William Ralph Bennett Papers

A Finding Aid to the Collection in the Library of Congress

Prepared by Joseph K. Brooks with the assistance of Jewel McPherson

Manuscript Division, Library of Congress

Washington, D.C.

2011

Finding aid encoded by Library of Congress Manuscript Division, 2012

Collection Summary

Title: William Ralph Bennett Papers
Span Dates: 1922-circa 1998
Bulk Dates: (bulk 1958-1996)
ID No.: MSS85461
Creator: Bennett, William Ralph, 1930-2008
Extent: 43,400 items; 124 containers plus 21 oversize; 49.6 linear feet
Language: Collection material in English, with Russian
Repository: Manuscript Division, Library of Congress, Washington, D.C.
Abstract: Physicist, inventor, educator, and author. Topical files, notebooks, records of scientific experiments, research material, correspondence, scientific papers, lecture files, drafts of books with related background and research material, printed matter, and miscellaneous material documenting Bennett's development of the gas laser and other inventions, his academic and professional career, and his authorship of scientific papers and books.

Selected Search Terms

The following terms have been used to index the description of this collection in the Library's online catalog. They are grouped by name of person or organization, by subject or location, and by occupation and listed alphabetically therein.

People
Bennett, William R. (William Ralph), 1904- William R. Bennett papers.
Bennett, William Ralph, 1930-2008.
Bennett, William Ralph, 1930-2008. Introduction to computer applications for non-science students (BASIC). 1976.
Bennett, William Ralph, 1930-2008. Scientific and engineering problem-solving with the computer. 1976.
Chebotaev, V. P. (Veniamin Pavlovich), 1938-
Gould, Gordon, 1920-2005.
Kahn, Leonard R.
Mussorgsky, Modest Petrovich, 1839-1881.
Steinberger, J.

Organizations
Bell Telephone Laboratories.
Columbia University.
Yale University.

Subjects
Cryptography.
Electromagnetic fields--Health aspects.
Force and energy.
Gas lasers.
Hearing aids.
Helium-neon lasers.
Information theory.
Music--Russia.
Phonocardiography.
Physics.
Science--Russia.
World War, 1939-1945--Communications.

Places

Russia--Civilization.

Occupations
Authors.
Educators.
Inventors.
Physicists.

Administrative Information

Provenance

The papers of William Ralph Bennett, physicist, inventor, educator, and author, were given to the Library of Congress by his wife, Frances C. Bennett, in 2009.

Transfers

Some reel-to-reel audiotapes, audiocassettes, a phonograph record, and VCR tapes have been transferred to the Motion Picture, Broadcasting, and Recorded Sound Division where they are identified as part of the William Ralph Bennett Papers.

Copyright Status

The status of copyright in the unpublished writings of William Ralph Bennett is governed by the Copyright Law of the United States (Title 17, U.S.C.).

Access and Restrictions

The papers of William Ralph Bennett are open to research. Researchers are advised to contact the Manuscript Reading Room prior to visiting. Many collections are stored off-site and advance notice is needed to retrieve them for research use.

Preferred Citation

Researchers wishing to cite this collection should include the following information: Container number, William Ralph Bennett Papers, Manuscript Division, Library of Congress, Washington, D. C.

Biographical Note

Date	Event
1930, Jan. 30	Born, Jersey City, N.J.
1951	Graduated, Princeton University, Princeton, N.J.
1952	Married Frances Commins
1957	Ph.D. in physics, Columbia University, New York, N.Y.
1959-1962	Member, technical staff, Bell Telephone Laboratories, Murray Hill, N.J.
1960	Invented with Ali Jarvan the first gas (helium-neon) laser
1962-1964	Associate professor of physics and applied science, Yale University, New Haven, Conn.

1964-1972	Professor of physics and applied science, Yale University, New Haven, Conn.
1965	Received the Morris N. Liebman Award of the Institute of Electrical and Electronics Engineers
1976	Published *Introduction to Computer Applications for Non-Science Students* and *Scientific and Engineering Problem-Solving with the Computer.* Englewood Cliffs, N.J.: Prentice-Hall
1977	Published *Physics of Gas Lasers*. New York: Gordon and Breach
1979	Published *Atomic Gas Laser Transition Data: A Critical Evaluation*. New York: Plenum
1981-1987	Master, Silliman College, Yale University, New Haven, Conn.
2000	Awarded Devane Medal for distinguished scholarship and teaching at Yale University, New Haven, Conn.; retired from the university
2008, June 29	Died, Haverford, Pa.

