. An Introduction.
New York: Wiley, 1973.

Björk, Lars-Eric and Saving, Jaak:
Datorer - på våra villkor. *In Swedish. (Computers - on Our Conditions).*
Malmö, Sweden: Liber Läromedel i samarbete med Sveriges Radios Förlag, 1975.

Bolc, Leonard (ed.):
Natural Language Communication with Computers.
Berlin: Springer, 1978. (Lecture Notes in Computer Science, 63).

Dorf, Richard C:
Computers and Man.
San Francisco: Boyd & Fraser, 1974.

Feigenbaum, E.A. and Feldman, J:
Computers and Thought.
New York: McGraw-Hill, 1963.

Greenberger, Martin (ed.):
Computers and the World of the Future.
Cambridge, Massachusetts: MIT Press, 1962.

Greenberger, M. (ed.):
Management and the Computer of the Future.
Cambridge, Massachusetts: MIT Press, 1962.

Hunt, E.B:
Artificial Intelligence.
New York: Academic Press, 1974.

Jackson, P.D:
Introduction to Artificial Intelligence.
New York: Petrocelli Books, 1974.

London, K.R:
The People Side of Systems. The Human Aspects of Computer Systems.
London and New York: McGraw-Hill, 1976.

Machine Intelligence. 8 vols.
New York: American Elsevier, 1967-77.

Pylyshyn, Z.W. (ed.):
Perspectives on the Computer Revolution.
Englewood Cliffs, N.J: Prentice-Hall, 197o.

Raphael, Bertram:
The Thinking Computer. Mind Inside Matter.
(About artificial intelligence). San Francisco: Freeman, 1976.

Schneider, Ben Ross:
Travels in Computerland. Or Incompatibilities and Interfaces.
Reading, Massachusetts: Addison-Wesley, 1974.

Slagle, J.R:
Artificial Intelligence: The Heuristic Programming Approach.
New York: McGraw-Hill, 1971.

Sloman, Aaron:
The Computer Revolution in Philosophy. Philosophy, Science and Models of Mind. *(About artificial intelligence).* Hassocks, Sussex: Harvester Press, 1978. (Harvard Studies in Cognitive Science).

Steinbuch, Karl:
Automat und Mensch.
Berlin: Springer, 1965, 1971.

von Neumann, John:
The Computer and the Brain.
New Haven, Conn: Yale Univ. Press, 1958, 1967 (reprint).

Weizenbaum, Joseph:
Computer Power and Human Reason. From Judgment to Calculation.
San Francisco: Freeman, 1976.

8. UNTRADITIONAL MATHEMATICS BOOKS

This group is not systematically covered and is of course difficult to define. See also 7. Miscellaneous about mathematics.

8.1 Mathematics

Asimov, Isaac:
Realm of Numbers.
New York: Fawcett, 1959.

Asimov, Isaac:
Realm of Algebra.
New York: Fawcett, 1961

Barr, Stephen:
Experiments in Topology.
New York: Thomas Y.Crowell, 1964.

Benice, Daniel D:
Mathematics: Ideas and Applications.
New York: Academic Press, 1978.

Bergamini, David:
Mathematics. Life Science Library.

New York: Time-Life International, 1965, 1975.(Life Science Libr).

Booss, Bernhelm:
Topologie und Analysis. Eine Einführung in die Atiyah-Singer-Indexformel.
Berlin: Springer, 1977.

Britton, Jack R. and Bello, I:
Topics in Contemporary Mathematics.
London: Harper & Row, 1975.

Clifford, W.K:
The Common Sense of the Exact Sciences.
1886. Freeport, N.Y: Books for Libraries Press, 1972 (reprint).

Courant, R. and Robbins, H:
What is Mathematics?
New York: Oxford Univ. Press, 1941, 1958. In German: Was ist Mathematik? Berlin: Springer, 1973.

Dantzig, Tobias:
Number, the Language of Science.
London: George Allen & Unwin, 1940.

Duncan, Ronald and Weston-Smith, Miranda (eds.):
The Encyclopaedia of Ignorance. Vol.1: Physical Sciences.
Oxford: Pergamon Press, 1977.

Gårding, Lars:
Encounter with Mathematics.
Berlin: Springer, 1977.

Gelbaum, B. and Olmsted, J:
Counterexamples in Analysis.
San Francisco: Holden-Day, 1964. New York: McGraw-Hill, 1964.

Herstein, I. and Kaplansky, I:
Matters Mathematical.
1974. New York: Chelsea, 1978 (2nd ed).

Hilbert, D. and Cohn-Vossen, S:
Geometry and the Imagination.
New York: Chelsea, 1952.

Holt, Michael and Marjoram, D.T.E:
Mathematics in a Changing World.
London: Heinemann, 1973.

Jacobs, Harold R:
Mathematics. A Human Endeavour. A Textbook for Those Who Think They Don't Like the Subject.
San Francisco: Freeman, 197o.

Kasner, E. and Newman, J:
Mathematics and the Imagination.
New York: Simon & Schuster, 194o.

Kaufmann, Arnold:
Introduction à la théorie des sous-ensembles flous à l'usage des ingénieurs. 3 vols.
Paris: Masson, 1973-75.

Keisler, H.J:
Elementary Calculus. *(Uses non-standard analysis).*
Boston: Prindle, Weber & Schmidt, 1976.

Keisler, H.J:
Foundations of Infinitesimal Calculus.*(Uses non-standard analysis).*
Boston: Prindle, Weber & Schmidt, 1976.

Klein, Felix:
Elementarmathematik vom höheren Standpunkt aus. 3 vols.
19o2-o8. Berlin: Springer, 1968 (reprint).

Klein, Felix:
Fameous Problems of Elementary Geometry.
New York: Dover, 1956 (reprint).

Kline, Morris:
Mathematics and the Physical World.
New York: Thomas Y. Crowell, 1959.

Kline, Morris (ed.):
Mathematics. An Introduction to Its Spirit and Use.
San Francisco: Freeman, 1978.

Knuth, Donald E:
Surreal Numbers. A Mathematical Novelette.
Reading, Massachusetts: Addison-Wesley, 1974.

Land, Frank:
The Language of Mathematics.
London: John Murray, 196o.

Mandelbrot, B:
Fractals: Form, Chance and Dimension.
San Francisco: Freeman, 1977.

Maxwell, E.A:
Fallacies in Mathematics.
London: Cambridge Univ. Press, 1959.

Melzak, Z.A:
Companion to Concrete Mathematics. 2 vols.
New York: Wiley, 1973.

Meschkowski, H:
Ungelöste und unlösbare Probleme der Geometrie.
Mannheim: Bibliographisches Institut, 1975.

Miller, Charles D. and Heeren, Vern E:
Mathematical Ideas.
Glenview, Illinois: Scott Foresman, 1978 (3rd ed).

Pedoe, Dan:
The Gentle Art of Mathematics.
New York: Dover, 1973.

Pólya, George:
Mathematical Methods in Science.
Washington, D.C: MAA=Mathematical Association of America, 1977.
(Mathematical Monographs, Vol.18).

Rademacher, H. and Toeplitz, O:
Von Zahlen und Figuren.
1933. New York and Berlin: Springer, 1968. Translated into English: The Enjoyment of Mathematics: Selections from Mathematics for the Amateur. Princeton, N.J: Princeton Univ. Press, 1957, 197o.

Rucker, Rudolf:
Geometry, Relativity and the Fourth Dimension.
New York: Dover, 1977.

Scientific American, readings from:
Mathematics in the Modern World. Introductions by Morris Kline.
San Francisco: Freeman, 1948, 1968.

Singh, Jagjit:
Great Ideas of Modern Mathematics: Their Nature and Use.
New York: Dover, 1959.

Stabler, E.R:
An Introduction to Mathematical Thought.
Reading, Massachusetts: Addison-Wesley, 1953.

Steen, Lynn Arthur and Seebach, J.Arthur:
Counterexamples in Topology.
New York: Holt, Rinehart & Winston, 197o. New York and Berlin: Springer, 1978.

Stein, Sherman K:
Mathematics: The Man-Made Universe. An Introduction to the Spirit of Mathematics.
1963. San Francisco: Freeman, 1976 (3rd ed).

Stewart, Ian:
Concepts of Modern Mathematics.
Harmondsworth, Middlesex: Penguin, 1975.

Weyl, Hermann:
Symmetry.
Princeton: Princeton Univ. Press, 1952.

Yale, Paul B:
Geometry and Symmetry.
San Francisco: Holden-Day, 1968.

Yoshino, Y:
The Japanese Abacus Explained.
New York: Dover, 1937, 1964.

8.2 Statistics

Larsen, R:
Statistics in the Real World: A Book of Examples.
Stockley Close, West Drayton, Middlesex: Collier Macmillan, 1976.

8.3 Operations research

Singh, Jagjit:
Great Ideas of Operations Research.
New York: Dover, 1968.

8.4 Computers

Minsky, M. and Pappert, S:
Perceptions: An Introduction to Computational Geometry.
Cambridge, Massachusetts: MIT Press, 1969.

Scientific American, readings from:
Computers and Computation. With Introductions by Robert R. Fenichel and Joseph Weizenbaum.
San Francisco: Freeman, 195o, 1971.

8.5 Cybernetics

Singh, Jagjit:
Great Ideas in Information Theory, Language and Cybernetics.
New York: Dover, 1966.

9. MATHEMATICS EDUCATION

9.1 MATHEMATICS EDUCATION IN GENERAL

Many books on primary mathematics education are not included. See also 3. Psychology of mathematics.

Andelfinger, B. and Nestle, F:
Wege zu einer neuen Schulmathematik. Lernen für Morgen.
Freiburg: Herder, 1967.

Athen, Hermann and Kunle, Heinz:
Proceedings of the Third International Congress on Mathematical Education. Karlsruhe 16-21 August 1976.
Organizing Committee of the 3rd ICME, Karlsruhe, 1977. Distributet by Zentralblatt für Didaktik der Mathematik. Stuttgart: Klett Verlag.

Ballauff, Th. (ed.):
Philosophie im mathematischen und naturwissenschaftlichen Unterricht.
Heidelberg: Quelle und Meyer, 1958.

Banwell, Colin; Saunders, Ken; and Tahta, Dick:
Starting Points for Teaching Mathematics in Middle and Secondary Schools.
Oxford: Oxford Univ. Press, 1972.

Baruk, Stella:
Echec et Math.
Paris: Editions du Seuil, 1973.

Bassler, Otto C. and Kolb, John R:
Learning to Teach Secondary School Mathematics.
Scranton, New York: Intext Educational Publishers, 1971.

Beberman, Max:
An Emerging Program of Secondary School Mathematics.
Cambridge, Massachusetts: Harvard Univ. Press, 1958, 1962 (2nd print). (The Inglis Lectures).

Begle, Edward G:
Mathematics Education. The Sixty-ninth Yearbook of the National Society for the Study of Education.
Chicago: Univ. of Chicago Press, 197o.

Beiträge zum Mathematikunterricht 1968, 1969, 197o, 1971, 1972, 1973, 1974, 1975, 1976, 1977. Vorträge auf der 2.-11. Bundestagung für Didaktik der Mathematik.
Hannover: Hermann Schroedel, 1969-77.

Biggs, Edith E. and MacLean, James R:
Freedom to Learn. An Active Learning Approach to Mathematics.
Don Mills, Ontario and Reading, Massachusetts: Addison-Wesley, 1969.

Birkenmeier, Wilh.:
Über den Bildungswert der Mathematik. Ein Beitrag zur philosophischen Pädagogik.
Leipzig: B.G.Teubner, 1923. Wiesbaden: Martin Sändig, 1973.

Bock, Hans and Walsch, Werner:
Zum logischen Denken im Mathematikunterricht.
Berlin: Volk und Wissen, 1975.

Branford, B.:
A Study of Mathematical Education.
Oxford: Oxford Univ. Press, 1908.

Breidenbach, Walter:
Methodik des mathematischen Unterrichts.
Stuttgart: Klett, 1950. (Unterrichtslehre, Reihe 3).

Butler, Charles H. and Wren, F.Lynwood:
The Teaching of Secondary Mathematics.
1941. New York: McGraw-Hill, 1965 (4th ed.).

Cameron, A.J.:
Mathematical Enterprises for Schools.
Oxford: Pergamon Press, 1966. (The Commonwealth and International Library. Mathematics Division).

Carson, G.St.L:
Essays on Mathematical Education.
London: Ginn, 1913.

Castelnuovo, Emma:
Didaktik der Mathematik.
Translated from Italian. Frankfurt am Main: Akademische Verlagsgesellschaft, 1968.

CCSM:
Goals for School Mathematics.
Boston: Houghton Mifflin, 1963.

Chapman, L.R. (ed.):
The Process of Learning Mathematics.
Oxford: Pergamon Press, 1972, 1973. (The Commonwealth and International Library. Mathematical Topics).

Conference Board of the Mathematical Sciences:
The Role of Axiomatics and Problem Solving in Mathematics.
London: Ginn, 1960. (Ginn Modern Mathematics Series).

Cooney, Thomas J; Davis, Edward J; and Henderson, K.B:
Dynamics of Teaching Secondary School Mathematics.
Boston: Houghton Mifflin, 1975.

Cramer, Hans:
Zur Mathematisierung des Mathematikunterrichts. Versuch einer Didaktik.
Bamberg: Buchner, 1951.

Crawford, Douglas H:
The Fife Mathematics Project. An Experiment in Individualized Learning.
Oxford: Oxford Univ. Press, 1975.

Crosswhite, F.Joe; Higgins, Jon L; Osborne, Alan R; and Shumway, Richard J:
Teaching Mathematics: Psychological Foundations.
Worthington, Ohio: Charles A.Jones, 1973.

Cundy, H.Martyn:
The Caribbean Mathematics Project: Training the Teacher as the Agent of Reform.
Paris: Unesco, 1977.

Davis,David R:
The Teaching of Mathematics.
Cambridge, Massachusetts: Addison-Wesley, 1951. (Addison-Wesley Mathematics Series).

Dienes, Z.P:
An Experimental Study of Mathematics-Learning.
London: Hutchinson, 1963, 1968.

