

**PSYCHOLOGY AT THE
UNIVERSITY OF MICHIGAN:**

1852-1950

VOLUME I

**THE HISTORY OF THE
DEPARTMENT OF PSYCHOLOGY**

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1968

PREFACE

When I was first invited to draw together a history of the Department of Psychology, I was flattered and, I must admit, interested. Among the memories of my graduate years in Ann Arbor are the many hours spent listening to some of the senior men like Professors Shepard and Brown recall the events, issues, and people that were Psychology at Michigan during those less hectic years before the Second World War. To provide a complete and systematic context for these matters was a challenge for me.

Over a period of almost one year, I interviewed and corresponded with present and former staff members; read personal, departmental and University papers; and have tried to put what I have learned into a “gestalt” that might pass for a history. The work seemed to fall conveniently into two parts which I have presented in two volumes.

Volume One can best be called a narrative of the history of psychology at the University of Michigan. It begins with the work carried out by the philosopher-presidents Tappan and Haven, whose work in mental philosophy was typical of the day. The narrative concludes with the reorganization of the department carried out after the Second World War by Donald G. Marquis. In this volume the persons who “were” psychology at Michigan are introduced with sufficient detail to carry the narrative along. The main biographical data, however, has been presented separately to compose Volume Two.

A historian’s search inevitably brings him in contact with persons whose gracious aid makes his work easier, exciting, and more complete. It is with sincere gratitude that I acknowledge the following persons whose cooperation made this work possible:

Professors Helen Peak and Edward L. Walker first approached me with the request to undertake the assignment. How they knew of my unspoken interest and desire to do such a project, I shall never know, but their interest and encouragement was all that was needed.

Professors Henry F. Adams, Carl R. Brown, Wilma Donahue, Norman R. F. Maier, Burton D. Thuma and Edward L. Walker each gave me several hours of their time and were gracious enough to allow these sessions to be recorded. Their recollections and comments make up the main data of this history.

I am especially grateful to Dr. Robert M. Warner, Director of the Michigan Historical Collections and his staff for their cooperation and suggestions during my search through the Pillsbury Papers and the University Records.

The following individuals very kindly provided the information that filled in many of the gaps in the events and lives of the persons who make up the narrative: Professor Lloyd Woodburne, Seattle, Washington; the late Forrest L. Dimmick, New Brunswick, New Jersey; Miss Rene Dirkan, Amherst College Library; Mr. Kimball C. Elkins, Harvard University Archives; Miss Elizabeth Findley, University of Oregon Library; Professor Adelbert Ames, San Diego, California; the late Sven Froeberg, Deland, Florida; Professor Clarence H. Graham, Columbia University; Professor Robert S. Harper, Knox College; Professor Ernest R. Helgard, Stanford University; Mr. Floyd S. Merritt, Amherst College Library; Miss Margaret F. Patty, University Library of the University of Tulsa; Professor John A.

Popplestone, Director, Archives of the History of American Psychology; Miss Mina Jean Waddell, Wichita State University Library; Mrs. Ruth Taylor Wallace, University of Pittsburgh Library.

My colleague at Flint College, Professor Edward T. Calver, read an earlier version of parts of this manuscript and made valuable suggestions.

And finally, my wife Jackie, who many years ago, dared suggest that I should consider writing such a history since it was obvious to her that it would be a work of love. But we didn't think that there was that much interest elsewhere to justify it. But after the invitation came, her unfailing interest, encouragement and advice were such as to make this work as much hers as mine.

Alfred C. Raphelson
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November, 1968

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CHAPTER ONE

The Period of the Philosophers: 1852-1896

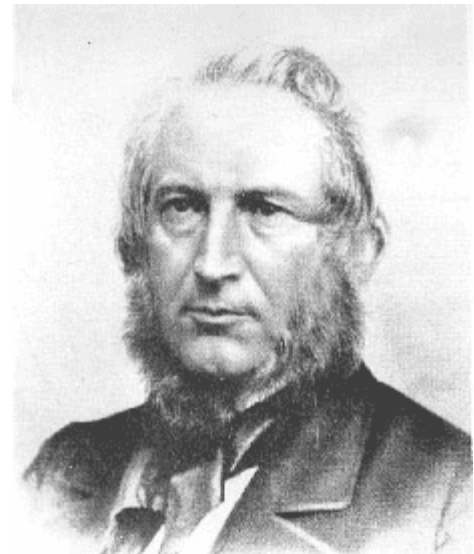
As was traditional with the discipline, the history of psychology at Michigan begins as a series of offerings in mental philosophy. These early courses were more often taught by clergy than by philosophers, although the first two men to offer this instruction were also presidents of the University: Henry P. Tappan and Erastus O. Haven.

Henry P. Tappan (1805-1881), the University's first president (1852-1863), graduated from Auburn Theological Seminary and served as an associate pastor of a Dutch Reform church in Schenectady, New York as well as pastor of a Congregational church in Pittsfield, Massachusetts. Previous to his coming to Michigan, he had been a professor of intellectual and moral philosophy at the University of the City of New York where he lectured and wrote extensively on mental philosophical topics.

During this pre-experimental period there were few works on any specialized psychological topics. Only the topic of "will" succeeded in drawing the specific attention of the mental philosophers. It was of special interest since it had a kind of conceptual status as a "springboard" for action for philosophers, theologians and psychologists alike.

Tappan was particularly engrossed with the subject of "will" and wrote three books about it. The first was a review and critique of Jonathan Edwards' (1703-1758) argument for the determination of will.¹ Edwards' position had evoked a storm of controversy which raged for a century following its publication in 1754.

Edwards assumed two mental faculties, reason and affection with the latter experiencing emotion, passion, desires and choice. He argued further that desire and will were identical. One never willed anything incongruent with his desires or desired anything incongruent with his will. Man was free to do what he desired, but he was not free to desire what he desired. Will, therefore, was completely dependent upon the desires. There appeared to be no escape from Edwards' conclusion that choice was as determined as desire as long as the identity of the two terms was maintained. The only hope appeared to be in making a distinction between the two concepts such that desire would be



Henry P. Tappan (From *History of the University of Michigan* by Burke A. Hinsdale, p. 42)

¹ Tappan, Henry P., *Review of Edwards' Inquiry into the Freedom of the Will*, (New York: Wiley and Putnam, 1839), 300 pp.

determined but not will. The distinction was made in Germany by Kant and popularized in America by Tappan in his book, *The Doctrine of the Will Determined by an Appeal to Consciousness*.²

In this work Tappan examined the content of consciousness for evidence pertinent to the will-desire distinction . . .

. . . Personality cannot be conceived without freedom. What it is affirmed I do, the I is truly and properly the in its doing, . . . what I cannot govern, regulate, direct, compel, resist, modify, or appropriate by will, cannot be mine, but must be his or theirs who do stand to it in this relation. Lands, houses and chattel are mine, because I have appropriated them by my will or because I regulate or control them by my will. . .³

Tappan found that in consciousness the laws of reason were immutable, i.e., operate similarly in all people. But this was not true in the case of will.

. . . Here is a power which, while the whole field of its possible determination is contemplated, retains its absolute contingency and freedom. There are for it no uniform and general laws necessarily governing its determination for it governs itself and can violate all law. From the reason it is easy to decide how the will ought to act; and for the sensitivity how it would be most pleasing to act, but it is under no compulsion from one or the other; whatever it does, it does from its own inherent force, in entire freedom. Every volition is its own immediate creation.⁴

Tappan extended the same kind of argument in still a third book.⁵ These critiques were very successful in dealing a deathblow to the cogency of Edwards' argument and re-establishing the belief in free-will as the basis for moral responsibility and religion.

Tappan became president of the University of Michigan in 1852. He also held a professorship in philosophy and offered work in his kind of mental philosophy which was taken by the students in their third and fourth years. Tappan's eleven years as the first president of the University were enlightened but stormy ones. His term ended in 1863.

