# Department of Mathematics Oral History Project records, 1984-1985: Preliminary Finding Aid

## Summary Information

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<th>Call number:</th>
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<td>Princeton University Library. Special Collections. Seeley G. Mudd Manuscript Library. Princeton University Archives. 65 Olden Street Princeton, New Jersey 08540 USA</td>
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<tr>
<td>Abstract:</td>
<td>Princeton University's Department of Mathematics, founded in 1904 under the chairmanship of Henry Burchard Fine, saw the development of a unique mathematical community in the 1930s that was unlike any other in America before that time and perhaps afterwards, and that had important consequences for American mathematics. The collection consists of written transcripts of 42 interviews with surviving faculty and students of the mathematics community in Princeton in the 1930s, as well as recordings of the interviews, microfilm of interview transcripts, background information on the project, and an archived website that was created in 1999 to provide online access to the interview transcripts and related information.</td>
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Location: This collection is stored onsite at the Mudd Manuscript Library.
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Princeton University's Department of Mathematics, founded in 1904 under the chairmanship of Henry Burchard Fine, saw the flowering of a unique mathematical community in the 1930s sparked by the construction of a luxurious new building Fine Hall (now Jones Hall) designed to facilitate a real community of mathematicians engaged in research and closely linked with mathematical physicists in the attached Palmer physics laboratory. This community was unlike any other in America before that time and perhaps afterwards, and had important consequences for American mathematics. With the planning and founding of the Institute for Advanced Study at the beginning of the decade, which shared Fine Hall with the university mathematics department during the period 1933 to 1939, a very exciting environment developed which many students and faculty were loath to leave.

Background on the Oral History Project: The 1930s saw the flowering of a unique mathematical community at Princeton University with the construction of a luxurious new building Fine Hall (now Jones Hall) dedicated to the mathematician and Dean Harry Fine and designed to facilitate a real community of mathematicians engaged in research and closely linked with mathematical physicists in the attached Palmer physics laboratory to which it was connected and shared a joint math-physics library. This community was unlike any other in America before that time and perhaps afterwards, and had important consequences for American mathematics. With the planning and founding of the Institute for Advanced Study at the beginning of the decade, originally having only a mathematics department, which then shared Fine Hall with the university mathematics department as a single institute during the period 1933 to 1939, starting with three of the university's leading mathematicians joined by Einstein and Gödel and attracting many visitors, a very exciting environment developed which many students and faculty were loath to leave. Half century later in 1984, one of the original participants Albert Tucker, himself a former mathematics department chair at Princeton, was motivated by Princetonian historian of science Charles Gillispie to capture some of the personal reminiscences of the remaining survivors of the period on tape himself with the help of William Aspray, which were then transcribed and organized into a body of written transcripts by then graduate student Rik Nebeker.

Description

The collection consists of written transcripts of 42 interviews with surviving faculty and students of the mathematics community in Princeton in the 1930s, as well as recordings of the interviews, microfilm of interview transcripts, background information on the project, and an archived website that was created in 1999 to provide online access to the interview transcripts and related information. Most of the interview discussions focus on the institutional and social context of the development of an eminent mathematical research and graduate education center, and on the personalities and biographies of the individuals involved. Information about technical accomplishments within mathematics are only peripherally considered. Common topics include reasons for coming to Princeton, assessments of the educational and research programs, and the effects of the Depression and the European political situation on academic life. These interviews concern primarily the mathematics community in Princeton in the 1930s.
Access and Use

Access

LINKED DIGITAL CONTENT NOTE: Please note that some previously linked digital content is temporarily unavailable while the data is being migrated from an outdated access service. If you would like to access this content, please send a request to mudd@princeton.libanswers.com.

The collection is open for research use with the exception of the interview of William Flexner, which is closed until 2020.

Restrictions on Use and Copyright Information

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Other Finding Aid(s)

A website titled "The Princeton Mathematics Community in the 1930s: An Oral-History Project" that was created to provide online access to the transcripts has been preserved by the Internet Archive and is available at https://web.archive.org/web/20131024065717/http://www.princeton.edu/~mudd/finding_aids/mathoral/pm02.htm.

An index to names of individuals that are mentioned in the transcripts is available here: Index of Names.

Acquisition and Appraisal

Provenance and Acquisition

The University Archives received the analog portion of this collection (i.e. the paper records, microfilm and audiocassettes) in January 1986. The website "The Princeton Mathematics Community in the 1930s" was archived beginning in 2007.