Dienes, Zoltan P:
Building up Mathematics.
London: Hutchinson Educational, 1964.

Dienes, Zoltan P:
The Power of Mathematics. A Study of the Transition from the Constructive to the Analytic Phase of Mathematical Thinking

in Children.
London: Hutchinson Educational, 1964.

Dubisch, Roy with the assistance of Howes, Vernon E:
The Teaching of Mathematics. From Intermediate Algebra through First Year Calculus.
New York: Wiley, 1963.

Eicholz, Robert E. and O'Daffer, Phares G:
Basic Modern Mathematics. 2 vols.
Reading, Massachusetts and Palo Alto, California: Addison-Wesley, 1966.

Ekenstam, Adolf af:
Gymnasieundervisning i matematik. *In Swedish. (Secondary School Mathematics Education).*
Stockholm: Almqvist and Wiksell, 1969.

Fang, J:
Numbers Racket. The Aftermath of "New Math".
Port Washington, New York: Kennikat Press, 1968.

Fetissow, A.I; Gibsch, I.A; and Semuschin, A.D:
Die Entwicklung des logischen Denkens im Mathematikunterricht.
Translated from Russian. Berlin: Volk und Wissen, 1962.
(Bibliothek des Lehrers. Abteilung II: Methodik).

Fladt, Kuno:
Didaktik und Methodik des mathematischen Unterrichts.
Frankfurt am Main: Hirschgraben, 1950.

Fletcher, Harold and Howell, Arnold A:
Mathematics with Understanding. 2 vols.
Oxford: Pergamon Press, 1970-72. (The Commonwealth and International Library. Mathematical Topics).

Fremont, Herbert:
How to Teach Mathematics in Secondary Schools.
Philadelphia: Saunders, 1969. (Saunders Science Teaching Series).

Freudenthal, H:
Mathematics as an Educational Task.
Dordrecht-Holland: D.Reidel, 1973.

Freudenthal, Hans:
Weeding and Sowing. Preface to a Science of Mathematical Education.
Dordrecht-Holland: D.Reidel, 1978.

Fuhrmann, Elizabeth:
Zum Definieren im Mathematikunterricht.
Berlin: Volk und Wissen, 1973.

Gattegno, Caleb et al:
Zur Didaktik des Mathematikunterrichts. 2 vols.
Hannover: Schroedel, 1969-71. (Beiträge zu einer neuen Didaktik. Reihe B: Monographien).

Glatfeld, M:
Motivation und Kreativität beim Mathematiklernen.
Braunschweig: Vieweg, 1977.

Goals for School Mathematics. The Report of the Cambridge Conference on School Mathematics.
Somerville, New Jersey (?): Educational Services Incorporated, 1963.

Griesel, Heinz:
Die neue Mathematik für Lehrer und Studenten. 3 vols.
Hannover: Schroedel, 1971-74.

Griffiths, H.B. and Howson, A.G:
Mathematics, Society and Curricula.
London: Cambridge Univ. Press, 1974.

Heisterkamp, Günther:
Psychologische Prinzipien des Mathematik- und des Physikunterrichts. Eine empirische Untersuchung über Formen der Unterrichtsgestaltung.
Saarbrücken: Universitäts-und Schulbuchverlag, 1974.

Henderson, K.B. and Pingry, R.E:
The Learning of Mathematics, Its Theory and Practice. Twenty-First Yearbook of NCTM=National Council of Teachers of Mathematics.
Reston, Virginia: NCTM, 1953.

Hilding, Sven:
Matematik. Mål och grundlinier. *In Swedish. (Mathematics. Goals and Principal Lines).*
Stockholm: Svenska Bokförlaget, 1963.

Höfler, Alois:
Didaktik des mathematischen Unterrichts.
Berlin: Teubner, 1910. (Didaktische Handbücher für den realistischen Unterricht an höheren Schulen, 1).

Holmberg, Ingrid:
Effects of Some Trials to Improve Mathematics Teaching.
Lund: CWK Gleerup, 1975. (Studia psychologica et paedagogica. Series altera, XXVI).

Howson, A.G. (ed.):
Developments in Mathematical Education. Proceedings of the Second International Congress on Mathematical Education.
London: Cambridge Univ. Press, 1973.

Incorporated Association of Assistant Masters in Secondary Schools:
The Teaching of Mathematics.
London: Cambridge Univ. Press, 1957, 1973.

IMA=Institute of Mathematics and its Applications:
Mathematical Needs of School Leavers Entering Employment.
Southend-on-Sea, England: IMA, 1975.

James, E.J:
The Teaching of Modern School Mathematics.
Oxford: Oxford Univ. Press, 1958.

Jaulin-Mannoni, Francine:
Le pourquoi en mathématique. Pour une analyse critique de l'acte pédagogique.
Paris: Les Editions ESF, 1975.

Johnson, Donovan A. and Rising, Gerald R:
Guidelines for Teaching Mathematics.
Belmont, California: Wadsworth, 1967.

Kapur, J.N:
Thoughts on Mathematical Education.
Delhi: Atma Ram, 1973.

Khinchin, A.Ja:
The Teaching of Mathematics. Edited by B.V.Gnedenko.
Translated from Russian. London: The English Univ. Press, 1968.

Kilpatrick, Jeremy and Wirszup, Izaak (eds.):
Soviet Studies in the Psychology of Learning and Teaching Mathematics. 14 vols.
Published by School Mathematics Study Group and Survey of Recent East European Mathematical Literature.
Chicago: Univ. of Chicago Press, 1969-.

Kinney, Lucien Blair and Purdy, Richard:
Teaching Mathematics in the Secondary School.
New York: Rinehart, 1956, 1959.

Kinsella, John J:
Secondary School Mathematics.
New York: The Center for Applied Research in Education, 1965.
(The Library of Education).

Kline, Morris:
Why Johnny Can't Add. The Failure of the New Math.
New York: St. Martin's Press, 1973. New York: Vintage Books, 1974.

Kratz, Johannes (ed.):
Der Mathematikunterricht in der Kollegstufe.
München: Bayerischer Schulbuchverlag, 1972.

Lamon, William E. (ed.):
Learning and the Nature of Mathematics.
Chicago: Science Research Associates, 1972.

Land, F.W.(ed.):
New Approaches to Mathematics Teaching.
London: Macmillan, 1966 (reprint).

Larsson, Inger:
Individualized Mathematics Teaching. Results from the IMU Project in Sweden.
Lund: CWK Gleerup, 1973. (Studia psychologica et paedagogica. Series altera, XXI).

Lauter, Josef and Röhrl, Emanuel:
Kummer mit der neuen Mathematik.
Freiburg: Herder, 1974.

Lietzmann, W:
Schulreform und mathematischer Unterricht.
Heidelberg: Quelle und Meyer, 1949.

Lietzmann, Walther:
Methodik des mathematischen Unterrichts. 2 vols.
Heidelberg: Quelle und Meyer, 1953.

Löding, Wolfgang; Malwitz-Schütte, Magdalene; Richter, Günther; Rohde, Claudia and Ulrich; and Stenzel, Michael:
Mathematisches Vorsemester. Protokoll eines Experimentes. Universität Bielefeld.
Königstein: Athenäum and Düsseldorf: Pädagogischer Verlag Schwann, 1972.

Löffler, E.(ed.):
Sozialkunde im mathematischen und naturwissenschaftlichen Unterricht.
Heidelberg: Quelle und Meyer, 1956.

Mathematics. Eleven to Sixteen.A Report Prepared for the Mathematical Association.
London: Bell, 1974.

Matthews, Geoffrey:
Mathematics through School.
London: John Murray, 1972.

McIntosh, Jerry A.(ed.):
Perspectives on Secondary Mathematics Education.
Englewood Cliffs, New Jersey: Prentice-Hall, 1971.

Meschkowski, Herbert (ed.):
Didaktik der Mathematik. 4 vols.
Stuttgart: Klett, 1972-74.

Mialaret, Gaston:
L'enseignement des mathématiques. Etudes de pédagogie expérimentale.
Paris: Presses Universitaires de France, 1964. (Bibliothèque

Scientifique Internationale. Section Pédagogie).

Mialaret, G:
L'apprentissage des mathématiques. Essai de psycho-pédagogie.
Bruxelles: Dessart, 1967. (Psychologie et Sciences Humaines).

Ministery of Education:
Teaching Mathematics in Secondary Schools.
London: HMSO, 1958.

Morrisett, Lloyd N. and Vinsonhaler, John (eds.):
Mathematical Learning. Report of a Conference.
Chicago: Society for Research in Child Development, 1965.
(Monographs of the Society for Research in Child Development, Serial 99, 1965, Vol.3o,1).

National Committee on Mathematical Requirements:
The Reorganization of Mathematics in Secondary Education.
Washington, D.C: The Mathematical Association of America, 1923.

NCTM=National Council of Teachers of Mathematics, US:
Instructional Aids in Mathematics. 34th Yearbook of NCTM.
Reston, Virginia: NCTM, 1973.

National Society for the Study of Education, US:
Mathematics Education. 69th Yearbook.
Chicago: Univ. of Chicago Press, 197o.

OECD:
Mathematics to-day. Report of a meeting in Athen, 1963.
Paris: OECD, 1964.

OEEC and OECD:
New Thinking in School Mathematics.
OEEC, 1961. Paris: OECD reprint.

OEEC:
Synopsis for Modern Secondary School Mathematics. Report of

a meeting in Dubrovnik, 1960.
Paris: OEEC, 1961.

Olsen, Stieg Mellin:
Undervisningsprojekter i matematik. Rapport til Matematikundervisningens Nordiske Komité (MUNK). *In Norwegian. (Educational Projects in Mathematics. Report to the Nordic Committee of Mathematics Education).*
Bergen, Norway: Universitetsforlaget, 1970.

Osborne, Alan (ed.):
An In-Service Handbook for Mathematics Education.
Reston, Virginia: National Council of Teachers of Mathematics, 1977.

Piaget,J; Beth, E.W; Dieudonné, J; Lichnerowicz, A; Choquet, G; and Gattegno, C:
L'enseignement des mathématiques.
Lausanne, Switzerland: Delachaux and Niestlé, 1955, 1960 (2nd ed). (Actualités Pédagogiques et Psychologiques).

Probleme des Mathematikunterrichts. Diskussionsbeiträge sowjetischer Wissenschaftler.
Translated from Russian. Berlin: Volk und Wissen, 1965.

Projektstudium Mathematik. Intentionen-Erfahrungen-Kritik.
Frankfurt/Main: Verlag Roter Stern, 1975.

Rinkens, Hans Dieter:
Abstraktion und Struktur. Grundbegriffe der Mathematikdidaktik.
Ratingen: Henn, 1973. (Beiträge zur Fachdidaktik, 19).

Rosskopf, Myron F.(ed.):
Children's Mathematical Concepts. Six Piagetian Studies in Mathematics Education.
New York: Teachers College Press, Columbia University, 1975.

Rosskopf, Myron F; Steffe, Leslie P; and Taback, Stanley (eds.):
Piagetian Cognitive-Development Research and Mathematical Education. Proceedings of a conference.
Reston, Virginia: National Council of Teachers of Mathematics, 1971.

Schmiedeberg, W; Wetzstein, G; and Klatt, G:
Die Bedeutung des mathematischen und naturwissenschaftlichen Unterrichts für die Erziehung unserer Jugend.
Berlin: Otto Salle, 1917.

Schubring, Gert:
Das genetische Prinzip in der Mathematik-Didaktik. Dissertation.
Stuttgart: Klett-Cotta, 1978.

Schröder, Heinz:
Der Mathematikunterricht im Gymnasium.
Hannover: Schroedel, 1966. (Ergebnisse aus der Arbeit der Lehrerfortbildung, 6,7).

Schuberth, Ernest:
Die Modernisierung des mathematischen Unterrichts. Ihre Geschichte und Probleme unter besonderer Berücksichtigung von Felix Klein, Martin Wagenschein und Alexander I. Wittenberg.
Stuttgart: Verlag Freies Geistesleben, 1971. (Erziehung vor dem Forum der Zeit, 8).

Schwartze, Heinz:
Grundriss des mathematischen Unterrichts.
Bochum: Kamp, 1972 (5th ed). (Kamps pädagogische Taschenbücher, 3o/31).

Scopes, P.G:
Mathematics in Secondary Schools. A Teaching Approach.
London: Cambridge Univ. Press, 1973.

Seaborne, Peter L:
An Introduction to the Dienes Mathematics Programme.
London: Univ. of London Press, 1975.

Servais, W. and Varga, T.(eds):
Teaching School Mathematics.
Harmondsworth, Middlesex: Penguin, 1971. (Unesco Source Books).

Skemp, Richard R:
The Psychology of Learning Mathematics.
Harmondsworth, Middlesex: Penguin, 1971, 1975.

Smitz, G; Bär, J; and Winter, H:
Aspekte moderner Mathematik in der Hauptschule. Beiträge zur

Fachdidaktik.
Ratingen: Henn, 1969.

SMSG=School Mathematics Study Group:
SMSG: The Making of a Curriculum.
London: SMSG, 1965.

SMSG=School Mathematics Study Group:
Report of a Conference on Responsibilities for School Mathematics in the 7os.
London: SMSG, 1971.

Solheim, Ragnar; Fidje, Tor; Harboe, Bård; Vassnes, Eivind:
Matematikk i den videregående skolen. Forsøk på en vurdering av stoffinnhold og framstillingsform. Sluttrapport fra "MADIF"-prosjektet. *In Norwegian. (Mathematics in the Secondary School. An Attempt at an Evaluation of Content and Presentation. Final Report from the "MADIF"-project).*
Oslo: Universitetsforlaget, 1976.

Steiner, Gerhard:
Mathematik als Denkerziehung. Eine psychologische Untersuchung über die Rolle des Denkens in der mathematischen Früherziehung.
Stuttgart: Ernst Klett, 1973.

Steiner, Hans-Georg (ed.):
Didaktik der Mathematik.
Darmstadt: Wissenschaftliche Buchgesellschaft, 1978.

Strunz, Kurt:
Der neue Mathematikunterricht in pädagogisch-psychologischer Sicht.
Heidelberg: Quelle und Meyer, 1968.