Erastus O. Haven (1820-1888) succeeded Tappan in the presidency. After his graduation from Wesleyan University, Haven held teaching positions in various New England academies and became an active member of the Methodist Episcopal Church. At different times in his career he held the pastorage of various churches, became editor of a church newspaper and in the years after his resignation from the University was elected bishop responsible for the pastoral supervision of the entire Pacific Coast area.

² Tappan, Henry P., *The Doctrine of The Will Determined by An Appeal to Consciousness*. (New York: Wiley and Putnam, 1840). 348 pp.

³ *Ibid.*, p. 175.

⁴ *Ibid.*, p. 179.

⁵ Tappan, Henry P., *The Doctrine of the Will Applied to Moral Agency and Responsibility*, (New York: Wiley and Putnam, 1841).

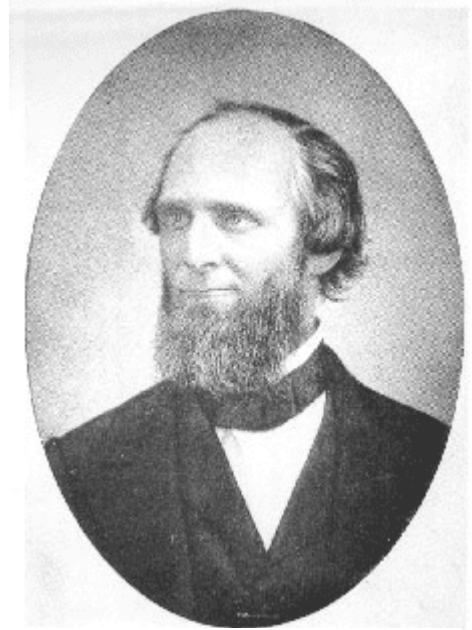
His association with the University began in 1852 when he was appointed professor of Latin languages and literature. After two years he was transferred to a chair of history and English literature. Assuming the presidency in 1863, he also held the duties of professor of rhetoric and English literature and lectured on logic, political economy, and mental and moral philosophy. A typical Haven lecture on the latter subject was his baccalaureate address in 1867 entitled, "Increased Mental Activity of the Age: Its Causes and Demands."

Haven was followed as professor of mental philosophy by a colorful, dynamic clergyman, Benjamin F. Cocker (1821-1883). Cocker was born in Yorkshire, England and worked there as a manufacturer of wool. He emigrated to Australia in 1856 because of illness and established a prosperous business in Melbourne. The financial panic of 1856 almost ruined him but he managed to save enough of his assets to buy a small trading ship on which he sailed to New Zealand and the Fiji and Friendly Islands. On the way back to Australia he was shipwrecked off of Tonga, an island inhabited by savages, where he had several close calls with death. He and his crew were rescued and taken back to Australia. With his fortune now completely gone, Cocker decided to emigrate to the United States. His destination was Adrian, Michigan where a Methodist clergyman lived whose acquaintance he had made in Australia and who had promised him aid.

Cocker reached Michigan utterly destitute. In his early life, he had been a Methodist circuit preacher in Yorkshire and had enjoyed the work. So Cocker decided to become a clergyman. In 1857 he was ordained by the Methodist Episcopal Church and assigned to a small country parish in Palmyra, Michigan. He quickly established a reputation for eloquence and was successively called to some of the more important churches in the Detroit Methodist Conference. He became well known for his contributions to church publications as well as his power of metaphysical reasoning. When the chair of mental philosophy at the University fell vacant upon Haven's resignation in 1869, Cocker was called to fill it.

Until his death in 1883, the Rev. Mr. Cocker offered a course in psychology every fall semester as well as an advanced course in speculative philosophy which embraced rational cosmology and rational psychology. Though the Rev. Mr. Cocker was an interesting, dynamic person, he was not a particularly able scholar having had no formal university training. He made a great effort to compensate for his shortcomings by extensive reading.

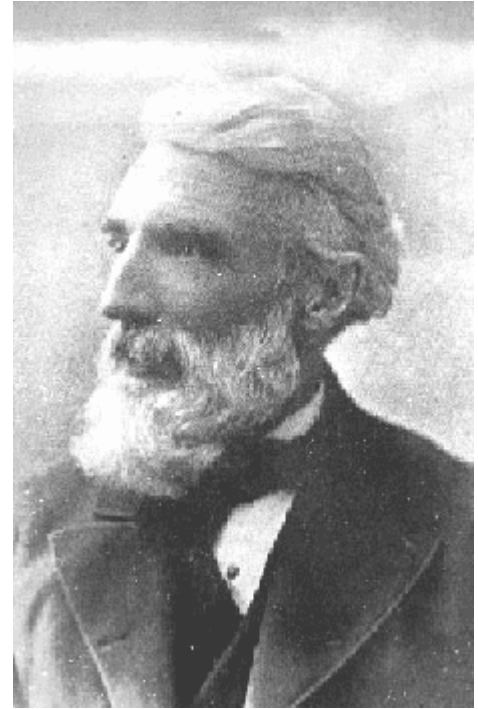
Cocker regarded psychology as the fundamental study in as much as it dealt with the mental principles which underlie logic and law. He devoted the entire first semester to this study alone. In the second semester he offered the history of philosophy, applied logic and ethics together with the relationship of these studies to the evidence for Christian principles.



Erastus O. Haven (From *History of the University of Michigan* by Burke A. Hinsdale, p. 52)

The Rev. Mr. Cocker approached his instructional duties with a vigor and enthusiasm that appeared to produce an inspiring effect among the thousand or more students who made up the University in those days. He was remembered by one alumnus as the dearest and best loved old man the University ever had, tolerant of everybody and everything. Another former student remembered the class experience with striking clarity over thirty years later. . .

. . . Into room 21, his classes used to come noisily and confidently. Often they left as the devout left a sanctuary. Men have not forgotten their surprise in finding that they had tiptoed their way out of a classroom. . . His supreme purpose never seemed to be in the line of discovering and collating facts. His position was to apply to life facts of value and ideas of worth. He touched human life with a reverent hand. Everything was subordinate to it. He deepened the sense of it in his pupils. They wondered what kind of psychology he was teaching. . . It seemed to them very like religion. And it was. He did have a distinct philosophical system, but it was the handmaiden of religion. He seems widely read in contemporary science, but it was in the interest of life. He loved to make himself at home in the demiborder land between metaphysics and theology but in the interest of theology.⁶



Benjamin F. Cocker (From *History of the University of Michigan* by Burke A. Hinsdale, p. 59)

In 1881 Cocker became professor of psychology, speculative philosophy and the history of religion. George S. Morris (1840-1889) was made professor of ethics, logic and the history of philosophy and a new, more academic spirit began to infuse the teaching of philosophy.

Morris had attended Dartmouth College graduating in 1861. At the outbreak of the Civil War he joined the Sixteenth Vermont Regiment and served until 1863. Upon discharge Morris took a position for one year as tutor of Greek and mathematics at Dartmouth. In 1864 he entered the Union Theological Seminary but while there decided upon a career in philosophy rather than the ministry. He traveled to Europe where he studied for several years becoming greatly influenced by German Idealism (especially Kant, Hegel and Schelling) as well as the impact of the theory of evolution on philosophy. Although he did not take a doctorate degree there, his articles and translation of Ueberweg's *History of Philosophy* (1872) earned him a reputation as a philosopher.

⁶ Stalker, Arthur D., "Portrait of Benjamin F. Cocker", *Michigan Alumnus*, 1907, p. 1034.

Henry S. Frieze, who was acting president at Michigan after Haven's resignation and before the appointment of President Angell, called Morris to Ann Arbor in 1870 with an offer to head the newly organized Department of Modern Languages and Literature. It was not until 1881 that Morris received the appointment in philosophy despite his international reputation as a philosopher. The circumstances of this latter appointment are of interest because of their ultimate effect upon psychology at the national level as well as at Michigan.