Appraisal

No information on appraisal is available.

Processing and Other Information

Preferred Citation
Identification of specific item; Date (if known); Collection Title, Box and Folder Number; Special Collections, Princeton University Library.

Works Cited

Portions of the organizational history were borrowed from the archived website "The Princeton Mathematics Community in the 1930s" created by Robert Jantzen in 1999; this site is available in Series 2 of this finding aid.

Encoding


Descriptive Rules Used

Finding aid content adheres to that prescribed by Describing Archives: A Content Standard.

Subject Headings

- Alexander, James Waddell, 1888-
- Bochner, S. (Salomon), 1899-
- Eisenhart, Luther Pfahler, b. 1876.
- Morse, Marston, 1892-1977.
- Veblen, Oswald, 1880-1960.
- Von Neumann, John, 1903-1957.
- Institute for Advanced Study (Princeton, N.J.) . -- School of Mathematics.
- Princeton University. -- Dept. of Mathematics -- History.
- Princeton University. -- Faculty.
- Mathematicians -- New Jersey -- Princeton.
- Mathematics -- History -- New Jersey -- Princeton.
- Mathematics -- Study and teaching -- New Jersey -- Princeton.
- Mathematicians. -- Interviews.
- Web sites.
- Transcripts.
- Princeton University
Oral History Project Information, Interview Recordings, and Interview Transcripts, 1984-1985

Description: The collection consists of written transcripts of 42 interviews with surviving faculty and students of the mathematics community in Princeton in the 1930s. Also included in the collection are audio recordings of interviews, microfilm of interview transcripts, and background information on the project. Most of the interview discussions focus on the institutional and social context of the development of an eminent mathematical research and graduate education center, and on the personalities and biographies of the individuals involved. Information about technical accomplishments within mathematics are only peripherally considered. Common topics include reasons for coming to Princeton, assessments of the educational and research programs, and the effects of the Depression and the European political situation on academic life. These interviews concern primarily the mathematics community in Princeton in the 1930s.

Arrangement: Audio recordings and project information are followed by an alphabetical listing of interview transcripts.

Interview Recordings, 1984-1985

Description: Includes audio recordings of interviews on cassette tapes, as well as one set of microfilm of interview transcripts.

Project Information, 1984-1985

Description: Includes introductory text, abstracts of interviews, and table of contents.

Bardeen, John [Transcript no. 1], 1984 May 29

itemnumber: 1

Description: Bardeen recounts his early career: undergraduate education in electrical engineering, work in geophysics while employed by the Gulf Oil Company in Pittsburgh, the math Ph.D. program at Princeton, and Junior Fellow of the Society of Fellows at Harvard. He talks about Eugene Wigner, John Van Vleck, and John Slater as pioneers of solid-state physics. Bardeen describes his years at Princeton and the close relationship between the mathematics and physics departments in those years. The interviewer is William Aspray.

Bargmann, Valentine (with Albert Tucker)[Transcript no. 2], 1984 April 1

itemnumber: 2

Description: Bargmann tells of his immigration to the United States in 1937. He became a member of the Institute for Advanced Study and worked as an assistant to Einstein. Bargmann talks about the relationship between mathematicians and physicists at Princeton and elsewhere, and about
his wartime work. In 1948 he accepted a tenured position in the physics department at Princeton. Bargmann and Tucker describe conditions in Princeton in the 1930s and talk about von Neumann, Einstein, Milton White, and others. The interviewers are William Aspray and Albert Tucker.

Brown, George W. and Mood, Alexander M. [Transcript no. 3], 1984 July 25

Description: Brown and Mood explain why they chose to go to Princeton for graduate work and how they came to work for Sam Wilks. They give two different pictures of the social life of graduate students: Mood was married and his wife took part in Wyman Club activities; Brown was single and lived at the Graduate College. They talk about courses and faculty members—Albert Einstein, Kurt Gödel, Paul Erdos, and others—and about the difficulties of getting work having just earned a Ph.D. in statistics.

Cameron, Robert [Transcript no. 4], 1984 July 31

Description: Cameron tells of his coming to Princeton, as a National Research Council Fellow, after completing his Ph.D. at Cornell University in 1932 and working briefly at Brown University. He arrived in Princeton in January 1934 and stayed through the following academic year. Cameron talks about the social life in Princeton and tells a story about Einstein. The interviewer is William Aspray.