Sullivan, E.V:
Piaget and the School Curriculum: a Critical Appraisal.
Ontario: OISE=Ontario Institute for Studies in Education, 1967.

Swain, Henry:
How to Study Mathematics. A Handbook for High School Students.
Reston, Virginia: National Council of Teachers of Mathematics, 197o.

Synopsis für moderne Schulmathematik. Herausgegeben vom Delegierten der Ständigen Konferenz der Kultusminister bei der OECD. Frankfurt/Main: Diesterweg, 1974.

Thwaites, B:
SMP: the First Ten Years. *(SMP=School Mathematics Project).* London: Cambridge Univ. Press, 1972.

Travers, Kenneth J; Pikaart, Len; Suydam, Marilyn N; and Runion, Garth E:
Mathematics Teaching.
New York: Harper and Row, 1977.

UNESCO:
Teaching of Mathematics in Secondary Schools. XIXth International Conference on Public Education, Geneva 1956.
Paris: UNESCO Publication 172.

UNESCO:
Report on the Work of the International Symposium on School Mathematics Teaching. Report of a UNESCO-symposium in Budapest, 1962.
Budapest: Publishing House of the Hungarian Academy of Sciences, 1963.

UNESCO:
The Teaching of Mathematics at Secondary Level.
Paris: UNESCO (Department of School and Higher Education), 1965 (preliminary edition).

UNESCO:
New Trends in Mathematics Teaching. 3 vols.
Paris: UNESCO, 1966-68.

UNESCO (Colloque International):
Modernisation de l'enseignement mathématique dans les pays Europeens.
Bucarest: Editions Didactiques et Pédagigiques, 1968.

UNESCO, CEDO, ICMI:
Interactions between Linguistics and Mathematical Education.
Paris: UNESCO, 1975.

Velsing-Rasmussen, G:
Regningens psykologi. Regneundervisningen set fra et pædagogisk psykologisk synspunkt. *In Danish. (The Psychology of Arithmetic. Arithmetic Education from a Pedagogical-Psychological Point of View).*
Copenhagen: Gyldendal, 1966.

Wain, G.T.(ed.):
Mathematical Education.
New York: Van Nostrand Reinhold, 1978.

Walsch, Werner:
Zum Beweisen im Mathematikunterricht.
Berlin: Volk und Wissen, 1975.

Walsch, Werner and Weber, Karlheinz (eds.):
Methodik Mathematikunterricht. Ausgearbeitet von eimem Autorenkollektiv unter Leitung von Werner Walsch und Karlheinz Weber.
Berlin: Volk und Wissen, 1975.

Walusinski, Gilbert:
Pourquoi une mathématique moderne?
Paris: Colin, 197o.

Watson, F.R:
Developments in Mathematics Teaching.
London: Open Books, 1976.

Willoughby, Stephen S:
Contemporary Teaching of Secondary School Mathematics.
New York: Wiley, 1967.

Wittenberg, Alexander Israel:
Bildung und Mathematik: Mathematik als exemplarisches Gymnasialfach.
Stuttgart: Klett, 1963.

Wittmann, Erich:
Grundfragen des Mathematikunterrichts.
Braunschweig: Vieweg, 1974, 1976.

Young, J.W.A:
The Teaching of Mathematics.
Harlow, England: Longman, 19o7, 1914.

9.2 Special Topics

9.2.1 Algebra

Braunfeld, Peter and Deskins, W.E.(eds.):
The Teaching of Algebra at the Pre-College Level. Proceedings of a conference.
St. Louis: CEMREL, 1975.

Vollrath, Hans-Joachim:
Didaktik der Algebra.
Stuttgart: Klett, 1974. (Klett Studienbücher Mathematik).

9.2.2 Geometry

Budden, F.J. and Wormell, C.P:
Mathematics through Geometry. An Inquiry into the Place of Geometry in the School Mathematics Syllabus.
Oxford: Pergamon, 1964. (The Commonwealth and International Library. Mathematics Division, 17).

Choquet, Gustave:
L'enseignement de la géometrie.
Paris: Hermann, 1964, 1971.

Lectures on Modern Teaching of Geometry and Related Subjects.
Report of a meeting in Aarhus, Denmark 1960.
Mathematics Department (Elementary Department), Aarhus University, Denmark, No.7, 1960.

NCTM=National Council of Teachers of Mathematics, US:
Geometry in the Mathematics Curriculum. 36th Yearbook of NCTM.
Reston, Virginia: NCTM, 1973.

Smith, David Eugene:
The Teaching of Geometry.
Boston: Ginn, 1911.

Steiner, Hans-Georg (ed.):
The Teaching of Geometry at the Pre-College Level. Proceedings of a conference.
Dordrecht-Holland: D.Reidel, 1971.

9.2.3 Statistics

Råde, Lennart (ed.):
The Teaching of Probability and Statistics. Proceedings of the first CSMP International Conference.
Stockholm: Almqvist & Wiksell and New York: Wiley, 1970.

Råde, Lennart (ed.):
Statistics at the School Level.The Interpretation of Official Statistics. Proceedings of the Third International Statistical Institute Round Table Conference on the Teaching of Statistics.
Stockholm: Almqvist & Wiksell and New York: Halsted, 1975.

9.2.4 Computers

Many books on computer assisted instruction are not included.

Berztiss, A.T.(ed.):
ACM SIGCSE Ninth Technical Symposium on Computer Science Education. Pittsburgh, Pa, Aug. 1978.
New York: ACM=Association for Computing Machinery, 1978.

Brickman, William W. and Lehrer, Stanley (eds.):
Automation, Education, and Human Values.
New York: School and Society Books, 1966.

Broderick, W.R:
The Computer in School.
London: The Bodley Head, 1968.

Buckingham, Richard A.(ed.):
Education and Large Information Systems. Proceedings of the IFIP TC3/TC8 Working Conference, April 18-21, 1977, The Hague, The Netherlands. *(IFIP=International Federation for Information Processing).*
Amsterdam: North-Holland, 1977.

CERI=Centre for Educational Research and Innovation:
Seminar on Computer Sciences in Secondary Education. Organized by OECD.
Paris: OECD, 1971.

Computer im Unterricht. Formen, Erfolge und Grenzen einer Lern-

technologie in der Schule.
Stuttgart: Ernst Klett, 1974.

Daniels, A.(ed.):
Educational Yearbook 1969-7o.
London: The British Computer Society, 1969.

Daniels, Alan (ed.):
Educational Yearbook 1971-72.
London: The British Computer Society, 1971-72.

Ellis, A.B:
The Computer in Education.
New York: McGraw-Hill, 1974.

Ellis, L.E; Goldstein, G; and Tinsley, J.D:
Computers and the Teaching of Numerical Mathematics in the Upper Secondary School. A report prepared for the Mathematical Association by a subcommittee of the Teaching Committee.
London: G.Bell, 1971.

Finerman, Aaron (ed.):
University Education in Computer Science. Proceedings of a conference in New York, June 1967.
New York: Academic Press, 1968.(ACM(=Association for Computing Machinery) Monograph Series).

Gerald, Ralph W. and Miller, J.G.(eds.):
Computers and Education. A Workshop Conference at University of California, Irvine.
New York: McGraw-Hill, 1967.

Hicks, B.L. and Hunka, S:
The Teacher and the Computer.
Philadelphia: W.B.Saunders, 1972.

IFIP=International Federation for Information Processing (ed.):
Computer Education for Teachers in Secondary Schools. An Outline Guide. Prepared by IFIP technical committee for education, IFIP working group on secondary school education.
Geneva: IFIP, 1971 (2nd ed).

Johnson, D.C. and Tinsley, J.D:
Informatics and Mathematics in Secondary Schools. Impacts and Relationships. Proceedings of the IFIP TC3 Working Conference held in Varna, Bulgaria, 19-23 September, 1977. *(IFIP=International Federation for Information Processing).*
Amsterdam: North-Holland, 1978.

Kemeny, John G:
Random Essays on Mathematics, Education and Computers.
Englewood Cliffs, N.J: Prentice-Hall, 1964.

Lecarme, O. and Lewis, R.(eds.):
Computers in Education. Proceedings of the IFIP 2nd World Conference, Marseilles, 1975. *(IFIP=International Federation for Information Processing).*
Amsterdam: North-Holland, 1975.

Margolin, Joseph B. and Misch, Marion R.(eds.):
Computers in the Classroom: An Interdisciplinary View of Trends and Alternatives.
London: Macmillan, 197o.

OECD:
Computer Science in Secondary Education.
Paris: OECD, 1971.

Quelques apports de l'informatique à l'enseignement des mathématiques.
France: Association des Professeurs de Mathématiques de l'enseignement Public, 1977.

Scheepmaker,B. and Zinn, K.L.(eds.):
World Conference on Computer Education, Amsterdam, 197o. Organized by IFIP=International Federation for Information Processing.
Groningen: Wolters Noordhoff, 197o.

Simon, Hartmut:
Computer-unterstützter Unterricht an der Hochschule. Entwicklung und Erprobung einer CUU-Lerneinheit "Statistik für Sozialwissenschaftler".
Stuttgart: Ernst Klett, 1975.

Spencer, Donald D:
A Guide to Teaching about Computers in Secondary Schools. Ormond Beach, Florida: Abacus Computer Corp, 1973.

Wasserman, Anthony and Freeman, Peter (eds):
Software Engineering Education. Needs and Objectives. Proceedings of an Interface Workshop.
New York and Berlin: Springer, 1976.

9.2.5 Applied mathematics

Dörfler, W. and Fischer, R.(eds):
Anwendungsorientierte Mathematik in der Sekundarstufe II. Vorträge des 1.Kärntner Symposiums für "Didaktik der Mathematik" , 28.9-1.1o 1976 in Klagenfurt.
Klagenfurt: Heyn, 1976. (Schriftenreihe Didaktik der Mathematik. Universität für Bildungswissenschaften in Klagenfurt, Band 1).

Giebel, K:
Anfertigung mathematischer Modelle. Für Schüler mittlerer Klassen.
Leipzig: Teubner, 1915. (Mathematische Bibliothek, 16).

Greenberg, H.J.(preface):
Education in Applied Mathematics. Proceedings of a conference.
Philadelphia: SIAM=Society for Industrial and Applied Mathematics, 1967.

L'Institut Grand Ducal:
New Aspects of Mathematical Applications at School Level.
Luxembourg: L'Institut Grand Ducal, 1975.

OECD:
Mathematics for Physicists and Engineers. Report of a meeting in Paris, 1961.
Paris: OECD, 1962.

SMP=School Mathematics Project:
Modern Mathematics in the Science Lesson.
London: Cambridge Univ. Press, 1977.

9.3 Learning problems in mathematics

See also 3. Psychology of mathematics.

Heidenreich, Karl and Nestle, Werner:
Beiträge zum Mathematikunterricht in der Lernbehindertenschule. Theorie.
Stuttgart: Metzler, 1978. (Beitr. z. Didaktik d. Lernbehindertenschule, 3B).

Johnson, G.Orville:
Education for Slow Learners.
Englewood Cliffs, N.J: Prentice-Hall, 1963.

Magne, Olof:
Matematiksvårigheter. *In Swedish. (Math Problems).*
Stockholm: Sveriges Lärarförbund, 1973. (Pedagogiska Skrifter, 253).

Magne, Olof; Bengtsson, Margot; and Carleke, Ivar:
Hur man undervisar elever med matematiksvårigheter. *In Swedish. (How to Teach Pupils with Math Problems).*
Stockholm: Esselte, 1973.

NCTM=National Council of Teachers of Mathematics, US:
The Slow Learner in Mathematics. 35th Yearbook of NCTM.
Reston, Virginia: NCTM, 1972.

9.4 Tests

This group is not systematically covered. See literature on psychology elsewhere.

Husén, Torsten (ed):
International Study of Achievement in Mathematics. A Comparison of Twelve Countries. 2 vols.
New York: Wiley and Stockholm: Almqvist & Wiksell, 1967.

9.5 University education in mathematics

See also 9.2.4 Computers.

Håstad, Matts:
Matematikutbildningen från grundskola till teknisk högskola igår - idag - i morgon. *In Swedish. (Training in Mathematics*

from Grade School to Technical University Yesterday - Today - Tomorrow). Dissertation.
Stockholm: Tekniska Högskolan, 1978.

Kline, Morris:
Why the Professor Can't Teach. Mathematics and the Dilemma of University Education.
New York: St. Martin's Press, 1977.

McLone, R.R:
The Training of Mathematicians. A Research Report.
London: Social Science Research Council, 1973.

9.6 Research on school mathematics

This group is not systematically covered.

NCTM=National Council of Teachers of Mathematics, US:
Research in Mathematics Education.
Reston, Virginia: NCTM, 1967.

Suydam, M.N:
Annotated Compilation of Research on Secondary School Mathematics 193o-197o. 2 vols.
Washington, D.C: US Office of Education, 1972.

Suydam, M.N. and Riedesel, C.A:
Interpretative Study of Research and Development in Elementary School Mathematics. 3 vols.
Washington, D.C: US Office of Education, 1969.

9.7 Mathematics education: History and countries

Behnke, Heinrich and Steiner, Hans-Georg (eds):
Mathematischer Unterricht an deutschen Universitäten und Schulen.
Göttingen: Vandenhoeck & Ruprecht, 1967.

Bidwell, James K. and Clason, Robert G:
Readings in the History of Mathematics Education.
Reston, Virginia: National Council of Teachers of Mathematics, 197o.

Bushnell, D.D:
The Computer in American Education.
Huntington, New York: Robert E.Krieger, 1967.

Downes, L.W. and Paling, D:
The Teaching of Arithmetic in Tropical Primary Schools.
Oxford: Oxford Univ. Press, 1959. (UNESCO Handbooks on the Teaching of Science in Tropical Countries).

Grosse, Hugo:
Historische Rechenbücher des 16. und 17. Jahrhunderts und die Entwicklung ihrer Grundgedanken bis zur Neuzeit.
Bad Godesberg: Dürrsche Buchhandlung, 1961. Wiesbaden: Martin Sändig Reprint, 1965.

Günther, Siegmund:
Geschichte des mathematischen Unterrichts im deutschen Mittelalter bis zum Jahre 1525.
Berlin: A.Hofmann, 1887. Wiesbaden: Martin Sändig Reprint, 1969.