In the late 1870s, the newly-organized Johns Hopkins University was seeking someone to add to its philosophy staff. The Trustees, after looking in vain toward Europe, invited three Americans to lecture in Baltimore on alternate semesters. The invitations went to Charles S. Peirce, G. Stanley Hall and Morris. During the spring term of 1878 Morris gave twenty lectures on the history of philosophy. The next spring he returned to give ten lectures on historical and practical ethics. So great was his success that he was offered a three-year appointment as a lecturer on the condition that he would remain at Hopkins at least one semester every year. He was to alternate with Peirce who would lecture on logic and Hall who would offer the work in psychology. Hall had just returned from Germany where he had studied with Wundt and Helmholtz.

Morris resigned his Michigan professorship in language and literature in June 1880. Although he continued to reside in Ann Arbor, he was not on the Michigan faculty during 1880-1881. Realizing that a scholar had been lost, Michigan offered Morris a chair in philosophy on his own terms -- that he be permitted to spend the first semester each year at Johns Hopkins and the second at Michigan.

Morris taught at Hopkins for eight semesters although during that time he spent no more than a total of eighteen months in Baltimore. He appeared to enjoy the arrangement and attempted to make his Hopkins visits more than a mere series of lectures. He strived for a guided study series with organized problems and a fixed and constant nucleus of students. The students did not disappoint him. Among the group of men he found and influenced were Joseph Jastrow, James McKeen Cattell, H. H. Donaldson, E. C. Sanford, Fred M. Taylor and John Dewey.

At Hopkins, Morris was perceived as being intelligent, catholic, well-read, accessible and cooperative. But he was uncomfortable with the philosophical climate he found there. Morris was a Hegelian Idealist with a strong religious interest and did not fit in with the "exaggerated scientism" he found there. The students were well-informed about the physiological and experimental side of psychology as Hall presented it and were impressed with this orientation.

Morris, on the other hand, saw philosophy's function in the University as "acting as a liberalizing agency, anticipating and so preventing the confessedly illiberal and narrowing tendencies of extreme specialism and to serve the public aims of the University by producing leaders capable of



George S. Morris (From *History of the University of Michigan* by Burke A. Hinsdale, p. 60)

recognizing the true ideals and intelligently directing the nation's energies to their accomplishment."⁷ He was not convinced that an empirical psychology had a claim to be called philosophy. But his personality was not forceful enough to hold its own, in face of the combined pragmatic and empirical orientations of Peirce and Hall.

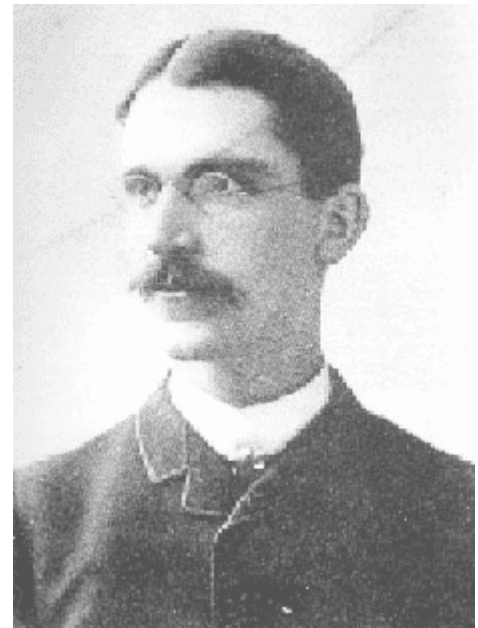
In 1884 the Hopkins trustees ended the part-time lecturer arrangement by appointing Hall as professor of psychology and pedagogy. Cocker had died the year before, so Morris accepted the complete charge of the department and began to devote his full time to philosophy at Michigan. He wrote one of his most brilliant students at Hopkins and offered him an instructorship at Michigan at the salary of \$900.00. John Dewey (1859-1952) accepted and together they proceeded to change the orientation and scope of the instruction of both philosophy and psychology at Michigan.

It was not altogether surprising that Dewey accepted Morris' offer. He had been greatly influenced by his work with Morris. The experience had led the young man into German Idealism, and despite his later deviations, had left an indelible mark on his thought.⁸ Dewey himself once remarked that regardless of their differences, he would be happy to believe that Morris' teaching had an enduring influence on him.

But Dewey was also greatly impressed with Hall's argument that while psychology and philosophy were intimately related, psychology had to be worked out on the basis of the new experimental approach that Hall had seen in Leipzig and Berlin. Experiment was to replace the older idealistic and rational study. At Michigan Dewey devoted his full energies to developing this new approach.

During his first semester (1884-1885), Dewey offered a course in empirical psychology using Sully's *Outline of Psychology*, special topics in physiological, comparative, and morbid psychology, and a third course covering psychology and philosophy with special reference to the history of philosophy in Great Britain. In subsequent semesters he introduced courses in experimental, speculative and the history of psychology. Sully's text was soon replaced by a printed syllabus which was his own digest of the new field. This work, published in 1887 under the title *Psychology*, was Dewey's first book and became the standard text at Michigan for the next ten years.

It is in many ways a curious book which attempts to integrate the older idealistic epistemology with the newer positivistic developments in psychological research. The twenty-six year old Dewey was groping and in this book is discovered straddling the two positions. Introspection is the preferred method. The works of



John Dewey, circa 1885 (From *History of the University of Michigan* by Burke A. Hinsdale, p. 283)

⁷ Hawkins, Hugh, *Pioneer: A History of The Johns Hopkins University, 1874-1889*, (Ithaca, New York: Cornell University Press, 1960), p. 199.

⁸ Dewey's doctoral dissertation (1884) was entitled *The Psychology of Kant*.

Helmholtz, Hering, Wundt, Volkman, and Stumpf are all cited. Sensation is stressed, reaction patterns are described, and the concept of habit is extensively employed. There are discussions of other adaptive mechanisms, e.g., will, feeling, intuition, which became important features of the functional psychology that was still a dozen years away. For these reasons perhaps Brett was correct when he described the text as, "the first gray dawn of that tomorrow for which the psychology of the American colleges were waiting."

It was only a "first gray dawn" for the text fell back on an older metaphysics to support the new science. This strange mixture of idealism and empiricism gave it an uncomfortably disorganized appearance. Mind, for example, is denied existence as an entity but is mentioned as "causing attention." The units of mental life had to be accounted for and Dewey saw no way except to evoke the activity of the self defined somewhat vaguely as "the activity of synthesis upon sensation." Sensation itself is the "elementary consciousness which arises from the reaction of the soul upon a nervous impulse conducted to the brain from the affection of some sensory nerve-ending by a physical stimulus."⁹ Every "concrete act of knowledge involves an intuition of God for it involves a unity of the real and the ideal, of the objective and the subjective."¹⁰

It was not until he read James' *Principles of Psychology* that Dewey was "helped" from the fence on which he perched with this book. So certain was James in his endorsement of the positivism of the new psychology, that Dewey felt encouraged to abandon the idealistic psychology for good in favor of a more empirical and objective functionalism.

During his first year in Ann Arbor, Dewey boarded at a house in which two coeds had rooms. One of these girls was a Michigan native by the name of Harriet Alice Chipman whom Dewey married in 1886 at her home in Fenton, Michigan.

In 1888 Dewey accepted a position at the University of Minnesota, and his place at Michigan was taken by Williston S. Hough (d. 1912) who continued the psychological program that Dewey began by offering courses in empirical and physiological psychology.¹¹ Dewey's association with the University, however, was only interrupted. During a spring vacation in 1889 Morris, who had gone camping with his son at a nearby lake, caught pneumonia and died. Dewey was immediately recalled and made professor and head of the Department of Philosophy. In the five years he remained at Michigan Dewey devoted his time to philosophy and his growing interest in education. He never again taught psychology but he continued to support it.