Church, Alonzo [Transcript no. 5], 1984 May 17

Description: Church mentions his two years as a National Research Fellow, the first year at Harvard, the second year at Gottingen and Amsterdam (where he worked with L.E.J. Brouwer). Church talks at greater length about his years as a graduate student at Princeton. He was especially influenced by Oswald Veblen. Church talks about his first years of teaching at Princeton and about his graduate students, including Steve Kleene, Barkley Rosser, John Kemeny, and Alan Turing. Church tells of his discussions with Kurt Gödel and of his work as editor of the Journal of Symbolic Logic.

Cohen, Leon W. (with Albert Tucker)[Transcript no. 6], 1984 April 12

Description: Cohen, who came to Princeton after completing his Ph. D. at the University of Michigan, talks about the two schools of topology whose leaders were, respectively, R.L. Moore and Oswald Veblen. Cohen describes working with Solomon Lefschetz and spending a summer with James Alexander in the French Alps. Cohen tells how he helped to find a position for the refugee mathematician Richard Brauer in 1931. Other people Cohen discusses are Emmy Noether, John Tukey, and Charles Fefferman. The interviewers are William Aspray and Albert Tucker.
Daly, Joseph and Eisenhart, Churchill [Transcript no. 7], 1984 July 10

Description: Daly describes the Princeton mathematics community in the fall of 1935, which was when he arrived in Princeton. Daly and Eisenhart discuss what research in statistics was going on at various universities at that time, and they talk at length about Sam Wilks. Other people they talk about are Harold Hotelling, Luther Eisenhart, H.L. Rietz, John Tukey, and Achison Duncan. Daly and Eisenhart tell something about the connection between economics and mathematical statistics in the 1930s. The interviewer is William Aspray.

Duren, William L., Jacobson, Nathan, and McShane, Edward J. Bardeen, John [Transcript no. 8], 1984 April 10

Description: Jacobson talks about the mathematics community in Fine Hall and especially about the following members of the University or the Institute: James Alexander, Solomon Lefschetz, Paul Alexandroff, Hermann Weyl, J.H.C. Whitehead, and Emmy Noether. McShane talks about conditions in Palmer Laboratory before the move to Fine Hall, about the large number of foreigners in Fine Hall, and about Noether, von Neumann, Einstein, and others. Duren tells of his year ('36-'37) at the Institute. He explains the influence Reinhold Baer, Marston Morse, and others had on him. Jacobson talks about how the math graduate students learned as much from each other as from the faculty. He describes the rivalry between two schools of topology: algebraic topology, as practised by Oswald Veblen at Princeton, and point-set topology, as practiced by R.L. Moore at Texas. The interviewer is Karen Parshall.

Eisenhart, Churchill [Transcript no. 9], 1984 July 10

Description: Churchill Eisenhart talks at some length about his father, Luther P. Eisenhart. He discusses also other members of the faculty at Princeton University and at the Institute for Advanced Study in the 1930s, including H.P. Robertson, Edward Condon, John von Neumann, Salomon Bochner, and H.F. Bohnenblust. Eisenhart tells something about the Eisenhart family and about the fact that his father left behind virtually no archival papers. The interviewer is William Aspray.

Flexner, William [Transcript no. 10], undated

Description: Flood describes his coming to Princeton in 1931 after earning a master's degree in number theory at the University of Nebraska. Flood
talks about faculty members: he was assistant to Luther Eisenhart, he took courses from James Alexander and H.P. Robertson, and he worked under J.H.M. Wedderburn for his Ph.D. Flood tells of graduate-student life, including poker playing, and how he came to switch to applied mathematics after completing his Ph.D. The interviewer is Albert Tucker.