Scope and Content Note

The papers of William Ralph Bennett (1930-2008) span 1922-circa 1998, with the bulk of the material dating from 1958 to 1996. Bennett was on the technical staff of Bell Telephone Laboratories from 1959 to 1962 where with Ali Jarvan he developed and built the first gas (helium-neon) laser, an invention that made applications and devices such as laser surgery, supermarket scanners, and compact disk players practicable. The collection is in English with some material in Russian, a reflection of Bennett's interest in scientific developments in Russia and in the culture, especially the music, of that country. The papers are described to the file level and organized into four series: Academic File, Subject File, Speeches and Writings, and Oversize.

Bennett's invention of the gas laser was a direct outgrowth of his doctoral work. The experimental and theoretical work at Columbia University that led to the development of the gas laser is documented in the Academic File. Also represented in the Academic File is Bennett's nearly half-century career as a professor of physics and applied science at Yale University. Most of the Yale material is lecture notes and graphical classroom aids such as slides.

Bennett's efforts during his academic career relating to his continued work with gas lasers, his other inventions, and his wide-ranging interests are documented as part of the Subject File. Besides material relating to various types of gas lasers, the Subject File series includes files on Bennett's efforts to elucidate the health effects of electromagnetic fields emanating from sources as varied as electric power transmission wires and consumer electronics such as cell phones; on his efforts to prove experimentally at a canal lock in Washington State the existence of a fifth force of nature; and on his development of dynamic spectral phonocardiograph and hearing aid technology.

The Subject File also includes material on Bennett's time at Bell Telephone Laboratories when he was working on the helium-neon laser, and on his tracking developments in information theory and cryptography, interests he shared with his father, William R. Bennett (1904-1983), a communications scientist who also worked at Bell Telephone Laboratories. There is a large grouping of documents on the senior Bennett in the Subject File, including his participation in the development of SIGSALY, the scrambler telephone system that Franklin Roosevelt and Winston Churchill used to communicate securely during World War II.

Also part of the Subject File are files of correspondence and other material relating to Russian scientists, especially laser pioneer V. P. Chebotayev; and on Gordon Gould and J. Steinberger. There is a large file on Bennett efforts to help Leonard R. Kahn get his AM stereo technology accepted as a radio broadcast industry standard.

The Speeches and Writings series features Bennett's articles and scientific papers and a large file of scientific papers by other scientists mainly relating to lasers. Also part of the Speeches and Writings are drafts and research files relating to Bennett's books, including the influential textbooks *Introduction to Computer Applications for Non-Science Students* and *Scientific and Engineering Problem-Solving with the Computer*, both published in 1976. Bennett was an accomplished amateur musician and avocational musicologist, and the Speeches and Writings contain a file on his unpublished book-length study on a suite by the Russian composer Modest Petrovich Mussorgsky, Pictures at an Exhibition: An Historical Interpretation of the Mussorgsky Work.

Arrangement of the Papers

The collection is arranged in four series:
- Academic File, circa 1954-circa 1998
- Subject File, 1922-1996
- Speeches and Writings, circa 1954-1984
- Oversize, 1960-1989

Description of Series

Container	*Series*
BOX 1-13	[Academic File, circa 1954-circa 1998](#)

Student papers, lecture notes, notebooks, research files, correspondence, printed matter, topical files, and miscellaneous material.

Arranged largely as received by name of academic institution and thereunder by topic or type of material.

BOX 13-58	[Subject File, 1922-1996](#)

Research files, scientific papers, records of scientific experiments, correspondence, patents, copyrights, notes, topical files, printed matter, andmiscellaneous material.

Arranged alphabetically by main topic or type of material largely as received. Files within main catagories are unsorted.

BOX 59-124	[Speeches and Writings, circa 1954-1984](#)

Scientific papers, drafts of books, articles, research files, correspondence, photographs, illustrations, topical files, printed matter, and miscellaneous material.

Arranged into writings by Bennett and by others and therein by type of writing and topic or subject.

BOX OV 1-OV 21	[Oversize, 1960-1989](#)

Slides, physics and mathematical notes, photographs, maps, drawings, and musical scores.