At Michigan, Dewey found ample stimulation for his new interest. It had one of the earliest chairs in education in the country. A regular program of statewide high school visitations by faculty members had been established and Dewey made many trips to determine the preparation given college-bound students. As an early member of the Schoolmasters Club of Michigan he cooperated with its

⁹ Dewey, John, *Psychology*, (New York: Harper and Bros., 1887), p. 27.

¹⁰ Ibid, p. 244.

¹¹ Hough's will created a trust fund under the terms of which the income for life was paid to his widow and upon her death (in 1966) was payable to the Regents of the University of Michigan to establish a fellowship in Psychology and ethics. The amount involved was about \$17,000 which was in an endowment fund the interest from which was used for the fellowship.

members in bringing secondary and higher educational practices nearer together. These experiences led him to study the educative process from the standpoint of psychology. He frequently spoke throughout the state at teachers' meetings on such topics as attention, memory, imagination, habit and thinking in relation to teaching and study. In his *Applied Psychology* (1839), written with J. A. McLellan of the University of Toronto, he presented these concepts in a practical manner that appeared appropriate to the problems of education.

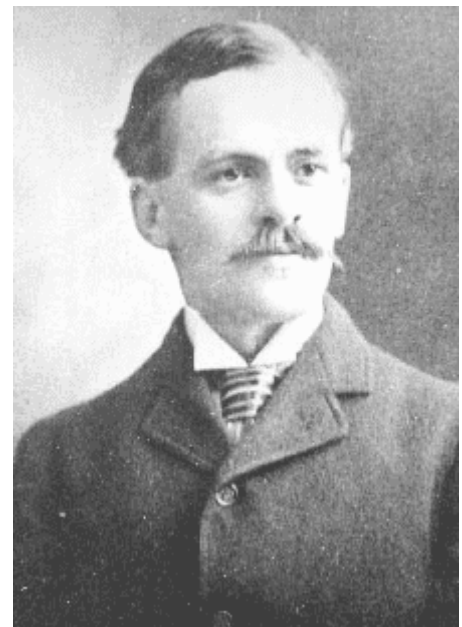
Dewey, as head of the department, did not neglect the psychological tradition he had begun. Though no longer interested in teaching these subjects, he did bring in competent people to handle their instruction. When Dewey returned to Ann Arbor, Hough left to replace him at Minnesota. Dewey engaged James H. Tufts (1862-1942) to offer the psychology courses. Tufts was not specifically trained in psychology and was, as a matter of fact, to make his reputation in philosophy through his translation of Windelband's influential *History of Philosophy* (1893). Originally a New Englander, Tufts completed undergraduate work at Amherst (A.B. 1884) and Yale (B.D. 1889) and later (1892) took a doctorate at Freiburg. During the two years he was in Ann Arbor, the rugged, solid Tufts formed a deep personal and intellectual friendship with Dewey that lasted throughout their lives.

During the academic years 1889-90 and 1890-91 Tufts offered the courses in general and physiological psychology. At that time there were only eight psychology laboratories in America. In 1890 Dewey encouraged Tufts to establish one at Michigan. He managed to collect some pieces of equipment and set them up on the top floor of the old medical building. Three hours a week were devoted to elementary studies of reaction time, color sense, Weber's Law, and physiological exercises. One of his students having this laboratory experience was James R. Angell, son of the University's president. Angell received his undergraduate and master's training at Michigan with Dewey and Tufts and credited them with causing much of his intellectual awakening.

Tufts left in 1891 for the newly established University of Chicago before the laboratory work became part of the regular curriculum. But the laboratory he created in 1890 marks the inauguration of experimental activity at the University of Michigan.

It was necessary to replace Tufts with two instructors in order to handle the increasing number of students enrolled in the philosophy and psychology courses. Alfred H. Lloyd (1864-1927) and George H. Mead (1863-1931) were engaged with Mead having the prime responsibility for the psychology offerings. Both Lloyd and Mead had studied at Harvard under William James and Josiah Royce. Mead had, in fact, served for over a year as tutor to the James children.

Mead had been reared in the orthodox tradition of his minister father who had descended from a long line of Puritan clergymen. As a young man, however, he had been sufficiently influenced by the contemporary naturalistic thought to have succeeded in refuting the dogma of the church to his own satisfaction. In the fall of 1888 he went to Germany to study at



Alfred H. Lloyd (From *History of the University of Michigan* by Burke A. Hinsdale, p. 331)

Leipzig and Berlin. While at Leipzig, Mead met G. Stanley Hall who convinced the young man that physiological psychology was the direction in which he should move. Mead agreed that he should make a specialty of this area.

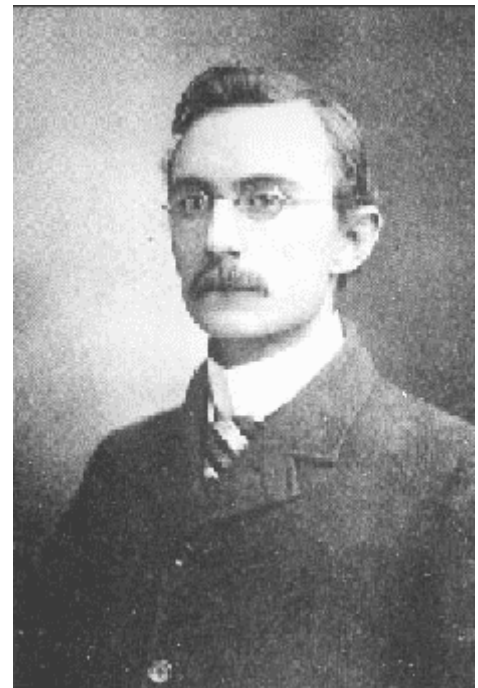
...because in America. . .poor bated, unhappy Christianity, trembling for its life, claps the gag into the mouth of Free Thought and says, 'Hush, hush, not a word, or nobody will believe in me any more.' He (Mead) thinks it would be hard for him to get a chance to utter any ultimate philosophical opinions savoring of independence. In Physiological Psychology, on the other hand, he has a harmless territory in which he can work quietly without drawing down upon himself the anathema and excommunication of all-potent Evangelicism.¹²

Mead was ready and willing, therefore, to accept Dewey's offer to give the work in physiological psychology. A single-unit room (Room One) was obtained on the first floor of the south wing of University Hall where Mead carried out laboratory instruction for three years. Dewey was quite enthusiastic about this work and informed the students that all introspective psychology had come to an end. The new psychology was what Mead was offering. The work, however, was not that exciting. One student, recalling the experience years later, remembered only the tedious routine of dissecting frogs. Tradition has associated only one "empirical" outcome with Mead's laboratory. While preparing and shellacking a brain, Mead allowed it to catch fire which, in turn, spread to the laboratory walls before being brought under control.

In 1894 Dewey moved to the University of Chicago. One of the reasons for accepting the chairmanship was that work in pedagogy was included in the department, and that made his assignment compatible with the three major interests he had developed at Michigan. In addition, he could renew his relationship with Tufts. Mead agreed to move with him. The next year he called James R. Angell to Chicago to direct the psychological laboratory. These former Michigan men formed the nucleus of the famous "Chicago School in Psychology and Philosophy," that gave that young university such an illustrious beginning.

After Dewey left, the work in psychology was subordinated to philosophy. Lloyd was appointed acting chairman, a position he held for two years. He brought in several new men to continue the psychology instruction.