Leon, Alfred and Foster, Else, Derrick, and Lehmer, Emma, and Morrey, Frances (with Albert Tucker)[Transcript no. 12], 1984 May 18

itemnumber: 12

Description: Alfred Foster talks about how he came to do his graduate work at Princeton, where he worked under Oswald Veblen and Alonzo Church, and about getting a job (at Berkeley, through the mediation of Jules Hildebrandt) after completion of the Ph.D. The Lehmers talk about the social life of the mathematical community at Princeton in the '30s, about economic conditions, and about the Veblens (who did much to promote social contact among the mathematicians and their families). Tucker, the Fosters, and Morrey contribute their recollections concerning these matters. Tucker describes Einstein's arrival in Princeton and talks about the period, '31-'32, when he (Tucker) was in charge of providing for afternoon tea at Fine Hall. Derrick Lehmer explains how he came to get a job at Princeton and talks about the people he worked with at Princeton, especially H.S. Vandiver and Hermann Weyl. Derrick Lehmer and Tucker talk about the mathematics library at Princeton. Morrey tells how she and her husband came to Princeton and talks about their stay in Princeton. The interviewers are Albert Tucker and William Aspray.

Giese, John [Transcript no. 13], 1984 October 13

itemnumber: 13

Description: Giese relates how he came to Princeton as a graduate student and how, in a course on Riemannian geometry taught by Luther Eisenhart, he found a thesis topic. Giese talks about his part-time work when he was a graduate student (clerical work for the Annals of Mathematics and teaching), about life at the Graduate College, about fellow graduate students (especially D. Ransom Whitney), and about Paul Erdos.

Givens, James Wallace, Taub, Abraham H., and Taylor, Angus E. (also Leon Henkin, with Albert Thomas)[Transcript no. 14], 1984 May 18

itemnumber: 14

Description: Henkin relates some of his experiences (with Hermann Weyl, Solomon Lefschetz, and others) as a graduate student at Princeton. Taylor tells how he came to spend one year (1937-38) at Princeton and talks about Salomon Bochner. Taub tells of his coming to Princeton for graduate work in 1931, just after Fine Hall was opened, and of his returning, to work with Oswald Veblen and then for defense-related work, in the early 1940s. Givens explains how he came to work with Veblen and talks at some length about him. Taub and Tucker add some of their recollections of Veblen. Givens tells
several anecdotes about Albert Einstein and J.H.M. Wedderburn. Givens, Taub, Taylor, and Tucker discuss American mathematics in general, also in the period before 1930, and particular mathematicians they got to know in the 1930s, such as H.P. Robertson and Luther Eisenhart. The interviewers are Albert Tucker and William Aspray.

Goldstine, Herman (with Albert Tucker)[Transcript no. 15], 1984 March 22
itemnumber: 15
Description: Goldstine tells how, through wartime work, he got to know Oswald Veblen. Goldstine talks about the group that worked at Aberdeen Proving Grounds during the war and about how he came to be in charge of Ballistic Research Laboratory project at the Moore School of Engineering at the University of Pennsylvania (the laboratory which built the ENIAC, an electronic computer). Goldstine gives his recollections and impressions of, especially, Veblen and von Neumann, and of G.A. Bliss, Enrico Fermi, Kurt Godel, Hermann Weyl, and others. The interviewers are Albert Tucker and Frederik Nebeker.

Greenwood, Robert E. (with Albert Tucker) [Transcript no. 16], 1984 July 12
itemnumber: 16
Description: Greenwood came to Princeton in 1936 to study mathematical physics, but soon switched to mathematics. He tells about life at the Graduate College, about courses, and about the two schools of topology (Princeton's algebraic and combinatorial topology and Texas's point-set topology). Greenwood talks about Salomon Bochner, with whom he did his thesis, and about Alan Turing, Maurice Pryce, and others.

Greenwood, Robert E. [Written Contribution], 1984 September 5
itemnumber: 17
Description: Greenwood describes graduate-student life at Princeton in the late Thirties, his fellow graduate students, their activities (especially at the Graduate College), and the professors (Luther P. Eisenhart, Paul Erdos, Witold Hurewicz, and others). Greenwood writes about the topology seminars at Princeton and about his oral examination (with Solomon Lefschetz) for the Ph.D. Finally, Greenwood describes the H. Petard spoof, a tongue-in-cheek article published in the American Mathematical Monthly in 1938.

Halperin, Israel (with Albert Tucker)[Transcript no. 18], 1984 May 25
itemnumber: 18
Description: After one year of graduate work at the University of Toronto, Halperin entered the Ph.D. program at Princeton in 1933. He talks about student life, about Fine Hall (especially the common room), and about his preliminary examinations for the Ph.D. He tells of working under John von Neumann for his thesis. Tucker and Halperin discuss mathematicians
at Princeton in the middle Thirties, including Norman Levinson, Nathan Jacobson, Hermann Weyl, and, especially, von Neumann. Tucker tells of working briefly on the von Neumann computer project just after World War II. Tucker and Halperin talk about the beginnings of game theory. The interviewer is Albert Tucker.