Inhetveen, Heide:
Die Reform des gymnasialen Mathematikunterrichts zwischen 189o und 1914. Eine sozioökonomische Analyse.
Bad Heilbrunn: Julius Klinkhardt, 1976. (Erlanger pädagogische Studien).

Lorey, Wilhelm:
Das Studium der Mathematik an den deutschen Universitäten seit Anfang des 19. Jahrhunderts.
Leipzig/Berlin: B.G.Teubner, 1916. (Abhandlungen über die mathematischen Unterricht in Deutschland).

Martin, Artemas:
Notes on the History of American Text-Books on Arithmetic.
Washington, D.C: Govt. Print. Off., 19oo.

NCTM=National Council of Teachers of Mathematics, US:
A History of Mathematical Education in the USA and Canada.
Reston, Virginia: NCTM, 197o.

Simons, Lao G:
Introduction of Algebra into American Schools in the Eighteenth Century.
Washington, D.C: Govt. Print. Off, 1924.

Swetz, Frank:
Mathematics Education in China: Its Growth and Development.
Cambridge, Massachusetts: MIT Press, 1974.

Vogel, Kurt:
Ein byzantinisches Rechenbuch des frühen 14.Jahrhunderts.
Text, Übersetzung und Kommentar.
Wien: Hermann Böhlaus,1968.(Wiener byzantinistische Studien,VI).

Yeldham, Florence A:
The Teaching of Arithmetic through Four Hundred Years (1535-1935).
London: George G.Harrap, 1936.

1o. RECREATIONAL MATHEMATICS

See also III.1.2.1. Bibliographies, Special Topics, Mathematics.

1o.1 Mathematics

Ahrens, W:
Mathematische Unterhaltungen und Spiele. 2 vols.
Leipzig: B.G.Teubner, 19o1, 1918-21.

Andrews, W.S. et al:
Magic Squares and Cubes.
New York: Dover, 1917.

Ball, W.W.Rouse:
Mathematical Recreations and Essays.
London: Macmillan, 1928, 196o.

Beiler, Albert:
Recreations in the Theory of Numbers: The Queen of Mathematics Entertains.
New York: Dover, 1964.

Cadwell, J.H:
Topics in Recreational Mathematics.
London: Cambridge Univ. Press, 1966.

Carroll, Lewis:
Symbolic Logic and The Game of Logic.

New York: Dover, 1896.

Domoryad, A.P:
Mathematical Games & Pastimes.
Oxford: Pergamon, 1964.

Dudeney, H:
The Canterbury Puzzles.
1907. New York: Dover, 1958.

Dudeney, Henry Ernest:
Amusements in Mathematics.
New York: Dover, 1917.

Dudeney, H:
536 Puzzles and Curious Problems. Editor: Martin Gardner.
(A collection from two of Dudeney's books "Modern Puzzles", 1926, and "Puzzles and Curious Problems", 1931).
New York: Charles Schribner, 1967.

Dynkin, E.B. and Uspenski, W.A:
Mathematische Unterhaltungen. 3 vols.
Translated from Russian. Berlin: Deutscher Verlag der Wissenschaften, 1968-76.

Fourrey, E:
Récréations arithmétiques.
Paris, 1899. Paris: Vuibert, 1947.

Friedland, Aaron J:
Puzzles in Math & Logic: 100 New Recreations.
New York: Dover, 1971.

Frolichstein, Jack:
Mathematical Fun, Games and Puzzles.
New York: Dover, 1962.

Gaines, Helen F:
Cryptanalysis: A Study of Ciphers and Their Solutions.
New York: Dover, 1939.

Gardner, Martin:
Mathematics, Magic and Mystery.
New York: Dover, 1956.

Gardner, Martin (ed):
Scientific American Book of Mathematical Puzzles & Diversions.
New York: Simon & Schuster, 1959, 1964.

Gardner, Martin:
Mathematical Puzzles.
New York: T.Y.Crowell, 1961.

Gardner, Martin (ed):
Second Scientific American Book of Mathematical Puzzles & Diversions.
New York: Simon & Schuster, 1961, 1965.

Gardner, Martin:
New Mathematical Diversions from Scientific American.
London: George Allen and Unwin, 1966. New York: Simon and Schuster, 1971.

Gardner, Martin:
Further Mathematical Diversions.
London: George Allen & Unwin, 197o.

Gardner, Martin:
Martin Gardner's Sixth Book of Mathematical Games from Scientific American.
San Francisco: Freeman, 1971. New York: Charles Schribner, 1975.

Gardner, Martin:
Mathematical Carnival.
London: George Allen & Unwin, 1976.

Gardner, Martin:
The Incredible Dr.Matrix.
New York: Charles Schribner, 1977.

Greenblatt, M.H:
Mathematical Entertainments. A Collection of Illuminating Puzzles, New and Old.
London: George Allen & Unwin, 1968.

Heffter, L:
Was ist Mathematik? Unterhaltungen während einer Seereise.
Berlin: Springer, 1925.

Hindman, Darwin A:
Eighteen Hundred Riddles, Enigmas and Conundrums.
New York: Dover, 1963.

Holt, Michael:
Math Puzzles & Games.
New York: Walker, 1977.

Holt, Michael:
More Math Puzzles & Games.
New York: Walker, 1977.

Honsberger, Ross:
Mathematical Gems. 2 vols.
Washington, D.C: Mathematical Association of America, 1973-76.

Hornschuh, H.D:
Eulenspiegels mathematische Streiche.
Stuttgart: Wittwer, 1975.

Hunter, J.A. & Madachy, Joseph S:
Mathematical Diversions.
New York: Dover, 1975.

Kerst, Bruno:
Mathematische Spiele.
Berlin, 1933. Wiesbaden: Martin Sändig Reprint, 1968.

Kowalewski, Gerhard:
Alte und neue mathematische Spiele.
Leipzig, 1930. Wiesbaden: Martin Sändig Reprint, 1968.

Kraïtchik, M:
La mathématique des jeux ou récréations mathématiques.
Brüssel and Paris, 1953 (2nd ed). Translated into English:
Mathematical Recreations. New York: Dover, 1953.

Lamb, Sidney:
Mathematical Games, Puzzles & Fallacies.
New York: Arco, 1977.

Lietzmann, Walther:
Lustiges und Merkwürdiges von Zahlen und Formen.
1922. Breslau: Hirt, 1930.

Longley-Cook, L.H:
New Math Puzzle Book.
New York: VanNostrand Reinhold, 197o.

Loyd, Sam:
Best Mathematical Puzzles of Sam Loyd. Selected and edited by Martin Gardner.
New York: Dover, 1959.

Lucas, Edouard:
Récréations mathématiques. 4 vols.
1891. Paris: A.Blanchard, 1975-77.

Lucas, Edouard:
L'arithmétique amusante. Introduction aux récréations mathématiques.
1895. Paris: A.Blanchard, 1974.

Merrill, Helen Abbot:
Mathematical Excursions.
New York: Dover, 1933.

Mott-Smith, G:
Mathematical Puzzles for Beginners and Enthusiasts.
1946. New York: Dover, 1954 (2nd ed).

Phillips, Hubert ("Caliban"):
My Best Puzzles in Mathematics.
New York: Dover, 1961.

Phillips, Hubert ("Caliban"):
My Best Puzzles in Logic and Reasoning.
New York: Dover, 1961.

Rice, Trevor:
Mathematical Games & Puzzles.
New York: St.Martin, 1974.

Riecke, Friedr. Jos. Pyth:
Mathematische Unterhaltungen.
Stuttgart, 1867-73. Wiesbaden: Martin Sändig Reprint, 1973.

Row, T. Sundara:
Geometric Exercises in Paper Folding.
New York: Dover, 1905.

Sawyer, W.W:
Mathematician's Delight.
Harmondsworth, Middlesex: Penguin, 1943.

Schuh, F:
The Master Book of Mathematical Recreations.
English translation of a Dutch book from 1943. New York: Dover, 1968.

Shepherd, W:
Mazes and Labyrinths.
New York: Dover, 1961.

Smith, G.M:
Mathematical Puzzles for Beginners and Enthusiasts.
New York: Dover.

Sprague, Roland:
Recreation in Mathematics. Some Novel Problems.
London: Blackie, 1963. New York: Dover, 1963. In German: Unterhaltsame Mathematik. Neue Probleme - überraschende Lösungen.
Braunschweig: Vieweg, 1965.

10.2 Computers

Frey, P.W.(ed):
Chess Skill in Man and Machine.
Berlin: Springer, 1977.

Levy, David:
Chess and Computers.
Woodland Hills, Calif: Computer Sci. Press, 1976.

Malina, F.J.(ed):
Visual Art, Mathematics and Computers.
Oxford: Pergamon Press, 1978.

Newborn, Monroe:
Computer Chess.

New York: Academic Press, 1974, 1975.

Schlossberg, E. and Brockman, J:
The Pocket Calculator Game Book.
Teakfield, Australia: Wilton House, 1976.

Spencer, Donald D:
Game Playing with Computers.
New York: Spartan Books, 1968.

PART II.

Models and System Theory.

1. Mathematization

Booss, Bernhelm and Krickeberg, Klaus (eds):
Mathematisierung der Einzelwissenschaften.
Basel: Birkhäuser Verlag, 1976. (Interdisciplinary Systems Research, Vol.24).

Canguilhem, Georges (ed):
La mathématisation des doctrines informes.
Paris: Hermann, 1972.

Frey, G:
Die Mathematisierung unserer Welt.
Stuttgart: Urban Bücher, Kohlhammer Verlag, 1967.

Woolf, Harry (ed):
Quantification. A History of the Meaning of Measurement in the Natural and Social Sciences.
Indianapolis: Bobbs-Merrill, 1961.

2. Models

Not all type of books on applied mathematics are included - only books about "models".

2.1 Mathematics

Many books on simulation are not mentioned. Some are in group II.3.2 System theory, Special topics.

Andrews, J.G. and McLone, R:
Mathematical Modelling.
London: Butterworths, 1976.

Aris, R:
Mathematical Modelling Techniques.
London: Pitman, 1978.

Bailey, N.T.J; Sendov, Bl; and Tsanev, R.(eds):
Mathematical Models in Biology and Medicine.
Amsterdam: North-Holland, 1974.

Banks, H.T:
Modeling and Control in the Biomedical Sciences.
Berlin: Springer, 1975. (Lecture Notes in Biomathematics, 6).

Bass, F.M. et al (eds):
Mathematical Models and Methods in Marketing.
London: Irwin, 1961.

Bell, Max:
Mathematical Uses and Models in Our Everyday World.
Stanford: Stanford University, 1972.

Bender, Edward A:
An Introduction to Mathematical Modeling.
New York: Wiley, 1978.

Berger, J; Bühler, W; Repges, R; and Tautu, P:
Mathematical Models in Medicine. Workshop, Mainz, March 1976.
Berlin: Springer, 1976. (Lecture Notes in Biomathematics, 11).

Biggs, N.L:
Interaction Models.
London: Cambridge Univ. Press, 1977. (London Mathematical Society Lecture Notes Series, No.3o).

Bittinger, Marvin and Crown, J.Conrad:
Finite Mathematics: A Modeling Approach.
Reading, Massachusetts: Addison-Wesley, 1977.

Blalock, H.M:
Causal Models in the Social Sciences.
Chicago: Aldine, 1971. London: Macmillan, 1972.

Boudon, R:
Mathematische Modelle und Methoden.- Hauptströmungen der sozialwissenschaftlichen Forschung.
197o. Frankfurt: Ullstein, 1972.

Brebbia, C.A.(ed):
Applied Numerical Modelling. Proceedings of a conference.
London: Pentech Press, 1978.

Bunge, M:
Method, Model and Matter.

Dordrecht-Holland: Reidel, 1973.

Chartrand, Gary:
Graphs as Mathematical Models.
Boston: Prindle, 1977.

Chorley, R.J. and Haggett, P.(eds):
Models in Geography. The Second Madingley Lectures.
London: Methuen, 1967.

Churchman, C.W. and Mason, R.O.(eds):
World Modeling: A Dialogue.
Amsterdam: North-Holland, 1976.

Clark, J. and Cole, S:
Global Simulation Models. A Comparative Study.
New York: Wiley, 1976.

Close, Charles M. and Frederick, Dean K:
Modeling and Analysis of Dynamic Systems.
Boston: Houghton Mifflin, 1978.

Cohen, J.E:
A Model of Simple Competition.
Cambridge, Massachusetts: Harvard Univ. Press, 1966.

Daget, J:
Les modèles mathématiques en écologie.
Paris: Masson, 1976.

Dalenoort, G.J.(ed):
Process Models for Psychology.
Rotterdam: Rotterdam Univ. Press, 1973.

Danø, S:
Industrial Production Models. A Theoretical Study.
Berlin: Springer, 1966.

Day, R.L. and Parsons, L.J.(eds):
Marketing Models: Quantitative Applications.
New York: Intext, 1971.

Deininger, Rolf A.(ed):
Models for Environmental Pollution Control.

Ann Arbor, Michigan: Ann Arbor Science, 1973.

DiPrima, R.C.(ed):
Modern Modeling of Continuum Phenomena.
Providence, RI: American Mathematical Society, 1977.

Dorny, C.Nelson:
A Vector Space Approach to Models and Optimization.
New York: Wiley, 1975.

Duncan, Otis Dudley:
Introduction to Structural Equations Models.
New York: Academic Press, 1975.

Elmaghraby, S.E:
Some Network Models in Management Science.
Berlin: Springer, 197o. (Lecture Notes in Economics and Mathematical Systems, Vol.29).

Forrester, Jay W:
Urban Dynamics.
Cambridge, Massachusetts: MIT Press, 1969.

Forrester, Jay W:
World Dynamics.
Cambridge, Massachusetts: Wright-Allen Press, 1971.

Fox, K.A; Sengupta, J.K; and Narasimham, G.V.L.(eds):
Economic Models, Estimation and Risk Programming. Essays in Honor of Gerhard Tintner.
Berlin: Springer, 1969. (Lecture Notes in Economics and Mathematical Systems, Vol.15).