George Rebec (1868-19) had been an instructor in English for two years when Lloyd offered him a similar position in philosophy with some responsibility for beginning work in psychology. Rebec, an unusually enthusiastic and



George Rebec (From *History of the University of Michigan* by Burke A. Hinsdale, p. 336)

¹² Letter from Henry Northrup Castle, February, 1889, Leipzig, Germany. Quoted in, Wallace, David, "Reflections on the Education of George Herbert Mead," *American Journal of Sociology*, 72, 1967, 406.

dramatic lecturer, was primarily interested in aesthetics. His vivid style and interest in literature attracted hundreds of students from the various language departments into his courses. He remained in the philosophy department until 1909 when he resigned to take up literary work.¹³

During Lloyd's chairmanship two other men were brought in to take charge of the work in psychology. For the year 1894-95 the Reverend Dr. John Bigham (1864-1940) served as an instructor. Bigham had received his doctorate under Hugo Munsterberg of Harvard and was specifically engaged to do the advanced work in psychology. He was apparently a man of great mechanical skill and was very successful in extending the laboratory work begun by Tufts and Mead.

Under Bigham's direction the laboratory was expanded to two rooms and a supply of apparatus considered unusual for that time was acquired. One room was equipped with a 500 volt motor which ran a color mixer and a kymograph. The other room contained a Hipp chronoscope, large models of the brain and sense organs, as well as instruments for optical, acoustical, temperature and tactual experiments. Bigham offered two year-long courses in experimental work. One was for beginners who were introduced to the subject through individual and group experiments. The other course was for advanced students who were interested in carrying out original investigations. The laboratory record book for that year indicates that six students elected the beginning course and nine students the advanced course. Research was conducted on problems of attention, time sense, speech, memory, association, aesthetics and mental telepathy. At the end of the year, Bigham left Michigan to accept a professorship of philosophy and theology at Depauw University.¹⁴



John Bigham, circa 1887 (Courtesy of the Frost Library, Amherst College)

His successor was Edgar Pierce (1870-1929) who also had trained with Munsterberg. He too, remained only one year. During 1895-96 Pierce shared the introductory work with Rebec and carried on the beginning and advanced laboratory work along the lines began by Bigham. Demonstration courses were offered to give the beginning student a general knowledge of experimental methods and of their relation to the more theoretical aspects of psychology. More advanced students elected courses in original research in which they were expected to pursue lines of work in one area for an extended period of time.

In June 1896, Pierce married the daughter of the owner of several hotels in the Boston area and entered the family's employ as the manager of the Parker House. At the death of his father-in-law, Pierce became president of the company and continued in the hotel business although he intensely

¹³ In later years, Rebec went to the University of Oregon where he became director of philosophical studies, dean of the graduate school and director of educational and civic services.

¹⁴ Bigham remained at Depauw for three years returning to Ann Arbor in 1898 where he occupied himself writing and studying. In 1901, he returned to his family home in Pittsburg where he spent the next nineteen years working for the United States Glass Company. He left that company in 1920 to become an independent advisor in securities. Bigham died in 1940.

disliked it. He managed to keep up with his interest in psychology and remained a member of the American Psychological Association.

There is an epilogue to Pierce's continuing interest in psychology. Munsterberg, with Germanic sense of academic dignity, would apparently become irritated at the sight of his former student working at his desk whenever the professor happened into the Parker House. So intense was his irritation that on numerous occasions he attempted to have Pierce dropped from the membership of the American Psychological Association. He would insist that no member of the Association should have any other business aside from psychology. Apparently he thought it undignified for a professional psychologist to have a part in the hotel business even if it was on a grand scale. The Association always refused to accede to Munsterberg's demands.

Pierce ultimately gained an ironic triumph. He was extremely successful as a hotel manager and sold out at a profit that was large enough to allow him to retire at an early age. He attempted to return to a scholastic life but found that the twenty-odd years in business had made him unsuited for a life of intensive study. He did publish one book entitled *Philosophy of Character* (1924).

The board of Overseers of Harvard University appointed Pierce to several terms on the Committee on the Philosophy and Psychology Department. When he died in 1929, Pierce left a bequest of \$872,802.17 to be used for additional instruction in the department and for the development of the laboratory. Out of these funds the William James Lectureship was created to bring eminent scholars to Harvard for an annual lecture series. Additional funds were also used to support an endowed chair, the Edgar Pierce Professorship, which is currently held by B. F. Skinner.

From the time of Dewey's departure, the University had sought an experienced philosopher to head the department and to carry on the traditions established by Morris and Dewey. Such a man was finally found in the person of Robert Mark Wenley (1861-1929), who headed the department from 1896 until his death. Wenley, who was born in Edinburgh, had the major part of his education in Scotland, where, at the age of thirty-five, he already had a distinguished career as a teacher of philosophy. Very soon after his arrival in Ann Arbor he established a reputation as the most brilliant teacher on campus. His lectures were amply sprinkled with wit as he dramatized



Edgar Pierce, circa 1893 (Courtesy of the University Archives, Harvard University Library)



Robert M. Wenley, circa 1900 (From *History of the University of Michigan* by Burke A. Hinsdale, p. 304)

philosophy by making its most difficult concepts appear to be about the most familiar kind of event. He was an immensely popular and successful teacher.

Wenley, as a person, was sociable, astute, magnetic, fluent, blunt and outspoken. It was extremely difficult to discuss anything with him. Students and colleagues were treated in the same manner--the self-assured Wenley simply told them what was "true" on any subject under discussion. Psychology remained under his determined administration for the entire twenty-three years he was in charge of the Department of Philosophy.

Although Wenley was interested in psychology (he eventually became a member of the American Psychological Association), he decided not to fill the instructorship in psychology until he could find someone having the proper training and interest to develop and enlarge the program along experimental and physiological lines. So for the year 1896-97 the laboratory equipment was stored and the psychology offerings were limited to the introductory lectures given by Lloyd and Rebec.

In the spring of 1897 Wenley found the man for whom he was looking. Walter Bowers Pillsbury (1872-1960), a recent graduate of Edward B. Titchener's laboratory at Cornell, was appointed an instructor in psychology beginning in September 1897. Wenley informed the twenty-five year old Pillsbury that he would have a free hand in developing the psychology program, but administratively, psychology would remain a sub-department of philosophy and subject to the personnel, budget and promotion decisions made by that department. This arrangement would remain unchanged until Wenley's death in 1929.

CHAPTER TWO

The Early Pillsbury Years: 1897-1917

When the twenty-five year old Pillsbury arrived in Ann Arbor, he found a university community of about 3000 students and 150 faculty.¹⁵ He was informed that he was the 300th faculty member in the University's history. Wenley found him room and board in a pleasant private home and informed him that the psychology curriculum at Michigan was his to develop as he saw fit.

At that time the elementary course in philosophy was given by Wenley. Its first half was entitled, "The Meaning and Scope of Philosophy" and covered general philosophical topics. In the middle of the semester the course divided into two parts, one section studying logic and the other psychology. Pillsbury took charge of the psychology and Dewey's text soon gave way to Titchener's manuals. Within the next few years Pillsbury broadened the offerings to include work in representative modern psychology ("with special reference to the animal and child") and systematic psychology ("a detailed discussion of the facts and principles of psychology in the light of introspection, experiment and pathology.").

In 1901, the elective system replaced the required-course curriculum in the Literary College. The arrangement that made the introductory work a part of general philosophy was abandoned. Pillsbury set up a one-semester three credit introductory course as a general elective and paralleled it with a year-long course in physiological-experimental psychology for students desiring the more technical work. This latter sequence could be elected for three, four or five hours depending upon how many hours of lecture, recitation, and/or laboratory the student desired. The maximum five hours were considered to be the normal election. This two track arrangement for introductory work was maintained during the entire forty-five year Pillsbury tenure.