Henkin, Leon and Tucker, Albert [Transcript no. 19], 1984 May 18

Description: Tucker and Henkin talk about John Addison, who became Alonzo Church's son-in-law. As an undergraduate at Princeton Addison became committed to mathematics as a result of taking Church's course in logic. Tucker tells how he helped bring it about that Addison did graduate work at the University of Wisconsin with Steve Kleene. The interviewer is William Aspray.

Hoffman, Banesh (with Albert Tucker) [Transcript no. 20], 1984 October 13

Description: Hoffmann tells how he came to Princeton from Oxford in 1929 to become a graduate student and a research assistant to Oswald Veblen. Hoffmann and Tucker talk about Veblen as a teacher and as a researcher. Other people discussed are Ed Condon, T.Y. Thomas, John von Neumann, H.P. Robertson, and Max Newman. Hoffmann talks about his Ph.D. thesis. Tucker and Hoffmann discuss Fine Hall and compare the atmosphere of the mathematics department at Oxford with that at Princeton. Hoffman tells of working three years at Rochester after completing his Ph.D. and then returning to Princeton to become Albert Einstein's research assistant. The interviewers, in Princeton, New Jersey, are Albert Tucker and William Aspray.

Hooke, Robert [Written Contribution], 1984 December 30

Description: Hooke describes some classes he took as a graduate student, especially ones given by Salomon Bochner and J.H.M. Wedderburn. Hooke tells of satisfying the requirements for the Ph.D.-prelims and thesis (under Claude Chevalley) and about getting a job after earning the Ph.D.

Kemeny, John (with Albert Tucker) [Transcript no. 22], 1984 June 7

Description: Kemeny entered Princeton as an undergraduate in February 1943. He describes undergraduate mathematics courses, and he talks about Fine Hall, about fellow students (including Stan Ulam), and about contacts between the University's mathematics department and the School of Mathematics of the Institute for Advanced Study. Kemeny talks about John von Neumann and, at some length, Kurt Gödel, and Tucker talks about Alan Turing. Kemeny tells how he became interested in computing. The interviewer is Albert Tucker.
Kleene, Stephen and J. Barkley Rosser [Transcript no. 23], 1984 April 26

description: This is an interview with J. Barkley Rosser and Stephen C. Kleene in Madison, Wisconsin on 26 April 1984. The interviewer is William Aspray of the Charles Babbage Institute. Both Kleene and Rosser explain how they came to do graduate work at Princeton and how they came to be interested in logic. Both describe taking courses from Alonzo Church and Kurt Gödel. Kleene and Rosser discuss some of the other logicians doing work at that time, including W.V.O. Quine and Haskell Curry, and describe their Ph.D. research under Church. Kleene and Rosser talk about their own contributions and those of Church, E.L. Post, and Alan Turing to the clarification of the notion of computability. They talk, too, about the founding of the Journal of Symbolic Logic.

Levine, Jack (with Albert Tucker) [Transcript no. 24], 1984 October 11

description: Levine tells of coming to Princeton as a graduate student in 1930. He talks about the faculty, including J.H.M. Wedderburn, Einar Hille, Luther Eisenhart, Solomon Lefschetz, and especially T.Y. Thomas, under whom Levine did his Ph.D. thesis. Levine then discusses others, including H.F. Bohnenblust, Malcolm Robertson, and E.J. McShane. Levine describes Fine Hall and especially the various activities that went on in the common room. The interviewers are Albert Tucker and William Aspray at Princeton University.

Montgomery, Deane (with Albert Tucker) [Transcript no. 25], 1984 March 13

description: Montgomery, after completing his Ph.D. at the University of Iowa, spent a year at Harvard and then a year (1934-35) at Princeton. During World War II he returned to Princeton; he taught Army students and worked for a year with John von Neumann. In 1948 Montgomery became a permanent member, in 1951 a professor, of the Institute for Advanced Study. Montgomery describes the atmosphere at Princeton, and Tucker and Montgomery talk at length about Oswald Veblen, who played a large role in the building up of the mathematics department at the University and the main role in the establishing of the School of Mathematics at the Institute. Montgomery discusses the beginnings of the Institute. The interviewers are Albert Tucker and Frederik Nebeker.