Freudenthal, H.(ed):
The Concept and the Role of the Model in Mathematics and Natural and Social Sciences. Proceedings of a colloquium.
Dordrecht-Holland: Reidel, 1961.

Funke, U.H:
Mathematical Models in Marketing. A Collection of Abstracts.
Berlin: Springer, 1976. (Lecture Notes in Economics and Mathematical Systems, Vol.132).

Gale, David:
The Theory of Linear Economic Models.
New York: McGraw-Hill, 1960.

Gandolfo, G:
Mathematical Methods and Models in Economic Dynamics.
New York: American Elsevier, 1971.

Gertsbakh, I.B. and Kordonskiy, Kh. B:
Models of Failure.
Translated from Russian. Berlin: Springer, 1969.

Getis, Arthur and Boots, Barry:
Models of Spatial Processes. An Approach to the Study of Point, Line and Area Patterns.
London: Cambridge Univ. Press, 1978.

Goel, N.S; Maitra, S.C; and Montroll, E.W:
On the Volterra and Other Nonlinear Models of Interacting Populations.
New York: Academic Press, 1971.

Gold, Harvey J:
Mathematical Modelling of Biological Systems.-An Introductory Guidebook.
New York: Wiley, 1977.

Haberman, R:
Mathematical Modelling.
Englewood Cliffs, N.J: Prentice-Hall, 1977.

Haberman, Richard:
Mathematical Models, Mechanical Vibrations, Populations Dynamics, and Trafic Flow. (An Introduction to Applied Mathematics).
Englewood Cliffs, N.J: Prentice-Hall, 1977.

Haight, F.A:
Mathematical Models for Trafic Flow.
New York: Academic Press, 1963.

Harary, F. and Norman, R:
Graph Theory as a Mathematical Model in Social Science.
Ann Arbor: Univ. of Michigan Press, 1953.

Harary, F; Norman, R.Z; and Cartwright, D:
Structural Models: An Introduction to the Theory of Directed Graphs.
New York: Wiley, 1965.

Harder, T:
Elementare mathematische Modelle in der Markt- und Meinungsforschung. Praktische Anwendung, Rechengang, Rechenaufwand.
München: Oldenbourg, 1966.

Harder, Th:
Dynamische Modelle in der empirischen Sozialforschung.
Stuttgart: Teubner, 1973.

Hawkes, Nigel (ed):
International Seminar on Trends in Mathematical Modelling.
Venice, 13-18 December, 1971.
Berlin: Springer, 1973. (Lecture Notes in Economics and Mathematical Systems, Vol.80).

Heinmets, F.(ed):
Concepts and Models of Biomathematics. Simulation Techniques and Methods.
New York: Dekker, 1969.

Hossdorf, Heinz:
Modellstatik.
Wiesbaden: Bauverlag, 1971. Translated into English: Model Analysis of Structures. New York: Van Nostrand Reinhold, 1974.

Hugger, Werner:
Weltmodelle auf dem Prüfstand. Anspruch und Leistung der Weltmodelle von J.W.Forrester und D.Meadows.
Basel: Birkhäuser Verlag, 1974. (Interdisciplinary Systems Research, Vol.2).

Hull, John et al:
Model Building Techniques for Management.
Lexington, MA(?): Lexington Books, 1977.

Hunkins, Dalton P. and Pirnot, Thomas L:
Mathematics: Tools and Models.
Reading, Massachusetts: Addison-Wesley, 1977.

Hyvärinen, Lassi:
Mathematical Modeling for Industrial Processes.
Berlin: Springer, 197o. (Lecture Notes in Economics and Mathematical Systems, Vol.19).

Jeffers, J.N.R.(ed):
Mathematical Models in Ecology.
Oxford: Blackwell, 1972.

Johansen, Paul:
Application of Mathematical Models in General Insurance.
Copenhagen: The Insurance Company "Nye Danske af 1864", 1964.

Kaufmann, A; Grouchko, D; and Cruon, R:
Modèles mathématiques pour l'étude de la réabilité des systèmes.
Paris: Masson, 1975. Translated into English: Mathematical Models for the Study of the Reliability of Systems. New York: Academic Press, 1974, 1977.

Kazemier, B.H. and Vuysje, D.(eds):
The Concept and the Role of the Model in Mathematics and Natural and Social Sciences.
New York: Gordon and Breach, 1961.

Kemeny, J.G. and Snell, J.L:
Mathematical Models in the Social Sciences.
New York: Blaisdell, 1962. Cambridge, Massachusetts: MIT Press, 1972.

Kempf, Wilhelm F. and Repp, Bruno H.(eds):
Mathematical Models for Social Psychology.
Bern: Hans Huber, 1977.

Kendall, M.G. et al (eds):
Mathematical Model Building in Economics and Industry. 2 vols.
Proceedings of conferences 1967-69.
London: Griffin, 1968-7o.

Kiefer, F.(ed):
Mathematical Models of Language.
Stockholm, 1973. (Soviet Papers in Formal Linguistics).

Klix, F. et al (eds):
Mathematische Modellbildung in Naturwissenschaft und Technik.

Berlin: Akademie-Verlag, 1976.

Krekó, Béla:
Optimierung - Nichtlineare Modelle.
Berlin: Deutscher Verlag der Wissenschaften, 1974.

Kromphardt, W; Henn, R; and Förstner, K:
Lineare Entscheidungsmodelle.
Berlin: Springer, 1962.

Lancaster, Peter:
Mathematics. Models of the Real World.
Englewood Cliffs, N.J: Prentice-Hall, 1976.

Langhaar, H.L:
Dimensional Analysis and the Theory of Models.
New York: Wiley, 1951.

Lave, C.A. and March, J.G:
An Introduction to Models in the Social Sciences.
New York: Harper and Row, 1975.

Leeflang, P.S.H:
Mathematical Models in Marketing. A Survey, the Stage of Development, Some Extensions and Applications.
Leiden: Stenfert Kroese, 1974.

Levine, G. and Burke, C.J:
Mathematical Model Techniques for Learning Theories.
New York: Academic Press, 1972.

Lewis, E.R:
Network Models in Population Biology.
Berlin: Springer, 1977. (Biomathematics, Vol.7).

Loś, Jerzy and Loś, Maria W:
Mathematical Models in Economics.
Amsterdam: North-Holland, 1974.

Macdonald, N:
Time Lags in Biological Models.
Berlin: Springer, 1978. (Lecture Notes in Biomathematics, 27).

Maki, Daniel P. and Thompson, Maynard:
Mathematical Models and Applications. With Emphasis on the Social, Life, and Management Sciences.
Englewood Cliffs, N.J: Prentice-Hall, 1973.

Malkevitch, Joseph:
Graphs, Models, and Finite Mathematics.
Englewood Cliffs, N.J: Prentice-Hall, 1974.

Mandl, C.E:
Simulationstechnik und Simulationsmodelle in der Sozial- und Wirtschafts-Wissenschaften.
Berlin: Springer, 1977. (Lecture Notes in Economics, Vol.148).

Marois, Maurice (ed):
Design of Global System Models and Their Limitations.
Oxford: Pergamon, 1977. (Towards a Plan of Actions for Mankind Series, Vol.4).

Matthies, Hansjürgen and Pliquett, Fritz:
Mathematische Modellierung von Lebensprozessen.
Berlin: Akademie-Verlag, 1972.

May, R.M:
Stability and Complexity in Model Ecosystems.
Princeton: Princeton Univ. Press, 1973.

Meadows, Dennis L. and Donella H. et al:
The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind.
London: A Potomac Associates Book, 1972.

Meadows, Dennis L. et al:
Dynamics of Growth in a Finite World.
New York: Wiley, 1974.

Merriam, D.F.(ed):
Mathematical Models of Sedimentary Processes. Proceedings of an international symposium, Heidelberg 1971.
New York: Plenum, 1972. (Computer Applications in the Earth Sciences).

Murdick, Robert G:
Mathematical Models in Marketing.

New York: Intext, 197o, 1971.

Murray, J.D:
Lectures on Non-Linear-Differential-Equation Models in Biology.
Oxford: Oxford Univ. Press, 1978.

Nemtschinow, Wassili S:
Ökonomisch mathematische Methoden und Modelle.
Translated from Russian. München: Oldenbourg, 1966.

Norman, D.A:
Models of Human Memory.
New York: Academic Press, 197o.

OECD, Education and Development:
Econometric Models of Education. Some Applications.
Technical Report. Paris: OECD, 1965.

OECD, Education and Development:
Mathematical Models in Educational Planning.
Technical Report. Paris: OECD, 1967.

OECD, Education and Development:
Mathematical Models for the Educational Sector. A Survey.
Technical Report. Paris: OECD, 1973.

OECD:
Mathematical Models for the Education Sector. Annexes. Supporting Material to the Survey.
Technical Report. Paris: OECD, 1974.

Olinick, Michael:
An Introduction to Mathematical Models in the Social and Life Sciences.
Reading, Massachusetts: Addison-Wesley, 1978.

Pollard, J.H:
Mathematical Models for the Growth of Human Populations.
London: Cambridge Univ. Press, 1973.

Restle, Frank:
Mathematical Models in Psychology. An Introduction.
Harmondsworth, Middlesex: Penguin, 1971.

Roberts, Fred S:
Discrete Mathematical Models. With Applications to Social, Biological, and Environmental Problems.
Englewood Cliffs, N.J: Prentice-Hall, 1976.

Roberts, Fred S.(ed):
Energy: Mathematics and Models. Proceedings of a conference.
Philadelphia: SIAM=Society for Industrial and Applied Mathematics, 1976.

Schwarzenbach, J. and Gill, K.F:
System Modelling and Control.
London: Edward Arnold, 1978.

Singleton, Robert R. and Tyndall, William F:
Games and Programs: Mathematics for Modeling.
San Francisco: Freeman, 1974.

Solomon, D.L. and Walter, C.(eds):
Mathematical Models in Biological Discovery. Proceedings, American Association for the Advancement of Science, New York, 1975.
Berlin: Springer, 1977. (Lecture Notes in Biomathematics, 13).

Stone, R:
Mathematical Models of the Economy and Other Essays.
London: Chapman & Hall, 197o.

Thom, René:
Stabilité structurelle et morphogenèse. Essai d'une théorie générale des modèles.
Reading, Massachusetts: W.A.Benjamin, 1972.

Thom, René:
Modèles mathématiques de la morphogenèse. Recueil de textes sur la théorie des catastrophes et ses applications.
Paris: Union Générale d'Editions, 1974.

Tikhonov, A.N; Kuhnert, F; Kuznecov, N.N; Moszynski, A; and Wakulicz, A.(eds):
Mathematical Models and Numerical Methods. Proceedings of a symposium.
Warszawa: PWN-Polish Scientific Publishers, 1978. (Banach

Center Publications, Vol.3).

Tinbergen, J. and Bos, H.C:
Mathematical Models of Economic Growth.
New York: McGraw-Hill, 1962. (Economics Handbook Series).

Toutenburg, Helge:
Vorhersage in linearen Modellen.
Berlin: Akademie-Verlag, 1975.

Tsetlin, M.L:
Automation Theory and Modeling of Biological Systems.
New York: Academic Press, 1973.

Vemuri, V:
Modeling of Complex Systems. An Introduction.
New York: Academic Press, 1978.

Waltman, P:
Deterministic Threshold Models in the Theory of Epidemics.
Berlin: Springer, 1974. (Lecture Notes in Biomathematics, 1).

Wheeler, Ruric E. and Peeples, W.D:
Finite Mathematics: An Introduction to Mathematical Models.
Monterry, Calif: Brooks-Cole, 1974.

Zeigler, B.P:
Theory of Modelling and Simulation.
New York: Wiley, 1976.

Zotos, J:
Mathematical Modeling of Chemical, Mechanical, and Physical Properties of Engineering Alloys.
Teakfield, Australia: Lexington Books, 1977.

Zwicker, E. and Terhardt, E:
Facts and Models in Hearing. Proceedings of the Symposium held at Tutzing, Oberbayern, Germany, April 22-26, 1974.
Berlin: Springer, 1974. (Communications and Cybernetics, 8).

2.2 Statistics

Bartholomew, D.J:
Stochastic Models for Social Processes.
New York: Wiley, 1967, 1973.

Bartlett, M.S:
Stochastic Population Models in Ecology and Epidemiology.
London: Methuen, 1960.

Beyer, Ottfried; Girlich, Hans-Joachim; and Zschiesche, Hans-Ulrich:
Stochastische Prozesse und Modelle.
Leipzig: Teubner, 1977.

Bibby, John and Toutenburg, Helge:
Prediction and Improved Estimation in Linear Models.
New York: Wiley, 1977.

Bury, Karl V:
Statistical Models in Applied Science.
New York: Wiley, 1975. (Wiley Series in Probability and Mathematical Statistics).

Bush, Robert R. and Mosteller, Frederick:
Stochastic Models for Learning.
New York: Wiley and London: Chapman & Hall, 1955.

Dubin, N:
A Stochastic Model for Immunological Feedback in Carcinogenesis. Analysis and Approximations.
Berlin: Springer, 1976. (Lecture Notes in Biomathematics, 9).

Elandt-Johnson, Regina C:
Probability Models and Statistical Methods in Genetics.
New York: Wiley, 1971. (Wiley Series in Probability and Mathematical Statistics).

Engen, S:
Stochastic Abundance Models. With Emphasis on Biological Communities and Species Diversity.
London: Chapman & Hall, 1978. (Monographs on Applied Probability and Statistics).

Feichtinger, G:
Stochastische Modelle demographischer Prozesse.
Berlin: Springer, 1971. (Lecture Notes in Economics and Mathematical Systems, Vol.44).

Gaver, Donald P. and Thompson, Gerald L:
Programming & Probability Models in Operations Research.
Monterry, Calif: Brooks-Cole, 1973.

Goel, Narendra S. and Richter-Dyn, Nira:
Stochastic Models in Biology.
New York: Academic Press, 1974.

Graybill, F.A:
An Introduction to Linear Statistical Models. Vol.1.
New York: McGraw-Hill, 1961.

Gupta, Prithwis Das:
A Stochastic Model of Human Reproduction.
Berkeley: Institute of International Studies, University of California, 1973.

