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Guide to the Walter Baily Papers 1937-2005



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Descriptive Summary

Identifier	ICU.SPCL.BAILYW
Title	Baily, Walter. Papers
Date	1937-2005
Size	3.5 linear feet (8 boxes)
Repository	Special Collections Research Center University of Chicago Library 1100 East 57th Street Chicago, Illinois 60637 U.S.A.

Abstract Walter Lewis Baily Jr. (1930-2013) was a mathematician and professor at The University of Chicago. During his career, Baily made numerous contributions to algebraic geometry, the most important of which is known as the Baily-Borel Compactification. This collection contains academic material that dates from 1937 to 2005. The collection includes correspondence, published and unpublished articles, and handwritten notes by Walter Baily as well as lecture notes, published articles, typescripts, and manuscripts by other mathematicians.

Information on Use

Access

This collection is open for research with the exception of material in Series V. This series contains restricted correspondence. Correspondence in Folder 1 in Box 8 is restricted until the year 2033.

Citation

When quoting material from this collection, the preferred citation is: Baily, Walter. Papers, [Box #, Folder #], Special Collections Research Center, University of Chicago Library.

Biographical Note

Walter Lewis Baily Jr. was born in Waynesburg, Pennsylvania in 1930. He was born to Walter Lewis Baily Sr. and Emily I. Thompson. In January of 1962, Baily married Yaeko Iseki. They had a son, Walter Toshi Baily, in 1974. Throughout his life, Baily frequently traveled to Japan and Russian and was known to be fascinated by the culture of both countries. Baily passed away in Illinois in 2013.

Walter Baily received his Bachelor's degree from Massachusetts Institute of Technology in 1952. In 1952 he won the William Lowell Putnam Mathematical Competition. A year later, in

1953, Baily received his Master's degree from Princeton University. He continued to study at Princeton University under the guidance of Kunhiko Kodaira, and in 1955 he earned his Ph. D. in Mathematics. Baily began teaching at the University of Chicago in 1957; he retired in 2005. Walter Baily's most impactful contribution is known as the Baily-Borel Compactification-- a concept that he co-authored with Armand Borel. Baily was a member of the American Mathematical Society and the Mathematical Society of Japan.

Scope Note

The Walter Baily Papers are organized into five series: Series I: Correspondence; Series II: Writings; Series III: Writings by Others; Series IV: Teaching; Series V: Restricted. The documents within this collection pertain to Baily's academic interests and career. Materials date from 1937 to 2005.

Series I, Correspondence, contains letters and emails sent or received by Walter Baily from 1992 to 2004. The documents are grouped by subject matter and arranged chronologically.

Series II, Writings, contains published and unpublished articles, and handwritten notes by Walter Baily. Articles--including typescript drafts, offprints and photocopies--are arranged chronologically at the beginning of the series. This is followed by Baily's notes, the bulk of which are undated.

Series III, Writings by Others, contains unpublished and published scholarly material. The documents in this series make up the bulk of the collection. The dates range from 1937 to 2005. The materials include lecture notes, published articles, typescripts, and manuscripts. While the majority of the documents are in English, there are some works in French, German, Japanese, Spanish, and Russian. The series is arranged alphabetically by author's last name. In some cases, articles are grouped by subject matter, as determined by Baily.

Series IV, Teaching, contains material that relates to Baily's pedagogical practice at the University of Chicago. The series includes two typescripts of lecture notes, a midterm assignment accompanied by Baily's notes, and a series of notes regarding a course on Modular Functions. The only dated item in this series is from 1957.

Series V, Restricted, contains restricted correspondence and scholarly publications by Shoyu Nagoka. Folder 1 is restricted until the year 2033.

Related Resources

The following related resources are located in the Department of Special Collections:

<http://www.lib.uchicago.edu/e/spcl/select.html>

Putnam, Alfred L. Papers

University of Chicago. Department of Mathematics. Records

Subject Headings

- Baily, Walter L.
- Iyanaga, Sokichi, 1906-
- Oda, Takayuki, 1950-
- Siegel, C. L. (Carl Ludwig), 1896-1981
-
- Baily-Borel compactification
- Geometry, Algebraic