Arranged and described according to the series, container, and file from which the matter was removed.

Container List

Container	Contents

BOX 1-13   Academic File, circa 1954-circa 1998
    Student papers, lecture notes, notebooks, research files, correspondence, printed matter, topical files, and miscellaneous material.
    Arranged largely as received by name of academic institution and thereunder by topic or type of material.

BOX 1   Columbia University, New York, N.Y.
    Bibliographies
    Dynamics course
    Examination reviews
      (2 folders)
    Miscellany
    Notebooks
      Electricity and magnetism
        (3 folders)
      Loose leaf
        No. 1
          (2 folders)

BOX 2   Nos. 2-6
          (7 folders)

BOX 3   Miscellaneous, nos. 1-9
          (9 folders)

BOX 4   Quantum mechanics, nos. 1-3
          (3 folders)
    Optical Spectra Excited in the Noble Gases at High Pressures by Polonium Alpha Particles, Bennett's thesis, 1959
      (3 folders)
    Quantum mechanics course
      (2 folders)

BOX 5   Statistical mechanics course
    Topics
      Charge exchange articles
      Collision processes
      Dirac theory
      Double crossing, helium-helium, helium-neon
      Fermi: hyperfine structure
      Electronic collisions
      Feynman's theory
      Hydrogenic atom
      Ions and electrons
      Metastable life-times
      Nitrogen
      Noble gas molecular states and vacuum ultraviolet spectrum

Academic File, circa 1954-circa 1998

Container	Contents
	Miscellaneous *See also Oversize*
	Monkeys
	Fourier transform
	Monkeys, 1975
	Monkeys, 1973
	Fortran
	Fourier transform and damped S. H. O.
	Manley-Rowe relations
BOX 10	Lecture no. 21, Fourier series
	Random walk problem, 1978
	Lecture no. 17, random walk
	Lecture no. 19, least squares
	Lasers, 1979
	Lecture no. 26, lasers
	QM and lasers
	Lasers
	Lecture no. 7, surfaces
	Surfaces handouts
	Surfaces
BOX 11	Mars, pictures, 1976
	Lecture no. 13, falling bodies, Big Bertha, football
	Lecture no. 14, Dynamics
	Lecture no.15, Dynamics
	Quadratic fields
	Hewlett Packard, HP 1000 computer
BOX 12	E and AS 118, introduction
	Applied Physics 207, 1987
	Fortran
	E and AS course, evaluations
	Matrix inversion, Fortran
	Plotting
	Wavelets
	Notebook
	(2 folders)
	Slides
	Introduction to basic Fortran
	Computer course for non-scientists *See also Oversize*
BOX 13	Photographs, E an AS course
	Applied Physics course, relativity
	Miscellany *See also Oversize*
	(2 folders)

Container	Contents

View graphs
  (2 folders)

BOX 13-58   Subject File, 1922-1996
              Research files, scientific papers, records of scientific experiments,
                 correspondence, patents, copyrights, notes, topical files, printed matter,
                 andmiscellaneous material.
              Arranged alphabetically by main topic or type of material largely as
                 received. Files within main catagories are unsorted.

BOX 13   Bell, Alexander Graham
                   Bell Telephone Laboratories
                     Chronological file
                       1959
                         (1 folder)
BOX 14   (5 folders)
                       1960
                       1961
                         (4 folders)
BOX 15   (2 folders)
                       1962
                         (5 folders)
BOX 16   1963-1971
                         (9 folders)
                     Drawings
                     Electron beam pump
                     Fabre-Perot interferometer
BOX 17   Gain measurements
                     Helium-neon transfer data
                     Hole burning, 1961
                         (2 folders)
                     Lamb, Willis E.
                     Life time data, helium-neon laser
BOX 18   Masers
                     Optics
                     Patents, 1958-1958
                     Photographs
                     Review of helium-neon laser discovery, 1968, 1984
BOX 19   Technical publications
                         (3 folders)
                   Bennett, William Ralph (1904-1983) (father)
                     Bell Telephone System, technical publications
                     Biographical material, 1922-1983
BOX 20   Campbell, George Ashley
                     Columbia University, New York, N.Y., 1928-1932
                         (4 folders)
                     Death, 1984
                     Filter problem