Robertson, Malcolm [Transcript no. 26], 1984 October 11

description: Robertson describes his coming to Princeton in 1931, following two years of graduate work at the University of Toronto. He tells about student life in the Depression years and about the mathematics community centered on Fine Hall.
Singleton, Robert (with Albert Tucker) [Transcript no. 27], 1984 June 6
itemnumber: 27
Description: Singleton tells about the courses he took, as a graduate student, from Luther Eisenhart, Albert Einstein, Alonzo Church, and J. H. M. Wedderburn. Singleton mentions also his friendship with Israel Halperin and his serving as teaching assistant in a course taught by Albert Tucker. The interviewer is Albert Tucker.

Snapper, Ernst (with Albert Tucker) [Transcript no. 28], 1984 June 7
itemnumber: 28

Tucker, Albert, The Mathematics Community at Princeton Before 1930 [Transcript no. 29], 1984 April 10
itemnumber: 29
Description: Tucker begins by describing the American mathematics community as it was in about 1900, when Princeton awarded its first Ph.D. in mathematics. Tucker describes the building up of the Princeton mathematics department, which was to a considerable extent the result of efforts by Henry Burchard Fine. Tucker discusses, at least briefly, all those who were members of the mathematics faculty, including part-time instructors and research assistants, at the beginning of the 1930s. Tucker tells how various fellowships, such as the National Research Council Fellowships, the Procter Fellowships, and the Commonwealth Fellowships, brought young mathematicians from many places to Princeton. Tucker explains how Fine Hall (completed in 1931) came to be built and how the Institute for Advanced Study was established. The interviewer is William Aspray.

Tucker, Albert, Fine Hall [Transcript no. 30], 1984 April 11
itemnumber: 30
Description: Tucker tells how Fine Hall came to be built and about the opening ceremony in October 1931. Tucker describes first the library in Fine Hall, which was run by Margaret Shields, then the arrangement of offices in the building. He explains how the practice of having afternoon tea started, and he tells some of the things that went on during tea and at other times in the common room. Tucker describes also the Professors’ Lounge, the furnishings of the offices, and the two classrooms in Fine Hall. He tells of other mathematics buildings that were, at least in part, modeled on Fine Hall. The interviewer is William Aspray.

Tucker, Albert, The Educational Program at Princeton in the 1930s [Transcript no. 31], 1984 April 12
itemnumber: 31
Description: Tucker tells how Fine Hall came to be built and about the opening ceremony in October 1931. Tucker describes first the library in Fine Hall, which was run by Margaret Shields, then the arrangement of offices in the building. He explains how the practice of having afternoon tea started, and he tells some of the things that went on during tea and at other times in the common room. Tucker describes also the Professors’ Lounge, the furnishings of the offices, and the two classrooms in Fine Hall. He tells of other mathematics buildings that were, at least in part, modeled on Fine Hall. The interviewer is William Aspray.
itemnumber: 31

Description: Tucker talks about admission to the graduate program in mathematics, then about what was expected of the graduate students, including language requirements and the preliminary examination for the doctorate (usually taken in the second year of graduate study). Tucker describes how a graduate student would select a thesis topic and mentions the unusual thesis written by Marvin Minsky. Tucker then discusses the courses, seminars, and talks that took place in Fine Hall. He talks also about the teaching of undergraduates, including the writing, by each mathematics major, of a "junior paper" and a "senior thesis". The interviewer is William Aspray.

Tucker, Albert, Mathematical Journals and Communication [Transcript no. 32], 1984 April 13

itemnumber: 32

Description: Tucker tells how the journal Annals of Mathematics, which was begun in 1884 by a professor of mathematics at the University of Virginia, became a Princeton publication, with J.H.M. Wedderburn and later Solomon Lefschetz doing most of the editing. Tucker describes the editorial policies of Lefschetz. Other journals that Tucker talks about are Journal of Symbolic Logic and Annals of Mathematical Statistics. He describes in some detail—having had himself the leading role in the story—how Annals of Mathematical Studies came into being and how it developed. The interviewer is William Aspray.