INVENTORY

Series I: Correspondence

Box 1

Folder 1

Yaroslavl conference on algebraic Geometry, 1992-1993

Box 1

Folder 2

Tankeev Serguei, 1994

Box 1

Folder 3

Ciprian Borcea, 2001-2005

Box 1

Folder 4

Mihnea Popa, 2004

Series II: Writings

Box 1

Folder 5

"On Hensel's lemma and exponential sums" -- Offprint, typed notes, and preface, circa 1968

Box 1

Folder 6

"Automorphic forms with Integral Fourier Coefficients" -- Notes and Typescript Draft, circa 1960-1970

Box 1

Folder 7

"On the Fourier Coefficients of Eisenstein Series," -- Annotated Typescript, circa 1970-1980

Box 1

Folder 8

KIT Mathematics Workshop Program (Algebra and Topology) -- Photocopy, 1986

Box 1

Folder 9

"Three Problems on an Exceptional Domain" -- Offprint, 1992

Box 1

Folder 10

"Three Problems on an Exceptional Domain" -- Typescript, 1994

Box 1

Folder 11

"An Exceptional Arithmetic Group and its Eisenstein Series" -- Typescript, undated

Box 1

Folder 12

Notes, undated

Box 1

Folder 13

Notes, undated

Box 1

Folder 14

Notes and photocopied equations [1/3], undated

Box 1

Folder 15

Notes and photocopied equations [2/3], undated

Box 1

Folder 16

Notes and photocopied equations [3/3], undated

Box 1

Folder 17

Notes, undated

Box 1

Folder 18

Notes [1/2], undated

Box 1

Folder 19

Notes [2/2], undated

Box 1

Folder 20

Notes [1/2], undated

Box 1

Folder 21

Notes [2/2], undated

Box 1

Folder 22

Notes - "Oda," undated

Box 1

Folder 23

Notes, undated

Box 1

Folder 24

Notes, undated

Box 1

Folder 25

Notes and photocopied equations [1/2], undated

Box 1

Folder 26

Notes and photocopied equations [2/2], undated

Box 1

Folder 27

Notes and legal pad, undated

Series III: Writings by Others

Box 2

Folder 1

Adrianov, Anatolli -- photocopied articles, 1976-1993

Box 2

Folder 2

Akizuki, Yasuo -- "An Introduction to Complex Manifolds" -- Typescript [1/3], 1967

Box 2

Folder 3

Akizuki, Yasuo -- "An Introduction to Complex Manifolds" -- Typescript [2/3], 1967

Box 2

Folder 4

Akizuki, Yasuo -- "An Introduction to Complex Manifolds" -- Typescript [3/3], 1967

Box 2

Folder 5

Andrianov, Fedor -- Photocopied articles, 1999

Box 2

Folder 6

Chow, Wei-Liang -- "Zur Algebraischen Geometrie IX," circa 1937

Box 2

Folder 7

Cossec, Francois -- Photocopied articles, 1983-1985

Box 2

Folder 8

Dolgachev, Igor -- "Integral Quadratic Forms: Application to Algebraic Geometry" --
Offprint, 1983

Box 2

Folder 9

Enrique Surfaces -- several scholarly articles by various authors, 1977-1993

Box 2

Folder 10

Faber, Carel -- "Prym Varieties of Triple Cyclic Covers," 1988

Box 2

Folder 11

Gelbart, Stephen and Sally, Paul -- "Intertwining Operators and Automorphic Forms for the Metaplectic Group" -- Typescript [1/6], 1974

Box 2

Folder 12

Gelbart, Stephen and Sally, Paul -- "Intertwining Operators and Automorphic Forms for the Metaplectic Group" -- Typescript [2/6], 1974

Box 2

Folder 13

Gelbart, Stephen and Sally, Paul -- "Intertwining Operators and Automorphic Forms for the Metaplectic Group" -- Typescript [3/6], 1974

Box 3

Folder 1

Gelbart, Stephen and Sally, Paul -- "Intertwining Operators and Automorphic Forms for the Metaplectic Group" -- Typescript [4/6], 1974

Box 3

Folder 2

Gelbart, Stephen and Sally, Paul -- "Intertwining Operators and Automorphic Forms for the Metaplectic Group" -- Typescript [5/6], 1974

Box 3

Folder 3

Gelbart, Stephen and Sally, Paul -- "Intertwining Operators and Automorphic Forms for the Metaplectic Group" -- Typescript [6/6], 1974