Container	Contents
	Hartley, R. V. L.
	Kac, Mark, 1947
	Miscellany
BOX 21	Noise
	(2 folders)
	Photographs
	Prime number notebook
	Riordan, J., Combinatoric
BOX 22	Scientific papers
	(2 folders)
	SIGSALY
	(7 folders)
BOX 23	Writings
	C. Rudmore, pseudonym for science fiction writings, 1949
	(2 folders)
	Miscellaneous
	(4 folders)
	Biographical material and awards
BOX 24	CBS Laboratories
	Commins, Eugene D.
	Copyright forms
	Dudley, Homer
	Dynamic spectral phonocardiograph
	(9 folders)
BOX 25	(9 folders)
BOX 26	(7 folders)
BOX 27	(8 folders)
BOX 28	(4 folders)
	Einstein, Albert
	Electromagnetic fields, health effects
	Alphabetical file
	A
	(6 folders)
BOX 29	B-C
	(11 folders)
BOX 30	D-M
	(8 folders)
BOX 31	N-V
	(5 folders)
	General
	(4 folders)
BOX 32	(6 folders)
BOX 33	(6 folders)
	CRC Handbook of Biological Effects of Electromagnetic Fields, by John Polk and Elliot Postow
	(2 folders)
BOX 34	*Health Effects of Low-Frequency Electric and Magnetic Fields,* Oak Ridge Associated Universities, 1992

Subject File, 1922-1996

Container	*Contents*

Solitons

Jabr thesis

EAS 14a, course

Quantum mechanics problems, 1963

EAS 100a, course

Department of Engineering and Applied Science courses, final problems

EAS 100a, course, 1967

DLE 202, course

Maser talks and correspondence

EAS 145b, course

BOX 48   EAS 107b, course, 1968

Eight lectures, 207b, course, 1975

Examinations, 1948-1954

Department of Engineering and Applied Science, high school science lecture

McMaster lecture, 1975

Lifetime talk, 1975

Gordon and Breach, 1968

National Science Foundation, 1972

Hole burning paper

Physics Today, 1993

Argon laser, figures

BOX 49   Patents

    (2 folders)

Stability

    (6 folders)

BOX 50   Notebook, 1963-1983

Kramers-Kronig and Bode relationships

Gould, Gordon

  (4 folders)

BOX 51   (7 folders)

BOX 52   Hearing aids

    (11 folders)

BOX 53   History of lasers

Hutchins, Carleen

Infinite monkey theorem

    (7 folders)

BOX 54   (3 folders)

Kahn, Leonard R.

  Miscellany

    (4 folders)

  Notebook

    (1 folder)

BOX 55   (3 folders)

Laser Sciences, Inc.

Newspaper clippings

Neural networks

Subject File, 1922-1996

Container	Contents

BOX 56   Nobel, Alfred
     Notes and correspondence
     Oppenheimer, J. Robert
     Pierce, John R.
     Positronium experiment *See also Oversize*
     Programs
     Publication, digital
     Printed matter
       (4 folders)

BOX 57   (1 folder)
     Russian scientists
       Chebotayev, V. P.
         (7 folders)

BOX 58   Miscellaneous
     Shackleton, Nicholas John
     Steinberger, J.
     Townes, Charles H.
     Wu, C., and Arthur L. Schawlow,
     Voynitch Manuscript
       (6 folders)

BOX 59-124   Speeches and Writings, circa 1954-1984
     Scientific papers, drafts of books, articles, research files, correspondence, photographs, illustrations, topical files, printed matter, and miscellaneous material.
     Arranged into writings by Bennett and by others and therein by type of writing and topic or subject.

BOX 59   By Bennett
     Articles and scientific papers
       (6 folders)
BOX 60   (7 folders)
BOX 61   (5 folders)
BOX 62   (5 folders)
BOX 63   (6 folders)
BOX 64   (10 folders)
BOX 65   (6 folders)
BOX 66   (2 folders)
     Books
     Atomic Gas Laser Transition Data: A Critical Evaluation (1979)
       Drawings
       Line Breadth
       Bibliography
       Plenum Publishing Co., 1979-1980
         (3 folders)
       Gases
         National Bureau of Standards tables
         Xenon tables