Gurland, J.(ed):
Stochastic Models in Medicine and Biology.
Madison, Wisconsin: Univ. of Wisconsin Press, 1964.

Hahn, Gerald J. and Shapiro, S.S:
Statistical Models in Engineering.
New York: Wiley, 1967.

Hochstädter, D:
Stochastische Lagerhaltungsmodelle.
Berlin: Springer, 1969. (Lecture Notes in Economics and Mathematical Systems, Vol.1o).

Holden, A.V:
Models of the Stochastic Activity of Neurones.
Berlin: Springer, 1976. (Lecture Notes in Biomathematics, 12).

Humak, K.M.S:
Statistische Methoden der Modellbildung.
Berlin: Akademie Verlag, 1977.

Johnson, Norman L. and Kotz, Samuel:
Urn Models and Their Applications. An Approach to Modern Discrete Probability Theory.
New York: Wiley, 1977.

Kashyap, R.L. and Rao, A.R:
Dynamic Stochastic Models from Empirical Data.
New York: Academic Press, 1976.

Koopmans, T.C.(ed):
Statistical Inference in Dynamic Economic Models.
New York: Wiley, 195o, 1962 (reprint). (Cowles commission for research in economics. Monographs, 1o).

Krafft, Olaf:
Lineare statistische Modelle und optimale Versuchspläne.
Göttingen: Vandenhoeck & Ruprecht, 1978. (Studia Mathematica/ Mathematische Lehrbücher, Band XXX).

Norman, M.F:
Markov Processes and Learning Models.
New York: Academic Press, 1972.

Rasch, G:
Probabilistic Models for Some Intelligence and Attainment Tests.
Copenhagen: Danmarks Pædagogiske Institut, 196o.

Searle,S.R:
Linear Models.
New York: Wiley, 1971. (Applied Probability and Statistics).

Sprent, P:
Models in Regression and Related Topics.
London: Chapman & Hall, 1969.

Stoyan, Dietrich:
Qualitative Eigenschaften und Abschätzungen stochastischer Modelle.
München: Oldenbourg, 1977.

Suppes, P. and Atkinson, R.C:
Markov Learning Models for Multiperson Interactions.
Stanford: Stanford Univ. Press, 196o.

2.3 Operations research

Charnes, A. and Cooper, W.W:
Management Models and Industrial Applications of Linear Programming. 2 vols.
New York: Wiley, 1966.

Cooper, Leon; Bhat, U.Narayan; and LeBlanc, Larry J:
Introduction to Operations Research Models.
Philadelphia: W.B.Saunders, 1977.

Fischer, Hannelore and Piehler, Joachim:
Modellsysteme der Operationsforschung. Ein Beitrag zur Theorie.
Berlin: Akademie-Verlag, 1974.

2.4 Computers

Coats, R.B. and Parkin, A:
Computer Models in the Social Sciences.
London: Edward Arnold, 1977.

Emshoff, James R. and Sisson, Roger L:
Design and Use of Computer Simulation Models.
New York: Macmillan, 197o.

Friedman, Joyce:
A Computer Model of Transformational Grammar.
New York: American Elsevier, 1971.

Heady, E.O. and Srivastava, U.K:
Spatial Sector Programming Models in Agriculture.
Ames: Iowa State Univ.Press, 1975.

Lehman, Richard S:
Computer Simulation and Modeling. An Introduction.
New York: Halsted Press, 1977.

Martin, Francis E:
Computer Modelling and Simulation.
New York: Wiley, 1968.

Moser, Ulrich:
Formale Modelle und Computersimulation in der Psychologie.

Basel: Birkhäuser Verlag, 1978. (Interdisciplinary Systems Research).

Naylor, T.H:
Computer Simulation Experiments with Models of Economic Systems.
New York: Wiley, 1971.

Ruberti, A.(ed):
Modelling and Identification of Distributed Parameter Systems. Proceedings, IFIP *(=International Federation for Information Processing)* Working Conference, Rome, Italy, June 21-26, 1976. Berlin: Springer, 1977. (Lecture Notes in Control and Information Sciences, Vol.1).

Schank, R.D. and Colby, K.M.(eds):
Computer Models of Thought and Language.
San Francisco: Freeman, 1973.

Smith, J.M:
Mathematical Modeling and Digital Simulation for Engineers and Scientists.
New York: Wiley, 1977.

Williams, H.P:
Model Building in Mathematical Programming.
New York: Wiley, 1978.

2.5 Cybernetics

Adam, A; Helten, E; and Scholl, F:
Kybernetische Modelle und Methoden.
Opladen: Westdeutscher Verlag, 197o.

Klír, Jiří and Valach, Miroslav:
Cybernetic Modelling.
London/Prague: Illiffe Books/SNTL-Publishers of Technical Literature, 1967.

3. SYSTEM THEORY

3.1 SYSTEM THEORY IN GENERAL

Ackoff, Russell L. and Emery, Fred E:
On Purposeful Systems.
Chicago: Aldine-Atherton, 1972.

Anderson, B.D. and Arbib, M.A:
Foundations of System Theory: Finitary and Infinitary Conditions.
Berlin: Springer, 1976. (Lecture Notes in Economics and Mathematical Systems, Vol.115).

Beltrami, Edward J:
Models for Public Systems Analysis.
New York: Academic Press, 1977. (Operations Research and Industrial Engineering Series).

Bensoussan, A. and Lions, J.L.(eds):
New Trends in Systems Analysis. Proceedings of an international symposium, Versailles, Dec. 1976.
Berlin: Springer, 1977. (Lecture Notes in Control and Information Sciences, Vol.2).

Berlinski, David:
On Systems Analysis: An Essay Concerning the Limitations of Some Mathematical Methods in the Social, Political, and Biological Sciences.
Cambridge, Massachusetts: MIT Press, 1977.

Bertalanffy, L. von:
General System Theory. Foundations, Development, Applications.
1968. Harmondsworth, Middlesex: Penguin, 1971.

Couger, J.Daniel and Knapp, Robert W.(eds):
System Analysis Techniques.
New York: Wiley, 1974.

Daniels, Alan and Yeates, Donald (eds):
Basic Training in Systems Analysis.
London: Pitman, 1976.

Delattre, P:
Système, structure, fonction, évolution. Recherches interdisciplinaires.
Paris: Maloine-Doin éditeurs, 1971.

Emery, F.E.(ed):
Systems Thinking.
Harmondsworth, Middlesex: Penguin, 1969.

Faurre, Pierre and Depeyrot, Michel:
Elements of System Theory.
Translated from French. Amsterdam: North-Holland, 1976, 1977.

Forrester, Jay W:
Principles of Systems.
Cambridge, Massachusetts: Wright Allen Press, 1968, 1973.

Hartnett, William E.(ed):
Systems: Approaches, Theories, Applications.
Dordrecht-Holland: D.Reidel, 1977.

Heim, R. and Palm, G.(eds):
Theoretical Approaches to Complex Systems. Proceedings, Tübingen, June 11-12, 1977.
Berlin: Springer, 1978. (Lecture Notes in Biomathematics, 21).

Hice, Gerald Forest; Turner, W.S; and Cashwell, L.F:
System Development Methodology.
Amsterdam: North-Holland, 1974, 1978.

Kalman, R.E; Falb, P.L; and Arbib, M.A:
Topics in Mathematical System Theory.
New York: McGraw-Hill, 1969.

Klir, George J:
An Approach to General Systems Theory.
New York: Van Nostrand Reinhold, 1969.

Klir, George J.(ed):
Trends in General Systems Theory.

New York: Wiley, 1972.

Klir, George J.(ed):
Applied General Systems Research: Recent Developments and Trends.
Proceedings of a Nato Conference, August 1977.
New York: Plenum, 1978. (Systems Science, Vol.5).

Krauch, H:
Wege und Aufgaben der Systemforschung.
Dortmund: Verkehrs-und Wirtschafts-Verlag Dr. Borgmann, 1969.

Kurzrock, R:
Systemtheorie. Forschung und Information.
Berlin: Colloquium Verlag, 1972. (Schriftenreihe der Rias-Funkuniversität).

Lange, Oskar Richard:
Wholes and Parts. A General Theory of System Behaviour.
Oxford: Pergamon Press, 1965.

Laszlo, E:
Introduction to Systems Philosophy.
London: Gordon and Breach, 1972.

Laszlo, E.(ed):
The Relevance of General Systems Theory: Papers Presented to Ludwig von Bertalanffy on His 7oth Birthday.
New York: Braziller, 1972.

Marchesini, G. and Mitter, S.K.(eds):
Mathematical Systems Theory. Proceedings of the International Symposium, Udine, Italy, June 1975.
Berlin: Springer, 1976. (Lecture Notes in Economics and Mathematical Systems, Vol.131).

Melcher, Arlyn J.(ed):
General Systems and Organizations - Methodological Aspects.
Kent, Ohio: Kent State Univ. Press, 1974.

Mesarović, M.D. and Takahara, Yasuhiko:
General Systems Theory: Mathematical Foundations.
New York: Academic Press, 1975.

Schwarz, H:
Einführung in die moderne Systemtheorie.
Braunschweig: Vieweg, 1969.

Shearer, L.S. et al:
Introduction to System Dynamics.
Reading, Massachusetts: Addison-Wesley, 1967.

Silver, Gerald A. and Silver, Joan B:
Introduction to Systems Analysis.
Englewood Cliffs, N.J: Prentice-Hall, 1976.

Strobel, Horst:
Experimentelle Systemanalyse.
Berlin: Akademie-Verlag, 1975.

Systemtheorie.
Berlin: Colloquium Verlag Otto H.Hess, 1972. (Forschung und Information. Schriftenreihe der RIAS-Funkuniversität).

Unbehauen, Rolf:
Systemtheorie. Eine Einführung für Ingenieure.
München: Oldenbourg, 1971 (2nd ed).

van Court, Hare,Jr:
Systems Analysis. A Diagnostic Approach.
New York, 1967.

Walliser, B:
Systèmes et modèles. Introduction critique à l'analyse de systèmes.
Paris: Seuil, 1976.

Weinberg, G.M:
An Introduction to General Systems Thinking.
New York: Wiley, 1975. (Wiley Series on Systems Engineering and Analysis).

Wunsch, G:
Systemtheorie.
Leipzig: Geest & Portig, 1975.

Wymore, A.W:
A Mathematical Theory of Systems Engineering.-The Elements.

1967. Huntington, N.Y: Robert E.Krieger, 1976 (reprint).

Zadeh, L.A. and Polak, E:
System Theory.
New York: McGraw-Hill, 1969.

3.2 Special topics

3.2.1 Miscellaneous

"Dynamic systems" are not included.

Ackoff, Russell L:
Redesigning the Future: A Systems Approach to Societal Problems.
New York: Wiley, 1974.

Aggarwal, J.K. and Vidyasagar, M.(eds):
Nonlinear Systems: Stability Analysis.
New York: Dowden, Hutchinson & Ross and Academic Press, 1977.

Aoki, Masano:
Optimal Control and System Theory in Dynamic Economic Analysis.
Amsterdam and New York: North-Holland, 1975.

Athans, M; Dertouzos, M.L; Spann, R.N; and Mason, S.J:
Systems, Networks and Computation: Multivariable Methods.
New York: McGraw-Hill, 1974.

Aziz, A.K; Wingate, J.W; and Balas, M.J.(eds):
Control Theory of Systems Governed by Partial Differential Equations.
New York: Academic Press, 1977.

Bailey, N.T.J. and Thompson, M.(eds):
Systems Aspects of Health Planning.
Amsterdam: North-Holland, 1975.

Beichelt, Frank:
Prophylaktische Erneuerung von Systemen. Einführung in mathematische Grundlagen.
Braunschweig: Vieweg, 1976. (Reihe Wissenschaft).

Bennett, Robert John and Chorley, R.J:
Environmental Systems. Philosophy, Analysis, and Control.

Princeton, N.J: Princeton Univ. Press, 1978. London: Methuen, 1978.

Biess, Günter; Erfurth, Horst; and Zeidler, Günter:
Optimale Prozesse und Systeme.
Leipzig: Teubner, 1974.

Boltjanski, W.G:
Optimale Steuerung diskreter Systeme.
Leipzig: Geest & Portig, 1976. (Mathematik und ihre Anwendungen in Physik und Technik, Vol.36).

Bossel, Hartmut; Klaczko, Salomon; and Müller, Norbert (eds):
System Theory in the Social Sciences. Stochastical Pattern Recognition, Fuzzy Analysis Simulation, Behaviour and Control Systems Models.
Basel: Birkhäuser Verlag, 1976. (Interdisciplinary Systems Research, Vol.2o).

Brauers, W.K.M:
Systems Analysis, Planning and Design Models. With Special Reference to National Defense.
Amsterdam: North-Holland, 1976.

Brunn, Ekkehard and Fehl, Gerhard (eds):
Systemtheorie und Systemtechnik in der Raumplanung.
Basel: Birkhäuser Verlag, 1976. (Interdisciplinary Systems Research, Vol.21).

Buckley, W.(ed):
Modern Systems Research for the Behavioral Scientist.-A Source Book.
1963. Chicago: Aldine, 1968.

Canaris, Claus-Wilhelm:
Systemdenken und Systembegriff in der Jurisprudenz, entwickelt am Beispiel des deutschen Privatrechts.
Berlin: Duncker & Humblot, 1969. (Schriften zur Rechtstheorie).

Chen, C.T:
Introduction to Linear System Theory.
New York: Holt, 197o.

Chorafas, Dimitris N:
Systems and Simulation.
New York: Academic Press, 1965. (Mathematics in Science and Engineering, Vol.14).

Chow, G.C:
Analysis and Control of Dynamic Economic Systems.
New York: Wiley, 1975.

Cortes, F; Przeworski, A; and Sprague, J:
Systems Analysis for Social Scientists.
New York: Wiley, 1974.

Dekker, L.(ed):
Simulation of Systems. Proceedings of a congress.
Amsterdam: North-Holland, 1977.

Dixhoorn, J.J. van; and Evans, F.J:
Physical Structure in Systems Theory. Network Approaches to Engineering and Economics.
New York and London: Academic Press, 1974.