Box 3

Folder 4

Grauert, Hans and Riemenschneider, Oswald -- "Verschwindungssatze fur analytische Kohomologiegruppen auf Komplexen Raumen" -- Typescript, undated

Box 3

Folder 5

Grothendiek, Alexandre -- Séminaire Géométrique Algébrique de L'Institut des Hautes Etudes Scientifiques -- Typed Lecture Notes [1/6], 1960

Box 3

Folder 6

Grothendiek, Alexandre -- Séminaire Géométrique Algébrique de L'Institut des Hautes Etudes Scientifiques -- Typed Lecture Notes [2/6], 1960

Box 3

Folder 7

Grothendiek, Alexandre -- Séminaire Géométrique Algébrique de L'Institut des Hautes Etudes Scientifiques -- Typed Lecture Notes [3/6], 1961

Box 3

Folder 8

Grothendiek, Alexandre -- Séminaire Géométrique Algébrique de L'Institut des Hautes Etudes Scientifiques -- Typed Lecture Notes [4/6], 1961

Box 3

Folder 9

Grothendiek, Alexandre -- Séminaire Géométrique Algébrique de L'Institut des Hautes Etudes Scientifiques -- Typed Lecture Notes [5/6], 1961

Box 3

Folder 10

Grothendiek, Alexandre -- Séminaire Géométrique Algébrique de L'Institut des Hautes Etudes Scientifiques -- Typed Lecture Notes [6/6], 1962

Box 3

Folder 11

Hoschild, Gerhard -- "Representation Theory of Lie Algebra" -- Typed lecture notes, 1959

Box 3

Folder 12

Hunt, Bruce -- "Arithmetic Quotient of bounded symmetric domains" -- Preliminary and revised Typescript, 1992-1993

Box 3

Folder 13

Hunt, Bruce -- Several Photocopied articles, 1990-1994

Box 3

Folder 14

Igusa, Jun-Ici -- "On Certain Representations of Semi-simple Algebraic Groups" -- Typescript, undated

Box 4

Folder 1

Igusa, Jun-ichi -- "On the irreducibility of Schottky's Divisor" -- Typescript, undated

Box 4

Folder 2

Iskovskik, Vasilii Alekseevich -- Several Photocopied articles, 1978-1983

Box 4

Folder 3

Iyanaga, Shokichi -- "On the life and works of Teiji Takagi" -- Typescript, undated

Box 4

Folder 4

Iyanaga, Shokichi -- "Class Field Theory Notes" -- Typescript, 1961

Box 4

Folder 5

Iyanaga, Shokichi -- "Comments" -- Three typed drafts and Correspondence with Walter Baily, circa 1993

Box 4

Folder 6

Kaplansky, Irving -- "Theory Fields" -- Typescript, 1965

Box 4

Folder 7

Karel, Martein -- "Functional Equations of Certain P-adic Whittaker Functions" -- Typescript, 1979

Box 4

Folder 8

Katsurada, H., and Nagaoka, S. -- "On Some P-adic properties of Siegel-Eisenstein Series" -- Offprint, 2004

Box 4

Folder 9

Kawada, Yukiyoishi -- "Gauss and Elliptic Functions" -- Publication scan, 1986

Box 4

Folder 10

Kim, Henry H. -- Several Photocopied articles, circa 1990-2000

Box 4

Folder 11

Kodaira K., Nirenberg, L., and Spencer, C. -- "On the Existence of Deformation of Complex Analytic Structures" -- Publication scan, 1958

Box 4

Folder 12

Krieg, A., Minking, E., and Dern, T. -- Several Photocopied articles, 1991-2005

Box 4

Folder 13

Kuga, Michio -- Fiber Varieties over a Symmetric Space Whose Fiber are Abelian Varieties" -- Typed lecture notes, 1963-1964

Box 4

Folder 14

Matsushima, Yozo -- "On Automorphisms and Equivalences of Siegel Domains" -- Typescript, undated

Box 4

Folder 15

Morikawa, Hisasi -- "A Note on Holomorphic Vector Bundles over Complex Tori" -- Typescript photocopy, 1971

Box 4

Folder 16

Morita, Yasuo -- "Ihara's Conjectures and Moduli Spaces of Abelian Values" -- Typescript, circa 1980s

Box 5

Folder 1

Mumford, David -- "Varieties Defined by Quadratic Equations" -- Typed lecture notes, 1969