Although administratively a part of the Department of Philosophy, psychology under Pillsbury came quickly to be closely associated with the biological sciences. Within a few years after his arrival, Pillsbury was publishing research articles jointly with the well-known physiologist Warner P. Lombard, held a lectureship in the Department of Medicine and Surgery, and invited Albert M. Barrett, Professor of Psychiatry and Diseases of the Nervous System, to participate in his seminars. He also encouraged--if not required--his

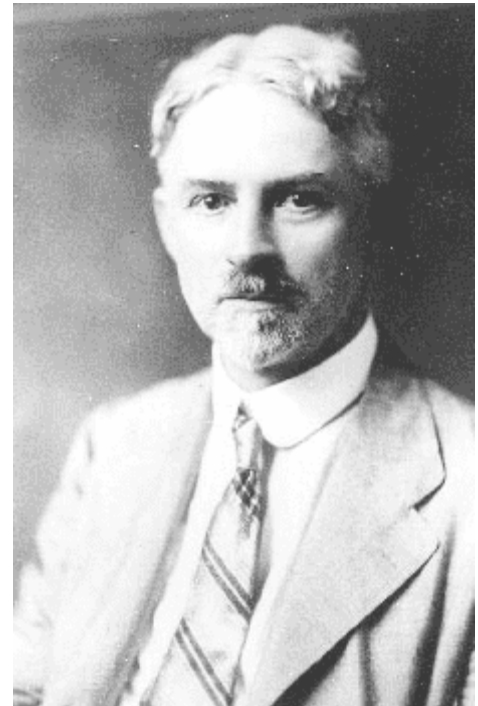


Walter B. Pillsbury, circa 1897 (From *History of the University of Michigan* by Burke A. Hinsdale, p. 338)

¹⁵ Detailed biographical material on the psychologists who are introduced in this and the following chapters will be presented in Volume Two. See Volume Two, Chapters 1 through 4 for the additional material on Professor Pillsbury.

graduate students to elect offerings in the medicine school. Thus psychology began early to affiliate with the biological and medical sciences and to function practically as a separate sub-department despite its administrative connection with philosophy.

During his first decade at Michigan, Pillsbury had the assistance of several young men who spent varying lengths of time on the Ann Arbor campus. One of the first of these men was J. E. Wallace Wallin who was an assistant at Michigan during 1902-03. Wallin took his doctorate with Edward W. Scripture and George T. Ladd at Yale University and studied with G. Stanley Hall and Edmund C. Sanford at Clark University. He came to Michigan primarily to obtain the Titchenerian point of view from personal contact with Pillsbury who at that time was one of Titchener's best known students. Wallin, however, derived little from his year at Michigan. Pillsbury kept his relationship with his assistant strictly professional with none of the elements of good fellowship that were usual among young scholars. There were never any spontaneous personal contacts between the two during the entire length of Wallin's stay. He left after one year and had a distinguished career in clinical, counseling and educational psychology.



Walter B. Pillsbury, circa 1912 (Courtesy of the Michigan Historical Collections)

Another assistant in these early years was Charles E. Galloway. Galloway appeared with Pillsbury at the 1904 meeting at Cornell which marked the beginning of the Society of Experimental Psychologists, that organization of distinguished men that centered around the personality of Titchener. Galloway remained several years as a graduate student and assistant and was succeeded by John F. Shepard (1881-1965).

In the fall of 1902, John Shepard, who had graduated from St. Lawrence College (Canton, N.Y.), entered graduate school at the University of Chicago. Toward the end of his first year he heard that Pillsbury was looking for a graduate assistant. Shepard applied, was accepted at an annual salary of \$450.00 and transferred to Michigan in the fall of 1903. He spent the rest of his life in Ann Arbor.¹⁶

Shepard served as a graduate assistant for three years while working toward his doctoral degree. In 1906, he became Michigan's first Ph.D. in psychology with a thesis entitled "Organic Changes and Feeling."¹⁷ The thesis was concerned with Wundt's theory of feelings and was based in part on data obtained by observing a laborer who had met with an accident which required the removal of a piece of the skull on the right side of his head. The area removed was of an irregular shape with diagonals of about two and a half and three inches respectively. No plate was used to cover the wound.

¹⁶ See Volume Two, Chapter 5 for additional biographical material.

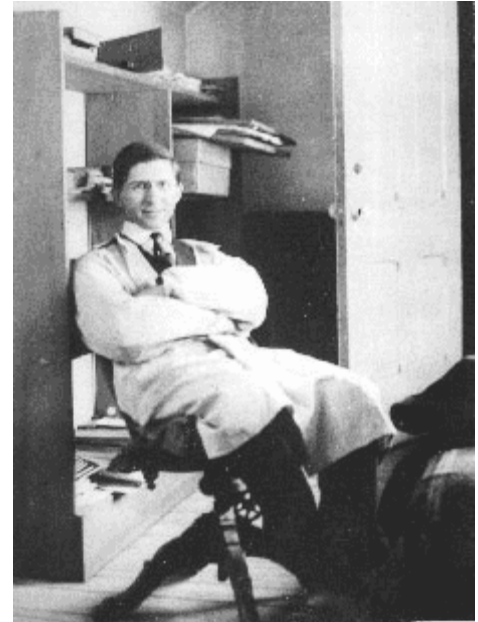
¹⁷ See *American Journal of Psychology*, 17, 1906, 552-584.

The patient's hair was thinner on the covering of the trephine and there was a considerable hollow where the scalp had grown over the wound. His scalp could be felt to pulsate and Shepard correlated these pulsations with the affective states reported by the subject. The man, who was of average intelligence, cooperated willingly in a long series of experiments.

After receiving his degree, Shepard continued working with this man and another one like him concentrating on the problem of vascular changes during sleep and published the results as a book in 1914.¹⁸ He was assisted in these studies by Herbert H. Woodrow who had taken his A.B. degree at Michigan in 1904 and then entered graduate school at Columbia University. By special arrangement, he was allowed to carry out his data collection for his doctoral dissertation in Ann Arbor.

In 1906 Shepard was advanced to an instructor and began to participate more fully in the development of the psychology program. Pillsbury had the words, "Director of the Psychological Laboratory," added to his title in 1901. Together they began to develop the program along lines quite independent of philosophy.

A most important circumstance was that ample laboratory equipment and space were available. At the time of Pillsbury's arrival in 1897, the laboratory, although still in University Hall, had been enlarged to four rooms. One room had been outfitted for general laboratory and demonstration purposes and two smaller rooms and a dark chamber were available for individual research projects. They were supplied with water, gas and electricity with sufficient power furnished by a 500 Watt Edison motor. The rooms were interconnected by wires and tubes for electrical and pneumatic transmission so that in reaction time and sensory experiments the subjects could be completely isolated from noises made by the recording instruments.



John F. Shepard, sitting in his office in the Psychology Laboratory, circa 1912 (Courtesy of *The John F. Shepard Papers*)

Upon his arrival Pillsbury began ordering new instruments primarily from the Rudolph Koenig Company in Paris. The laboratory soon contained pendulum and gravity chronographs, a Neumann time sense apparatus, a Marbe color-mixer, Hering instruments for color demonstrations, various apparatus for recording vocal organ movements, and acoustical devices such as an air compressor for blowing sirens, Oppum reeds, and an Ellis harmonic. There was also a complete series of instruments for recording variations in circulation, respiration, and voluntary efforts under the influence of various mental states.

In 1903 psychology was fortunate enough to obtain what was the envy of other departments of that day--a building of its very own. The building was hardly new and in fact had a history as old as that of the Ann Arbor campus.

¹⁸ His book, *The Circulation and Sleep*, was the first volume of the Scientific Series of the University of Michigan Studies.

The university's first building program in 1840 included four buildings for use as professors' homes. Two were erected on North University Avenue and two on South University Avenue. Only one remains standing today, serving as it had since Tappan's day, as the President's home. Psychology inherited the building called the Northwest Professor's Home located where the Natural Science Building now stands. It housed faculty from 1840 to 1875 when it became the first home of the School of Dentistry. In 1877, two wooden pavilions, 114 x 30 feet were built on the rear of the home and the complex became the hospital for the Homeopathic Medical College. A third building was added on to the wooden pavilions to serve as an amphitheater for the college.