Dobrushin, R.L; Kryukov, V.I; and Toom, A.L:
Locally Interacting Systems and Their Applications in Biology.
Berlin: Springer, 1978. (Lecture Notes in Mathematics, 653).

Edin, Robert:
Dynamische Analyse betrieblicher Systeme. Ein Beitrag zur industriellen Planung.
Berlin: Berlin Verlag, 1971.

El-Fattah, Y.M. and Foulard, C:
Learning Systems: Decision, Simulation, and Control.
Berlin: Springer, 1978. (Lecture Notes in Control and Information Sciences, Vol.9).

Elgerd, O.I:
Control System Theory.
New York: McGraw-Hill, 1967.

Emery, J:
Organizational Planning and Control Systems.
London: Collier Macmillan, 1969.

Fehl, Gerhard and Brunn, Ekkehard (eds):
Systemtheorie und Systemtechnik in der Raumplanung. Ansätze und Erfahrungen.
Basel: Birkhäuser Verlag, 1977. (Interdisciplinary Systems Research, Vol.21).

Findeisen, Wladislaw:
Hierarchische Steuerungssysteme.
München: Oldenbourg, 1977.

Fortmann, Thomas E. and Hitz, Konrad L:
An Introduction to Linear Control Systems.
New York: Marcel Dekker, 1978. (Control and Systems Theory Series, Vol.5).

Frank, Paul M:
Introduction to System Sensitivity Theory.
New York: Academic Press, 1978.

Gilles, Ernst-Dieter:
Struktur und Dynamik soziologischer Systeme.
München: Oldenbourg, 1974.

Gordon, Geoffrey:
Systems Simulation.
Englewood Cliffs, N.J: Prentice-Hall, 1969.

Gray, W.F.D.Duhl and Rizzo,N.D.(eds):
General System Theory and Psychiatry.
Boston: Little, Brown, 1968.

Grodins, F:
Control Theory and Biological Systems.
New York: Columbia Univ. Press, 1963.

Haimes, Y.Y:
Hierarchical Analyses of Water Resources Systems: Modeling and Optimization of Large-Scale Systems.
New York: McGraw-Hill, 1977.

Helly, Walter:
Urban Systems Models.
New York: Academic Press, 1975.

Hermann, Robert:
Algebraic Topics in Systems Theory.
Brookline, Massachusetts: Math. Sci. Press, 1973. (Interdisciplinary Mathematics Series, No.3).

Hermann, Robert:
Geometry, Physics & Systems.
New York: M.Dekker, 1973. (Pure and Applied Mathematics Ser,18).

Ho, Y.C. and Mitter, S.K.(eds):
Directions in Large-Scale Systems. Many-Person Optimization and Decentralized Control.
New York: Plenum, 1976.

Hsia, T.C:
System Identification. Least-Squares Method.
Teakfield, Australia: Lexington Books, 1978.

International Conference on Systems Modelling in Developing Countries, Bangkok, 1978. Systems Models for Decision Making.
Oxford: Pergamon, 1978.

Kagiwada, Harriet H:
System Identification: Methods and Applications.
Reading, Massachusetts: Addison-Wesley, 1974.

Kuhn, H.W. and Szegö, G.P.(eds):
Mathematical Systems Theory and Economics. Vol.1-2. Proceedings of an international summer school held in Varenna, Italy, June 1-12, 1968.
Berlin: Springer, 1969.
(Lecture Notes in Operations Research and Mathematical Economics, Vol.11-12).

Lakshmikantham, V.(ed):
Nonlinear Systems and Applications. An International Conference.
New York: Academic Press, 1977.

MacFarlane, A.G.J:
Engineering Systems Analysis.
Reading, Massachusetts: Addison-Wesley, 1964. Translated into German: Analyse technischer Systeme. Mannheim: Bibliographisches Institut, 1967.

Marko, H:
Methoden der Systemtheorie. Die Spektraltransformation und ihre Anwendungen.
Berlin: Springer, 1977. (Nachrichtentechnik, Vol.1).

Mayne, D.O. and Brockett, R.W.(eds):
Geometric Methods in System Theory. Proceedings of the NATO Advanced Study Institute, held at London, England, August 27-September 7, 1973.
Dordrecht-Holland: D.Reidel, 1973.

Mehra, K. and Lainiotis, D.G:
System Identification.
New York: Academic Press, 1976. (Mathematics in Science and Engineering, Vol.126).

Mesarovic, M.D. et al (eds):
System Theory and Biology.
Berlin: Springer, 1968.

Mesarovic, M.D; Macko, D; and Takahara, Y:
Theory of Hierarchical, Multilevel Systems.
New York: Academic Press, 197o.

Naslin, Pierre:
Dynamik linearer und nichtlinearer Systeme. Mathematische Methoden zu ihrer Behandlung.
Translated from French. München: Oldenbourg, 1968.

Negoita, C.V. and Ralescu, D.A:
Applications of Fuzzy Sets to System Analysis.
Basel: Birkhäuser Verlag, 1975. (Interdisciplinary Systems Research, Vol.11). New York: Halsted Press, 1976.

Optner, S.L:
Systems Analysis for Business Management.
Englewood Cliffs, N.J: Prentice-Hall, 196o.

Optner, Stanford L:
Systems Analysis for Business and Industrial Problem Solving.
Englewood Cliffs, N.J: Prentice-Hall, 1965.

Peebles, P.Z:
Communication Systems Principles.
Reading, Massachusetts: Addison-Wesley, 1976.

Quade, E.S. and Boucher, W.I.(eds):
Systems Analysis and Policy Planning.
Amsterdam: Elsevier, 1968.

Rosenberg, Reinhardt M:
Analytical Dynamics of Discrete Systems.
New York: Plenum, 1977. (Mathematical Concepts and Methods in Science and Engineering, Vol.4).

Ruberti, A. and Mohler, R.R:
Variable Structure Systems with Applications to Economics and Biology. Proceedings, 1974.
Berlin: Springer, 1975. (Lecture Notes in Economics and Mathematical Systems, Vol.111).

Rugh, W.J:
Introduction to the Mathematical Description of Linear Systems.
New York: M.Dekker, 1975. (Control and Systems Theory Ser., 2).

Saeks, R:
Resolution Space, Operators and Systems.
Berlin: Springer, 1973. (Lecture Notes in Economics and Mathematical Systems, Vol.82).

Seiler, John A:
Systems Analysis in Organizational Behavior.
Homewood, Illinois: Irwin, 1967.

Shinners, S.M:
A Guide to Systems Engineering and Management.
Teakfield, Australia: Lexington Books, 1977.

Siegel, Reinhold:
Zur Anwendung von System Dynamics in der Lagerhaltung.
Basel: Birkhäuser Verlag, 1978. (Interdisciplinary Systems Research).

Strobel, Horst:
Experimentelle Systemanalyse.
Berlin: Akademie-Verlag, 1975.

Wegner, Gertrud:
Systemanalyse und Sachmitteleinsatz in der Betriebsorganisation.
Wiesbaden: Gabler, 1969.

Wolf, H:
Lineare Systeme und Netzwerke.
Berlin: Springer, 1971.

Wolovich, W.A:
Linear Multivariable Systems.
Berlin: Springer, 1974. (Applied Mathematical Sciences, 11).

Yovits, M. and Cameron, S.(eds):
Self-Organizing Systems.
New York: Pergamon, 1960.

Zadeh, L.A. and Desoer, C.A:
Linear System Theory. - The State Space Approach.
New York: McGraw-Hill, 1963.

Zangenmeister, Christof:
Nutzwertanalyse in der Systemtechnik.
München: Wittemann, 1971.

Zypkin, Ja.S:
Grundlagen der Theorie Lernender Systeme.
Berlin: Verlag Technik, 1972.

3.2.2 Statistics

Aoki, Masano:
Optimization of Stochastic Systems. Topics in Discrete-Time Systems.
New York: Academic Press, 1967.

Bailey, Norman T.J:
Mathematics, Statistics, and Systems for Health.
New York: Wiley, 1977.

Balakrishnan, A.V:
Stochastic Differential Systems. I. Filtering and Control. A Function Space Approach.
Berlin: Springer, 1973. (Lecture Notes in Economics and Mathematical Systems, Vol.84).

Howard, R.A:
Dynamic Probability Systems. Vol.1: Markov Models. Vol.2: Semi-Markov and Decision Processes.
New York: Wiley, 1971.

Kushner, Harold J. and Clark, Dean S:
Stochastic Approximation Methods for Constrained and Unconstrained Systems.
New York and Berlin: Springer, 1978.

Maisel, H. and Gnugnoli, G:
Simulation of Discrete Stochastic Systems.
Chicago: Science Research Associates, 1972.

Saridis, G.N:
Self-Organizing Control of Stochastic Systems.
New York: M.Dekker, 1977. (Control and Systems Theory, Vol.4).

Striebel, C:
Optimal Control of Discrete Time Stochastic Systems.
Berlin: Springer, 1975. (Lecture Notes in Economics and Mathematical Systems, Vol.110).

Wets, R.J.B.(ed):
Stochastic Systems. Vol.1: Modeling, Identification. Vol.2: Optimization.
Amsterdam: North-Holland, 1976.

3.2.3 Operations research

Billeter, Ernst; Cuénod, Michel; and Klaczko, Salomon (eds):
Overlapping Tendencies in Operations Research, Systems Theory and Cybernetics. Proceedings of a symposium.
Basel: Birkhäuser Verlag, 1976. (Interdisciplinary Systems Research, Vol.32).

Flagle, Ch.D; Huggins, W.H; and Roy, R.H.(eds):
Operations Research and Systems Engineering.
Baltimore: Johns Hopkins Press, 196o, 1964.

Mital, K.V:
Optimization Methods in Operations Research and Systems Analysis.
New York: Halsted Press, 1977.

Pegels, C.C:
Systems Analysis for Production Operations.
New York: Gordon & Breach, 1976. (Studies in Operations Research).

3.2.4 Computers

"Computer systems" are almost not included.

Chu, Yaohan:
Digital Simulation of Continuous Systems.
New York: McGraw-Hill, 1969.

Gane, Chris and Sarson, Trish:
Structured Systems Analysis: Tools and Techniques.
Englewood Cliffs, N.J: Prentice-Hall, 1979.

Giloi, W.K:
Principles of Continuous System Simulation. Analog, Digital, and Hybrid Simulation in a Computer Science Perspective.
Stuttgart: B.G.Teubner, 1975.

Grindley, Kit:
Systematics: A New Approach to Systems Analysis.
New York: McGraw-Hill, 1975.

Hart, J. and Takasu, S.(eds):
Systems and Computer Science.
Toronto: Univ. of Toronto Press, 1967.

Kuo, Franklin F. and Kaiser, James F.(eds):
System Analysis by Digital Computer.
New York: Wiley, 1966.

Ord-Smith, R.J. and Stephenson, J:
Computer Simulation of Continuous Systems.

London: Cambridge Univ. Press, 1975. (Cambridge Computer Science Texts, Vol.3).

3.2.5 Cybernetics

Rose, J.(ed):
Current Topics in Cybernetics and Systems. Proceedings of the fourth international congress of cybernetics and systems, 21-25 August, 1978, Amsterdam.
Berlin: Springer, 1978.

Rose, J. and Bilciu, C.(eds):
Modern Trends in Cybernetics and Systems. Proceedings of the third international congress of cybernetics and systems, Bucharest, Romania, August 25-29, 1975. 3 vols.
Berlin: Springer, 1977.

Trappl, R. et al (eds):
Progress in Cybernetics and Systems Research. 3 vols.
New York: Wiley, 1975-78.

Zypkin, J.S:
Adaption und Lernen in kybernetischen Systemen.
München: Oldenbourg Verlag, 197o.

PART III.

Works of Reference.

See also I.1.1.1 History of mathematics in general, Works of reference.

1. BIBLIOGRAPHIES

1.1 Bibliographies of mathematics in general

Dick, Elie M:
Current Information Sources in Mathematics. An Annotated Guide to Books and Periodicals, 196o-72.
Littleton, Colorado: Libraries Unlimited, 1973.

Dorling, A.R.(ed):
Use of Mathematical Literature.
London: Butterworths, 1977.

Fang, Joong:
A Guide to the Literature of Mathematics Today.
Memphis, Tennessee: Paideia, 1972.

Gaffney, M.P. and Steen, L.A:
Annotated Bibliography of Expository Writing in the Mathematical Sciences.
Washington, D.C: The Mathematical Association of America, 1976.

MAA=The Mathematical Association of America (ed):
A Basic Library List for Four-Year Colleges.
Washington, D.C: MAA, 1977.

Parke, Nathan G:
Guide to the Literature of Mathematics and Physics.Including Related Works on Engineering Science.
1947. New York: Dover, 1958.

Pemberton, John E:
How to Find Out in Mathematics. A Guide to Sources of Information.
Oxford: Pergamon Press, 1964, 1969 (2nd ed).

1.2 Special topics

1.2.1 Mathematics

Berman, Gerald (ed):
Applied Graph Theory Bibliography with Forward Citations.
Waterloo, Ontario: Computer Lab, University of Waterloo, 1977.

Schaaf, William L:
Bibliography of Recreational Mathematics. 3 vols.
Reston, Virginia: NCTM=National Council of Teachers of Mathematics, 197o-73.

Sommerville, D.M.Y:
Bibliography of Non-Euclidean Geometry.
New York: Chelsea, 197o.

1.2.2 Statistics

Anderson, T.W; Gupta, Somesh Das; and Styan, George P.H:
A Bibliography of Multivariate Statistical Analysis.
Huntington, N.Y: Krieger, 1977.

Buckland, W.R. and Fox, R:
Bibliography of Basic Texts and Monographs on Statistical Methods. 1945-196o. Published for the International Statistical Institute.
Edinburgh and London: Oliver & Boyd, 1951, 1963.

Kendall, M.G. and Doig, Alison G:
Bibliography of Statistical Literature: 195o-1958.
London: Oliver and Boyd, 1962.

Kendall, M.G. and Doig, Alison G:
Bibliography of Statistical Literature: 194o-1949.
London: Oliver & Boyd, 1965.

Wold, H.O.A.(ed):
Bibliography on Time-Series and Stochastic Processes.
Cambridge, Massachusetts: MIT Press, 1966.