Box 5

Folder 2

Oda, Takayuki -- Several Photocopied articles and a note written by Walter Baily, circa 1984-2005

Box 5

Folder 3

Oda's remarks -- Several Photocopied articles by various authors and one page of notes, circa 1984-2000

Box 5

Folder 4

Pjateckii, Sapiro -- "Reduction of the Fields of Modular Functions and the Rings of Functions on P-Adic Manifolds" -- Typescript, undated

Box 5

Folder 5

Prym Maps -- Several Photocopied articles by various authors [1/4], 1977-1981

Box 5

Folder 6

Prym Maps -- Several Photocopied articles by various authors [2/4], 1977-1981

Box 5

Folder 7

Prym Maps -- Several Photocopied articles by various authors [3/4], 1977-1981

Box 5

Folder 8

Prym Maps -- Several Photocopied articles by various authors [4/4], 1977-1981

Box 5

Folder 9

Royden, H. L. -- "Remarks on Kobayashi Metric"-- Typescript, undated

Box 5

Folder 10

Reich, Daniel -- "P-Adic Function Spaces and the Theory of the Zeta Function" --
Dissertation manuscript, 1966

Box 5

Folder 11

Satake, Ichiro -- Several Photocopied articles, 1980-1991

Box 5

Folder 12

Siegel, Carl -- "Analytic Functions of Several Complex Variables" -- Typed lecture notes,
1948-1952

Box 5

Folder 13

Siegel, Carl -- "Lectures on Riemann Matrices" -- Typed lecture notes, 1963

Box 6

Folder 1

Siu, Yum-Tong -- "An Osgood Type Extension Theorem for Coherent Analytic Sheaves"
-- Typescript, undated

Box 6

Folder 2

Special Surfaces and Solids -- Several Photocopied articles by various authors, 1985-1994

Box 6

Folder 3

Taniguchi, Takashi -- "A Mean Value Theorem for Orders of Degree Zero Divisor Class
Groups of Quadratic Extensions Over a Functional Field" -- Offprint, 2004

Box 6

Folder 4

Thimm, Walter -- "Extension of Coherent Analytic Subsheaves" -- Typescript, undated

Box 6

Folder 5

Torelli Theorem -- Several Photocopied articles by various authors, 1982-1986

Box 6

Folder 6

Weil, Andre -- "Discontinuous Subgroups of Classical Groups" -- Typed lecture notes, 1958

Box 6

Folder 7

Unknown Author -- "Commutative Algebra" -- Typescripts (one clean copy, one edited), undated

Box 6

Folder 8

Unknown Author -- "Chapter Three: Octonion Planes" -- Typescript, undated

Box 6

Folder 9

Unknown Author -- "Ensembles Fondamentaux" -- Typescript, undated

Box 6

Folder 10

Unknown Author -- "Ensembles Fondamentaux: deuxième construction" -- Typescript photocopy, undated

Box 6

Folder 11

Unknown Author -- "Formes Automorphes" -- Typescript, undated

Box 6

Folder 12

Unknown Author -- "Studies of the Algebraic Geometrical properties of the Moduli Space" and "Main Results" -- Typescript, undated

Box 6

Folder 13

Unknown Author -- "Summary of results 4- and 9-dimensional families of K-3 Surfaces" -- Article Fax, 1994

Box 6

Folder 14

Unknown Author -- "The Space of Moduli of a Complex Surface" -- Scanned Publication, 1967

Box 6

Folder 15

Unknown Author -- "Value Distribution of Holomorphic Maps" -- Typescript, undated

Series IV: Teaching

Box 6

Folder 16

Several Complex Variables -- Typed Lecture Notes, 1957

Box 7

Folder 1

Several Complex Variables II -- Typed Lecture Notes, 1957

Box 7

Folder 2

Notes -- midterm assignment, notes, and photocopied equations [1/3], circa 1992

Box 7

Folder 3

Notes -- midterm assignment, notes, and photocopied equations [2/3], circa 1992

Box 7

Folder 4

Notes -- midterm assignment, notes, and photocopied equations [3/3], circa 1992

Box 7

Folder 5

Notes -- "Course on Modular Functions," undated

Series V: Restricted

Box 8

Folder 1

Nagoka, Shoyu -- Offprints, Photocopied Articles, Correspondence, and Letter of Recommendation, 1987-2003