Psychology Laboratory Building, looking southeast from North University Avenue, circa 1902. The first building in the left foreground is the original Northwest Professor's Home built around 1840. The Psychology laboratory was in the three wooden buildings directly behind the Professor's home. The first building of the complex (looking south) contained Professor Shepard's maze; the next (under the Gables) contained the laboratory room where the experimental course work was conducted; and the left, squarish looking building contained the amphitheatre which served as a lecture hall. (Courtesy of the *History of the University of Michigan* by Burke A. Hinsdale, p. 108)



Psychology Laboratory Building, looking southwest, circa 1902. The building on the left is the amphitheatre, and the long building is the laboratory proper. This is the view of the side of the building that is not visible in the above picture. (Courtesy of *The John F. Shepard Papers*)

The story is told that these additions were built during a smallpox epidemic when beds were needed to handle the contagious cases. In those days convenient methods of disinfection were not available, so the plan was to build cheap, wooden buildings which could be burned after the crisis was over. This story cannot be fully documented, but according to those who worked in the building, its appearance did nothing to disconfirm the legend.

The buildings were used by the Homeopathic Medical College until 1899 when it moved to new quarters. The three wooden buildings were then occupied for three years by the Department of Pathology. In 1903 psychology took over the three buildings and remained in them until 1915.



Two View from the Psychology Building approached from the southern direction, circa 1913.

Above: Close view with young woman student on the steps. The entrance led immediately into the amphitheatre.

Right: The southern entrance to the amphitheatre. Seated on the steps are (left to right): Top row: Floyd A. Dockeray and William H. Batson; and Bottom row: John F. Shepard and Edgar DeCamp.

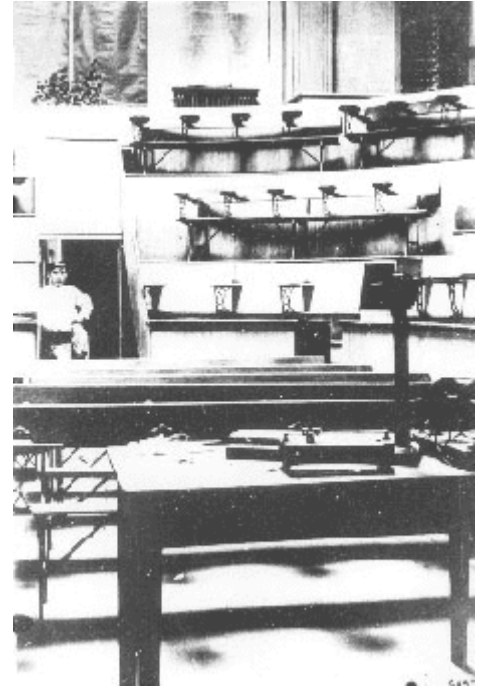


(Courtesy of *The Z. Pauline Hoakley Papers* in the Archives of American Psychology)

The site of the buildings was located on what was then a quiet part of the campus. Entering from the south, one came upon the semicircular amphitheater which held about 150 students and served as the main lecture room. The second section contained the main experimental room. Just inside its entrance were the offices of Pillsbury and Shepard. The senior professor had his office on the left (west) side. Shepard's office on the right (east) side was divided into two part-rooms. In one section he had his desk and bookcases and in the other section, he kept a cot, it was said, for his sleep research.



John F. Shepard, seated on the steps leading into the amphitheatre of the Psychology Building. 1913. (Courtesy of *The Z. Pauline Hoakley Papers* in the Archives of American Psychology)



The Amphitheatre in the Psychology Building, 1913. John F. Shepard is standing in the doorway. (Courtesy of *The Z. Pauline Hoakley Papers* in the Archives of American Psychology)

In the middle of the room were long tables on which the equipment was placed. Quiz sections for the introductory courses were also held here. Along the east wall was a row of windows below which was a counter that ran the length of the room. Along the other wall a series of cubby holes had been constructed to serve as experimental rooms for the various exercises.



The Psychology Laboratory Room. This room was in the middle section north of the amphitheatre. All laboratory course work was conducted here. (Courtesy of *The Z. Pauline Hoakley Papers* in the Archives of American Psychology)

The last section was a room about thirty feet square in which Shepard built his first maze and began his forty-year study of maze learning. The maze itself was about fifteen feet square, eighteen inches deep and entirely covered by wire netting. The windows were always shuttered to keep the setting light free. Above the maze was the attic where Shepard would go to observe his subjects. He would lie on his stomach with his eye to a hole in the floor that gave him a view down upon the animals.

Although the thirty-five year old structure was not aesthetically very satisfying, it was quite adequate for research purposes. Over fourteen "rooms" of various sizes including two dark rooms were available for general laboratory work. The laboratory was also supplied with gas, electricity and water. It was here that early students like Herbert H. Woodrow, Floyd C. Dockeray, Harry Crane and Clark L. Hull were introduced to experimental work.

In those early years a great deal of research was completed and reported. Michigan took its place as one of the leading centers of psychological activity. Between 1903 and 1913 Pillsbury published nine research articles, six general articles and three books. Shepard published four research articles in addition to his book.

A series which became known as *Studies from the Psychological Laboratory of the University of Michigan* was edited by Pillsbury beginning in 1901. These were studies by Pillsbury, his associates and students which appeared in various psychological journals rather than as separate publications. The series was continued until 1905.

Pillsbury completed his book on *Attention* in 1904. Of all his many publications this was the one for which he is best known. The work grew out of his dissertation which he extended with experimental work carried out in his and Lombard's physiological lab. He wrote the book in English but had to have it published in Paris since no American or English firm would accept such a highly specialized work. Because of the time required to have the manuscript translated into French, the book did not come out until 1906. It was well received and soon Pillsbury had an offer to publish it in English. He enlarged it for the new edition which was brought out in 1908. Eventually, it was also translated into Spanish (1910).

Pillsbury was a frequent participant in the American Psychological Association meetings. At the 1906 meetings, for example, he delivered a paper on "An Attempt to Harmonize the Current Psychological Theories of Judgment" and took part in a discussion of "Organized Cooperation in Standardizing Tests." He also introduced his junior colleague, Shepard, who spoke on "Cerebral Circulation in Sleep." Pillsbury was also elected to the Association's Council as well as to its committee on test standardization.

During January and February of 1909 Pillsbury held a nonresident lectureship at Columbia University where he gave eight lectures on the psychology of reasoning. He had become interested in this topic while at Cornell. These lectures were expanded and published (1910) under the title *The Psychology of Reasoning*.

In 1910 Pillsbury received three honors which reflect the reputation of the psychological activity he had developed at Michigan. He was promoted to full professor, appointed to the editorial board of the *Psychological Review* and elected president of the American Psychological Association.

At that time there were just 200 members of the association and no more than seventy-five could be expected to attend any meeting. Pillsbury, an early student of Titchener, a frequent publisher with two well-received books in print, and head of an important university laboratory easily qualified as a leader in the profession despite his personal tendency toward reticence. His presidential address was entitled, "The Place of Movement in Consciousness" and was delivered at the meeting held in Minneapolis in 1910. The address straddled the line between the structuralism in which Pillsbury had been trained and the functionalism which was then current.

. . . If the earlier theory placed too much emphasis upon the sensory regions of the cortex and sensational qualities, this theory too much neglects them. Again it must be emphasized that all action is sensory-motor, that movement alone will not explain consciousness any more than sensation alone. . . more important than either sensation by itself or movement by itself is the fact that consciousness is always an organized system. The system is constantly growing with and by use, and to it every experience contributes. . . A complete explanation of any phase of consciousness can be neither in terms of sensation nor in terms of movement exclusively but must include both. . . above all there must be constant reference to the ever growing system of knowledge that develops out of sensation, that is tested by movement and which alone gives meaning to sensation and rational direction to movement. . .¹⁹

It is of interest to note that 1911 was Pillsbury's most productive single year in his entire professional career. He published five articles and one book.²⁰ In 1913 Pillsbury was elected vice-president of the American Association for the Advancement of Science and chairman of its section on anthropology and psychology.