1.2.3 Operations research

Hausmann, D. (ed):
Integer Programming and Related Areas. A Classified Bibliography 1976-1978.
Berlin: Springer, 1978.

Künzi, H.P. and Oettli, W:
Nichtlineare Optimierung: Neuere Verfahren. Bibliographie.
Berlin: Springer, 1969. (Lecture Notes in Economics and Mathematical Systems, Vol.16).

1.2.4 Computers

Carter, C:
Guide to Reference Sources in the Computer Sciences.
New York: Macmillan, 1974.

Implications of Computer Technology. An Annotated Bibliography.
Publ. by Harvard University, Program's Information Center; Cambridge, Massachusetts, 1971. (Harvard University Program on Technology and Society. Research Review, 7).

Pritchard, A:
A Guide to Computer Literature. An Introductory Survey of the Sources of Information.
London: Clive Bingley, 1972 (2nd ed).

2. Dictionaries

Many dictionaries of mathematics in more than one language are not included.

2.1 Mathematics

Baker, C.C.T:
Dictionary of Mathematics.
London: Newnes, 1961.

Bendick, J. and Levin, M:
Mathematics Illustrated Dictionary.
London: Kaye and Ward, 1973.

Freiberger, W.F. et al (eds):
The International Dictionary of Applied Mathematics.
Princeton, N.J. and New York: Van Nostrand Reinhold, 1960, 1967.

Grunert, Johann August (ed):
Supplemente zu Georg Simon Klügel's Wörterbuch der reinen Mathematik.
Leipzig: G.B.Schwickert, 1833.

Herland, Leo:
Dictionary of Mathematical Sciences. 2 vols. Vol.1: German-English. Vol.2: English-German.
London: Harrap, 1966.

James, G. and James, R.C:
Mathematics Dictionary.
New York: Van Nostrand Reinhold, 1968, 1976 (4th ed).

Karush, William:
The Crescent Dictionary of Mathematics.
New York: Macmillan, 1962.

Klaften, E.B:
Mathematical Vocabulary.
München: Wila Verlag Wilhelm Lampl, 1961.

MacIntyre, S. and Witte, E:
German-English Mathematical Vocabulary.
Edinburgh: Oliver and Boyd, 1956.

Meschkowski, Herbert:
Mathematisches Begriffswörterbuch.
Mannheim: Bibliographisches Institut, 1965, 1971. (B.I. Hochschultaschenbücher, Band 99).

Meschkowski, Herbert:
Mehrsprachenwörterbuch mathematischer Begriffe.
Mannheim: Bibliographisches Institut, 1972.

Montferrier, A.A.V.S.de (ed):
Dictionnaire des sciences mathématiques pures et appliquées.
2 vols. 1835-4o. Paris: Bibliothèque Scientifique, 1845.

Naas, Josef and Schmid, Hermann Ludwig (eds):
Mathematisches Wörterbuch. Mit Einbeziehung der theoretischen Physik. 2 vols.
Berlin: Akademie-Verlag, 1961, 1974.

Peyovitch, Tadya (ed):
Dictionary of Mathematical Terms.
Beograd: Institut Mathématique, 1966.

2.2 Statistics

Kendall, M.G. and Buckland, W.R.(eds):
A Dictionary of Statistical Terms.
1957. Harlow, Essex: Longman, 1971 (3rd ed).

Kotz, Samuel:
Russian-English / English-Russian Glossary of Statistical Terms.
Published for the International Statistical Institute.
Edinburgh: Oliver and Boyd, 1971.

Paenson, Isaac (ed):
Systematic Glossary of the Terminology of Statistical Methods. English-French-Spanish-Russian.
Oxford: Pergamon Press, 197o, 1971.

2.3 Computers

Breuer, Hans:
Dictionary for Computer Languages.
New York: Academic Press, 1966.

Bürger, E.(ed):
Four Language Technical Dictionary of Dataprocessing, Computers, and Office Machines.
Oxford: Pergamon, 197o.

Chandor, Anthony; Graham, John; and Williamson, Robin:
A Dictionary of Computers.
Harmondsworth, Middlesex: Penguin, 197o.

Clason, W.E:
Elsevier's Dictionary of Computers, Automatic Control and

Data Processing. In Six Languages.
Amsterdam: Elsevier, 1971, 1973.

Eriksen, Bjørn; Helms, Hans Jørgen; and Rømer, Mogens D:
Edb-ordbog. *In Danish. (Computer Dictionary).*
Copenhagen: Gjellerup, 1971.

Gould, I.H.(ed):
IFIP Guide to Concepts and Terms in Data Processing. *(IFIP= International Federation for Information Processing).*
Amsterdam: North-Holland, 1971.

IBM (ed):
Data Processing Glossary.
New York: IBM, October 1977 (6th ed).

IEEE (ed):
IEEE Standard Dictionary of Electrical and Electronics Terms.
New York: Wiley, 1972.

Meek, C.L:
Glossary of Computing Terminology.
New York: CCM Information Corporation, 1972.

Norsk språkråds komité for dataterminologi (ed):
Norsk Dataordbok. *In Norwegian. (Norwegian Computer Dictionary).*
Bergen and Oslo: Universitetsforlaget, 1976.

Sippl, C.J:
Data Communications Dictionary.
New York: Van Nostrand Reinhold, 1976.

SIS=Standardiseringskommissionen i Sverige (ed):
Dataordboken. Data Processing Glossary. *(Swedish-English-French-German).*
Stockholm: SIS, October 1977. (SIS handbok 142).

Wittmann, Alfred and Klos, Joël:
Dictionary of Data Processing. Including Applications in Industry, Administration and Business.
Amsterdam: Elsevier, 1973.

2.4 Cybernetics

Klaus, Georg and Liebscher, Heinz:
Wörterbuch der Kybernetik.
Berlin: Ditz Verlag, 1967, 1976.

3. Encyclopedias

3.1 Mathematics

Alexandroff, P.S. et al:
Enzyklopädie der Elementarmathematik. 5 vols.
Berlin: Deutscher Verlag der Wissenschaften, 1965-71.

Beckman, M.J; Menges, G; and Selten, R.(eds):
Encyclopedic Handbook of the Mathematical Sciences.
Düsseldorf: Westdeutscher Verlag, 1977.

Behnke, Heinrich; Bachmann, Friedrich; Fladt, Kuno;and Süss, Wilhelm:
Grundzüge der Mathematik. Für Lehrer an Gymnasien und Mathematiker in Industrie und Wirtschaft. 5 vols.
Göttingen: Vandenhoeck & Ruprecht, 1958-68.

Enzyklopädie der mathematischen Wissenschaften mit Einschluss ihrer Anwendungen. 6 vols.
Leipzig: Teubner, 1898-1935, 1939-59 (2nd ed). Incomplete French translation: Encyclopédie des sciences mathématiques pures et appliquées. Paris: Gauthier-Villars, 19o4-15.

Gellert, W. et al (eds):
Kleine Enzyklopädie-Mathematik.
1965. Frankfurt M: Verlag Harri Deutsch, 1972. Leipzig: VEB Bibliographisches Institut, 1977. Translated into English: The VNR Concise Encyclopedia of Mathematics. New York: Van Nostrand Reinhold, 1977.

Iyanaga, Shôkichi and Kawada, Yukiyosi (eds):
Encyclopaedic Dictionary of Mathematics.
Issued by the Mathematical Society of Japan. Translated from Japanese. Cambridge, Massachusetts: MIT Press, 1977.

Rota, Gian-Carlo (ed):
Encyclopedia of Mathematics and Its Applications.
Reading, Massachusetts: Addison-Wesley, 1976-.

Shapiro, Max S.(ed):
Mathematics Encyclopedia.
Garden City, N.Y: Doubleday, 1977.

Sneddon, I.N.(ed):
Encyclopaedic Dictionary of Mathematics for Engineers and Applied Scientists.
New York: Pergamon, 1976.

The Universal Encyclopaedia of Mathematics.
London: Allen & Unwin, 1964. Translated from German: Meyers Rechenduden. Mannheim: Bibliographisches Institut, 1960.

3.2 Statistics

Kruskal, William H. and Tanur, Judith M.(eds):
International Encyclopedia of Statistics.
Free Press. West Drayton, Middlesex: Collier Macmillan, 1978.

Müller, P.H.(ed):
Lexikon der Stochastik. Wahrscheinlichkeitsrechnung und mathetische Statistik.
Berlin: Akademie-Verlag, 1975 (2nd ed).

3.3 Computers

Belzer, Jack; Holzman, Albert G; and Kent, Allen (eds):
Encyclopedia of Computer Science and Technology. 11 vols.
New York: M.Dekker, 1975-78.

Helms, Hans Jørgen and Nielsen, Johs.(eds):
Gyldendals Edb-leksikon. *In Danish. (Gyldendal's Computer Encyclopedia).*
Copenhagen: Gyldendal, 1975.

Ralston, Anthony and Meek, C.L. (eds):
Encyclopedia of Computer Science.
New York: Petrocelli / Charter, 1976. New York: Van Nostrand Reinhold, 1977.

4. Handbooks

This group does not include handbooks of formulas and tables.

4.1 Mathematics

Auerbach, F.(ed):
Taschenbuch für Mathematiker und Physiker.
Leipzig: B.G.Teubner, 19o9.

Barwise, J.(ed):
Handbook of Mathematical Logic.
Amsterdam: North-Holland, 1977.

Bronstein, I.N. and Semendjajew, K.A:
Taschenbuch der Mathematik.
Translated from the Russian edition of 1956. Frankfurt: Harri Deutsch, 1971, 1975. Leipzig: Teubner, 1975.

Carr, George Shoobridge:
A Synopsis of Elementary Results in Pure Mathematics.
London: F.Hodgson, 1886.

Dreszer, Jerzy:
Mathematik-Handbuch (für Technik und Naturwissenschaft).
Frankfurt: Harri Deutsch, 1975.

Grazda, Edward E:
Handbook of Applied Mathematics.
Huntington, N.Y: Krieger, 1977 (4th ed).

Howson, A.G:
A Handbook of Terms Used in Algebra and Analysis.
London: Cambridge Univ. Press, 1972.

Korn, Granino A. and Korn, Theresa M:
Manual of Mathematics.
New York: McGraw-Hill, 1967.

Korn, Granino A. and Korn, Theresa M:
Mathematical Handbook for Scientists and Engineers.
New York: McGraw-Hill, 1968 (2nd ed).

Kuipers, L. and Timman, R.(eds):
Handbook of Mathematics.

Oxford: Pergamon, 1969. In German: Handbuch der Mathematik. Berlin: Gruyter, 1968.

Luce, R.Duncan; Bush, Robert R; and Galanter, Eugene (eds):
Handbook of Mathematical Psychology.
New York: Wiley, 1963.

Merritt, Frederick S:
Mathematics Manual; Methods and Principles of the Various Branches of Mathematics for Reference, Problem Solving, and Review.
New York: McGraw-Hill, 1962.

Meschkowski, Herbert and Laugwitz, Detlef (eds):
Meyers Handbuch über die Mathematik.
Mannheim: Bibliographisches Institut, 1972, 1977.

Meyler, Dorothy S. and Sutton, O.G:
A Compendium of Mathematics and Physics.
London: English Univ. Press, 1958.

Pearson, Carl E.(ed):
Handbook of Applied Mathematics. Selected Results and Methods.
New York: Van Nostrand Reinhold, 1974.

Rektorys, Karel:
Survey of Applicable Mathematics.
London: Iliffe Books, 1969.

Schlömilch, Oskar Xaver; Reidt; and Heger, R.(eds):
Handbuch der Mathematik. 3 vols.
Breslau: E.Trewendt, 1879-81. Leipzig: J.A.Barth, 1904.

Simon, H. and Stahl, K:
Mathematik: Nachschlagebücher für Grundlagenfächer.
Leipzig: Fachbuchverlag, 1976 (12th ed).

Tuma, Jan J:
Engineering Mathematics Handbook.
New York: McGraw-Hill, 1970.

Tuma, Jan J:
Technology Mathematics Handbook.
New York: McGraw-Hill, 1975.

Weiss, A:
Handbuch der Trigonometrie.
Fürth: J.L.Schmid, 1851.

Wörle, Helmut and Rumpf, Hans-Joachim:
Taschenbuch der Mathematik.
München: Oldenbourg, 1978.

4.2 Statistics

Burington, Richard S. and May, Donald C,Jr:
Handbook of Probability and Statistics with Tables.
New York: McGraw-Hill, 1969, 197o (2nd ed).

Meddis, Ray:
A Statistical Handbook for Non-Statisticians.
New York: McGraw-Hill, 1975.

Pollard, J.H:
A Handbook of Numerical and Statistical Techniques, with Examples Mainly from the Life Sciences.
London: Cambridge Univ. Press, 1977.

Rietz, H.L. et al:
Handbook of Mathematical Statistics.
Boston: Houghton, 1924.

4.3 Operations research

Eiselt, H.A. and von Frajer, H:
Operations Research Handbook. Standard Algorithms and Methods.
Berlin: W. de Gruyter, 1977.

Moder, J.J. and Elmaghraby, S:
Handbook of Operations Research - Foundations and Fundamentals.
New York: Van Nostrand Reinhold, 1977.

4.4 Computers

Sippl, Charles J:
Microcomputer Handbook.
New York: Petrocelli, 1977.

Yearsley, R. and Graham, R.(eds):
Handbook of Computer Management.
Teakfield, Australia: Gower Press, 1973.

5. How to write mathematics

Dieudonné, J.A; Halmos, P.R; Schiffer, M.M; and Steenrod, N.E:
How to Write Mathematics.
Providence, R.I: American Mathematical Society, 1973, 1975.

6. Addresses

Se also I.6 Women and mathematics.

Hailpern, Raoul (ed):
Guidebook to Departments in the Mathematical Sciences in the United States and Canada.
Washington, D.C: Mathematical Association of America, 1975 (6th ed).

IMU=The International Mathematical Union (ed):
World Directory of Mathematicians.
Bureau of World Directory of Mathematicians, Mathematics Department, Kyoto University, Kyoto 606, Japan, 1979 (6th ed).

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