Container	Contents

	Oxygen table
	Neon table
	Iodine table
	Helium
	Krypton
BOX 67	Mercury
	Europium
	Germanium
	Helium
	Iodine
	Manganese
	Magnesium
	Neon
	Nitrogen
	Oxygen
	Phosphorus
	Samarium
	Selenium
	Silicon
	Sulfur
	Tellurium
	Ytterbium
	Argon
	Arsenic
BOX 68	Bromine
	Chlorine
	Numerical file
	R 1-R 70
	(4 folders)
BOX 69	R 71-R 120
	(7 folders)
BOX 70	R 121-R 309
	(8 folders)
BOX 71	R 310-R 400
	(3 folders)
	Miscellany
	(3 folders)
BOX 72	*Introduction to Computer Applications for Non-Science Students* (1976)
	Draft
	Miscellaneous material
	Computer data
	Newspaper clippings
	Inverting of matrices of high order
	Walsh functions
	Julesz, Bela
	DuPraw, Ernest J.
	Picture recognition

Container	Contents
	Pi, calculation to 100,000 decimals
	Fourth and fifth order monkeys
	Thomas, Lewis
BOX 73	Braille
	Miscellaneous material
	Gibbs, Josiah W.
	Hamlet, Act III
	Arabic
	Bach-monkey project
	Chaucer, Geoffrey
	Sun Wei
	Ramanu, Juan
BOX 74	Gadsby, by Ernest Vincent Wright, 50,000 word novel written without the letter e
	Dewey, Godfrey, on the relative frequency of English speech sounds
	The Art of the Fugue
	Vonnegut, Kurt
	Third order monkeys
	Chapter 4, figs.
	Chapter 3, March final original
	Hamlet, Act III correlation action
	Gettysburg Address
BOX 75	Language comparison
	The Gold Bug
	Bacon, Roger
	Entropy, fig.
	Chu, Otto
	Sensory World
	Hawaiian language
	Human brain
	Dolezel, Lubomir, and Richard W. Bailey, *Statistics and Style*
BOX 76	Entropy and anthropology
	The Physics of Gas Lasers (1977)
	(12 folders)
	Pictures at an Exhibition: An Historical Interpretation of the Mussorsky Work, 1980
	Drafts
	(1 folder)
BOX 77	(1 folder)
	Appendixes
	Translations
	Williams, Edward V.
	(2 folders)
	New York Times, letter to the editor
	Platt, Alexander
BOX 78	Con Mortius, musical score
	Baba Yaga, musical score

Container	Contents

Conclusion
Great Gate of Kiev, musical score
References
Frankenstein, Alfred
New York, N.Y., library trip
Miscellaneous material
Preface
Promenade, musical score
Gnomus, musical score
Promenade, musical score
Vecchio Castello, musical score
Promenade, musical score
Tuileries (children), musical score
Bydlo, musical score
Promenade, musical score
Ballet of Chicks, musical score
Two Jews, musical score

BOX 79   Missing Promenade, musical score
Limoges, musical score
Catacombae, musical score
Draft
Correspondence, 1980
Musical scores *See also Oversize*
Draft
Pianos

BOX 80   *Khovanshchina* (opera)
    (3 folders)
The Witches, musical score
Drafts
    (2 folders)
Reconstruction fragments
Photographs
    (3 folders)

BOX 81   (1 folder)
References
Musical Scores and text reduced by Kodak for publication
Miscellaneous material
    (2 folders)
Pictures at an Exhibition, for the piano, musical score

BOX 82   *Scientific and Engineering Problem-Solving with the Computer* (1976)
Draft
    (2 folders)
Prentice-Hall, working correspondence
Bell Telephone Laboratories
Permissions, chapters 1-8
Prentice-Hall, book
Correspondence, Prentice-Hall

Speeches and Writings, circa 1954-1984

Container	Contents

Speeches and Writings, circa 1954-1984

Container	Contents
Container	*Contents*

BOX 87   Energy
     (2 folders)
Tops
Computer book, correspondence
Super coil algorithm
Chapters 5-7
Reviews
AIDS
     (2 folders)
News clippings
Printed matter
Miscellaneous material

BOX 88   Applied Physics 207 course, computer lab notes
Bell Telephone Laboratories
Lecture 6, TTY plotting
Vectors, matrices
Lecture 4, matrices
Fox and Li, calculations
Miscellaneous material
Circuits
Oscillator
Nyquist, Harry
Black, Harold