Tucker, Albert, Areas of Mathematical Research at Princeton in the 1930s [Transcript no. 33], 1984 July 11

itemnumber: 33

Description: Tucker talks first about geometry, which at Princeton was the most active area of mathematical research. He talks about Luther Eisenhart and Oswald Veblen, both of whom had become interested in Riemannian geometry following the publication of Albert Einstein's general theory of relativity in 1916. Tucker tells something about the beginnings of topology as a recognized branch of mathematics, discussing, in particular, the work of Solomon Lefschetz and James Alexander. Tucker mentions some of the people doing work in analysis (especially H. F. Bohnenblust) and in algebra (especially J.H.M. Wedderburn). The work of Alonzo Church and Kurt Gödel in logic is discussed, as is the work of Sam Wilks in statistics. The interviewer is William Aspray.

Tucker, Albert, The Institute for Advanced Study in the 1930s [Transcript no. 34], 1984 July 12

itemnumber: 34

Description: Tucker describes the personalities and research interests of the permanent members of the Institute for Advanced Study in the 1930s. He
talks about John von Neumann, Hermann Weyl, Marston Morse, and Kurt Godel. Tucker mentions several visitors to the Institute, such as P.A.M. Dirac. The interviewer is William Aspray.

Tucker, Albert, The People at Princeton in the 1930s [Transcript no. 35], 1984 July 13

itemnumber: 35

Description: Tucker begins by talking about the professors, including assistant and associate professors, at Princeton in 1930. He tells most about James Alexander, Alonzo Church, Luther Eisenhart, Solomon Lefschetz, and H.P. Robertson. Other faculty members Tucker talks about at some length were Einar Hille, Morris Knebelman, T.Y. Thomas, and Oswald Veblen. The interviewer is William Aspray.

Tucker, Albert, Overview of Mathematics at Princeton in the 1930s [Transcript no. 36], 1984 October 8

itemnumber: 36

Description: In this interview Tucker tells what he regards to be the most important contributions of the Princeton mathematics community: the training of graduate students (to be productive researchers and to acquire what Tucker calls "mathematical statesmanship"), the production of mathematical publications (such as the Annals of Mathematics and the Annals of Mathematics Studies), post-doctoral training (some 50 National Research Fellows in the '20s and '30s choose to work at Princeton), and the research of faculty members (especially in geometry, topology, and logic). The interviewer is William Aspray.

Tucker, Albert, The Reputation of Princeton Mathematics [Transcript no. 37], 1984 October 9

itemnumber: 37

Description: Tucker talks about the history of the Princeton mathematics department, beginning with Woodrow Wilson's institution of the preceptor system in 1905. Tucker describes the work of Henry Burchard Fine in building up the mathematics department. Tucker talks about the importance of fellowships, especially the National Research Council Fellowships. He tells about the beginnings of the Institute for Advanced Study. The interviewer is William Aspray.

Tucker, Albert, Career, Part 1 [Transcript no. 38], 1975 September

itemnumber: 38

Description: Tucker talks about growing up as the son of a Methodist minister in Ontario, Canada, and about his education (4 different high schools, the University of Toronto, and Princeton University). He talks at some length about his years as a graduate student at Princeton and describes many of the faculty members, including Luther Eisenhart, Solomon Lefschetz, J.W.
Alexander, and Oswald Veblen. Tucker tells of the beginnings of the Institute for Advanced Study. The interviewer is T.P. Speed.

Tucker, Albert, Career, Part 2 [Transcript no. 39], 1975 September

itemnumber: 39

Description: Tucker tells of becoming interested in the history of topology, partly as a result of contact with Eric Temple Bell. Tucker describes his wartime work; he was associate director the Fire Control Research Project, and he was in charge of the mathematics portion of the Army Specialized Training Program at Princeton. He tells how he came to work in the fields of linear programming and game theory. He tells of his work editing the Annals of Mathematics Studies, and how he became an editor of the Princeton Mathematical Series. Tucker describes his research activities (nonlinear programming as well as game theory and linear programming) in the late 1940s and early 1950s. He talks also about administrative and committee work; in 1953 he became chairman of the Commission on Mathematics of the College Entrance Examination Board, and from 1961 to 1963 he was president of the Mathematical Association of America. He talks about other of his activities, including travel to Australia and New Zealand, in the 1950s and 1960s. The interview conducted by Terry Speed.