BOX 89   Dolby
Pulse filters
Ultra short laser pulses
Miscellaneous material
Mass spectrometers
Tucker, V. A., The Energetic Cost of Moving About
Windmills
Gravity
Scientific papers
Brown, Robert
Apollo module re-entry

BOX 90   Mechanics notes
Routh, Edward J., *A Treatise on the Dynamics of a Particle*
Coach Routh
Babcock, H. W., The Topology of the Sun's Magnetic Field and 22-
     Year Cycle
New York Times, clippings
Draft lottery
Einstein, Albert
Brownian motion
RND
Corrections, chapter 7
Gypsy moth
Venereal disease

Speeches and Writings, circa 1954-1984

Container	Contents
	Random walk
	Optimization
	Newspaper clippings
	Fourier transforms
	Hopkins exp.
	Jean's harpsichord problem
BOX 91	Least square fits
	Miscellaneous material
	Michelson, A. A., *Light Waves and Their Uses*
	Well-tempered scale
	Nixon lecture
	Trumpet, Burkhardt, 1973
	Letters of permission
BOX 92	Correspondence
	Copyright, masks
	Book cover
	Illustrations
	Chapter 1
	Chapter 3
	Newspaper articles
	Eddington, Arthur
	Tillotson, John
	Cartoon
	Chapter 4
BOX 93	Voynich manuscript
	Dee, John
	Monkey cartoon
	Decree of Canopus
	A Method for Obtaining Digital Signatures and Public-Key Cryptosystems, Laboratory for Computer Science, Massachusetts Institute of Technology, Cambridge, Mass., 1977
	Newspaper articles
	Chapter 4
	Poe cipher no. 2
	Newspaper articles
	Chapter 5
	Chapter 6
	Diffusion
BOX 94	Prentice-Hall (2 folders)
	Chapter 5 (2 folders)
	Chapter 6
	Pattern recognition
	Solar flare problem
	Accelerators
	Least squares and optimization

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	Quadrapole mass filter
	Reentry
	Wavelets
	Chapter 8
	(2 folders)
	Meteor film
BOX 95	By others
	Articles and scientific papers
	Part I
	Abella, I. D.-Bagaev, S. N.
	(16 folders)
BOX 96	Bagman, I. L.-Bazhulin, P. A.
	(15 folders)
BOX 97	Beahn, T. J.-Beutler, H.
	(17 folders)
BOX 98	Biondi, M. Breit, G.
	(27 folders)
BOX 99	Brewer, R. G.-Coccoli, J. D.
	(29 folders)
BOX 100	Cochran, J. A.-de Bruin, T. L.
	(26 folders)
BOX 101	Deech, J. S.-Eriksson, K. B. S.
	(24 folders)
BOX 102	Esterowitz, L.-Franken, P. A.
	(22 folders)
BOX 103	Freed, C.-Hahn, E. L.
	(24 folders)
BOX 104	Haisma, J.-Herriott, D. R.
	(26 folders)
BOX 105	Herchbach, D. R.-Hughes, V. W.
	(18 folders)
BOX 106	Humphreys, C. J.-Kiefer, L. J.
	(20 folders)
BOX 107	Kiess, C. C.-Kronic, R. De L.
	(27 folders)
BOX 108	Krotkov, R. V.-Letokhov, V. S.
	(16 folders)
BOX 109	Levenson, M. D.-Malone, D. F.
	(26 folders)
BOX 110	Mandel, L.-McCumber, D. E.
	(19 folders)
BOX 111	McDowell, M. R. C.-Odintsov, A. I.
	(26 folders)
BOX 112	Offenberger, A. A.-Pollack, M. A.
	(25 folders)
BOX 113	Porto, S. P. S.-Sargent, M.
	(28 folders)

Container	Contents

Oversize, 1960-1989

Container	Contents
	Schematics, drawings, charts, photographs, maps (Container 38)
BOX OV 18	Positronium experiment
	Drawings and graphs, 1960 (Container 56)
BOX OV 19	Speeches and Writings

Books

Pictures at an Exhibition: An Historical Interpretation of the Mussorgsky Work, 1980

Musical scores (Container 79)

BOX OV 20	*Scientific and Engineering Problem-Solving with the Computer* (1976)
	Rosetta Stone
	Photographs and drawings (Container 83)
BOX OV 21	Voynich manuscript, photographic copy (Container 84)