Tucker, Albert, Conversation with Albert Lewis [Transcript no. 40], 1979 April 9

itemnumber: 40

Description: Tucker talks about J.W. Alexander, his family background, his education, and his personality. Two other topologists that Tucker talks about are Solomon Lefschetz (who introduced the word 'topology' into English) and R.L. Moore (who visited Princeton in the Thirties). Tucker recounts his experiences with Marston Morse, first when Tucker was a post-doctoral fellow at Harvard, later after Morse accepted a position at the Institute for Advanced Study. Then Tucker describes Oswald Veblen and Alonzo Church, and discusses his interest in the history of matrix algebra. The interviewer is Albert Lewis.

Tukey, John (with Albert Tucker) [Transcript no. 41], 1984 April 11

itemnumber: 41

Description: Tukey tells something about his background and about how he came to do graduate work at Princeton. He earned a Ph.D. in topology. Tukey talks about his wartime work (at Fire Control Research in Princeton) and how as a result of this work statistics came to be his principal interest. He talks about fellow mathematicians, including Frederick Mosteller, Charles Winsor, Sam Wilks, and George Snedecor. Tukey talks also about the social atmosphere at the Graduate College and at Fine Hall, in the period when he was a graduate student. The interviewer is William Aspray, assisted by Albert Tucker.

Walker, Robert (with Albert Tucker) [Transcript no. 42], 1984 July 12
itemnumber: 42

Description: Walker tells of coming from Carnegie-Tech (now Carnegie-Mellon) to Princeton in 1930 to begin graduate work. He describes courses he took and the atmosphere of Fine Hall. Tucker and Walker talk about some fellow graduate students at the time, including John Vanderslice and Nathan Jacobson. Walker talks about his thesis research, in algebraic geometry with Solomon Lefschetz, and about Harald Bohr, Paul Alexandroff, and P.A.M. Dirac. The interviewers are Professor Albert Tucker and William Aspray, interviewing by telephone from Princeton.

Whitney, Hassler (with Albert Tucker) [Transcript no. 43], 1984 April 10

itemnumber: 43

Description: Whitney talks about his year in Princeton, '31-'32, as a National Research Council Fellow. In particular he talks about James W. Alexander and Solomon Lefschetz and about the social atmosphere in Fine Hall. Tucker contributes some of his recollections about Alexander and the dedication ceremony of Fine Hall, and he compares the mathematical community at Princeton with that at Harvard and with that at Chicago. Whitney tells how an incident with Chuck Morrey led to his (Whitney's) writing an important paper. The interviewers are Albert Tucker and William Aspray.

Wigner, Eugene (with Albert Tucker) [Transcript no. 44], 1984 April 12

itemnumber: 44

Description: Wigner begins by describing how he came to Princeton (in early 1931). He mentions some of his students, including Fred Seitz, John Bardeen, Conyers Herring, and Leonard Eisenbud. Wigner describes how he officially became a physicist; his Ph.D. was in chemical engineering. He tells of some of his friends and colleagues, including E.U. Condon, Paul Dirac, and, at some length, John von Neumann. The interviewer is William Aspray with the assistance of Albert Tucker.

Wylie, Shaun [Transcript no. 45], 1985 June 21

itemnumber: 45

Description: Wylie describes his background (his father was an Oxford don) and his education (Winchester, Oxford, and Princeton). He tells of the graduate program in mathematics at Princeton, and he talks about many of the faculty members, including Tracy Thomas, J.H.M. Wedderburn, Solomon Lefschetz, James Alexander, and especially Albert Tucker. Wylie tells of some things that went on at the Graduate College and in the common room of Fine Hall. The interviewer is Frederik Nebeker.

Oral History Project Archived Website, "The Princeton Mathematics Community in the 1930s", 1999
Arrangement: No arrangement action taken or arrangement information not recorded at the time of processing.

Description: Consists of an interactive website that displays project information and interview transcripts, and offers a name index.

Biography/History: In 1999, Robert Jantzen, a former Princeton undergraduate and Ph.D. advisee of one of the original participants in the Princeton mathematics community of the 1930s, Abraham H. Taub, stumbled upon the story leading up to and surrounding this decade by chance while using the new Fine Hall math-physics library to get background information on a peripheral story involving another famous Princeton mathematician and Dean of that period, Luther P. Eisenhart, and his connection with the application in relativistic cosmology by Gödel and Taub of the work of the Italian mathematician Luigi Bianchi. In order to make the Oral History Project available to the whole world, together with supporting documents telling the story surrounding it, Jantzen, also encouraged by Gillispie, volunteered to make this happen.