At the 1912 American Psychological meetings, held in Cleveland, Shepard presented papers on the apparatus used in his experimental studies of phonetics, the effect of maturation and practice on the development of an instinct (with F. S. Breed), and on his studies of association and inhibition (with H. M. Fogelsonger). The last study is of special interest because it emphasized the same kind of stimulus patterning effect that the Gestaltists were simultaneously beginning to discuss and theorize about in Germany.²¹

The curriculum continued to expand. The two introductory courses were shared by Pillsbury and Shepard. Angell's *Psychology* was used as a text for the one-semester course (Philosophy 7) which was intended primarily for education students. The year-long course in physiological and experimental psychology (Philosophy 8) used a variety of texts such as James' *Principles of Psychology*, Kulpe's *Outlines of Psychology*, Sully's *Human Mind*, Titchener's *Laboratory Manuals* and Pillsbury's *Attention*.

In 1911 Pillsbury published his first introductory text, *The Essentials of Psychology*, which was primarily written for the one semester general course. The book was favorably received and eventually

¹⁹ Pillsbury, W. B., "The Place of Movement in Consciousness", *Psychological Review*, 18, 1911, p. 9.

²⁰ It is of further interest to note that it was in the following fall that Pillsbury suffered his first known petit mal attack and was forced to take a sick leave. For a further discussion of his illness, see Volume Two, Chapter 1.

²¹ Shepard, John F. and Fogelsonger, H. M. J., "Studies in Association and Inhibition", *Psychological Review*, 20, 1913, 290-311. For further discussion of this experiment, see Volume Two, Chapter 5, Section II.

went through three editions. Its sales were very good—equaling during one year the combined total of all the competing texts. The book was professedly written from a functionalist point of view. However, Pillsbury made use of the results of structural psychology wherever they would shed light upon function or if they were of interest in themselves.

Pillsbury's definition of the science of psychology is a curious anticipation of behaviorism—a fact acknowledged by Watson himself.²²

. . . we measure the intelligence of an animal by its accomplishments.
Mind is known from man's activity. Psychology may be most
satisfactorily defined as the science of human behavior. . .²³

The book placed a heavy emphasis upon anatomy, physiology and experimental work. Mental phenomena were described and explained in terms of classification of elementary sensations, attention and memory traces. Other topics discussed were work, fatigue, sleep and transfer of training.

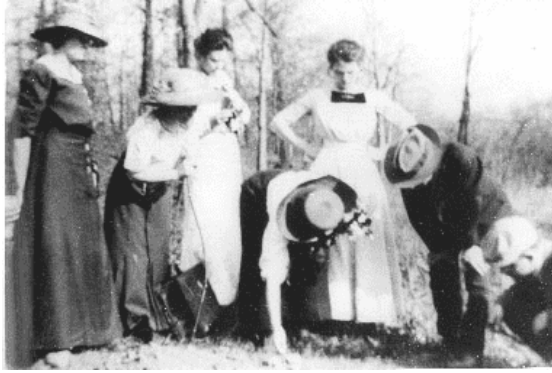
Pillsbury offered additional courses in apperception, history of modern psychology, memory and one course that soon became a campus set-piece, the "Psychology of the Abnormal and the Occult." The description of the latter was as follows: "A critical survey of the more important facts of mental derangement that throw light upon the principles of general psychology. . . The more interesting forms of modern occultism will be considered in their bearing upon psychopathology." It was a very popular election that always filled the lecture room, apparently as an antidote to the other courses which were filled with details of the nervous system.

Shepard offered the work in advanced experimental psychology, psychophysical methods, systematic psychology, and genetic psychology and in 1910 introduced a course in comparative psychology. This latter course was described as a study of the evaluation of mental processes and their comparative development in different animal forms. The lectures were accompanied by laboratory work in the learning process.

The comparative course was considered quite unique because undergraduate students were given the opportunity to work in the comparative setting. (Similar work on other campuses was limited to graduate students.) Studies were carried out on fish, ants, rats and cats mostly in maze situations similar to the one Shepard had built in the back section of the laboratory.

²² Watson, John B., "Psychology as the Behaviorist Views It," *Psychological Review*, 20, 1913, p. 165.

²³ Pillsbury, W. B., *The Essentials of Psychology*, (New York: Macmillan, 1911), p. 1.



John Shepard's Comparative Psychology Class

Above left: John F. Shepard and a Comparative Psychology class on a field trip collecting ants in a field between Ann Arbor and Ypsilanti, 1912.

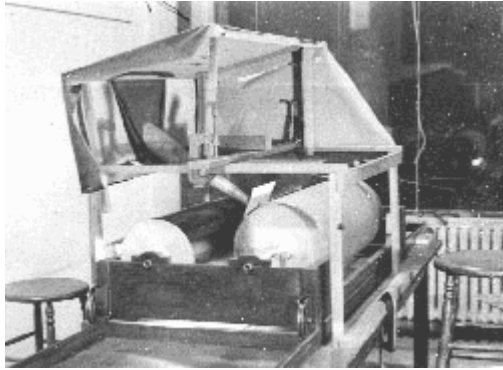
Above: John F. Shepard at an ant hill between Ann Arbor and Ypsilanti, 1912.

Left: Professor John F. Shepard has a student smell an ant for formic acid. 1912.

(Courtesy of The Z. Pauline Hoakley Papers in the Archives of American Psychology)

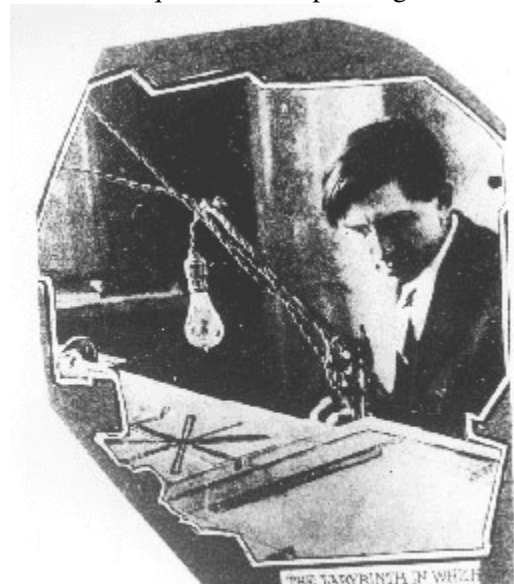


From their observations Shepard's students plotted graphs that reflected the typical trial and error curves that Edward L. Thorndike had published twelve years earlier. For comparative purposes Shepard had his students collect similar data on humans. As an actual maze for humans could not be conveniently constructed, an ingenious maze drawn on paper was used.²⁴ The subject followed the paper by looking through a paper tube which cut off all view beyond the pencil lines between which his eye was traveling. The results from these experiments showed that in all cases the human subject learned the maze in essentially the same manner as did the animals.



Human maze learning apparatus used by Professor John F. Shepard. The maze pattern was drawn on a paper which moved as the subject turned the drum. The subject followed the paper by looking through a paper tube which cut off all view beyond the pencil lines between which his eyes would travel as the drum turned. Circa 1912. From *The John F. Shepard Papers*.

Generalizing from these experiments, Shepard argued that there were four types of learning. The first type was the ability to form simple associations. The second type involved the selection of necessary elements and the elimination of errors leading to some consequence. A drop of sugar was placed on a plate of glass which had been covered with coal oil smoke so that the tracks of an ant crawling on it could be recorded. The glass was placed near an ant hill. Soon one of the ants would begin exploring the large "black plain" wandering aimlessly until it discovered the sugar. It followed its crooked path back to the ant hill. Soon all the ants were marshaled behind the first ant who led them back to the sugar--not over the original circuitous path but rather over a straightened line that led to the goal via the shortest distance.



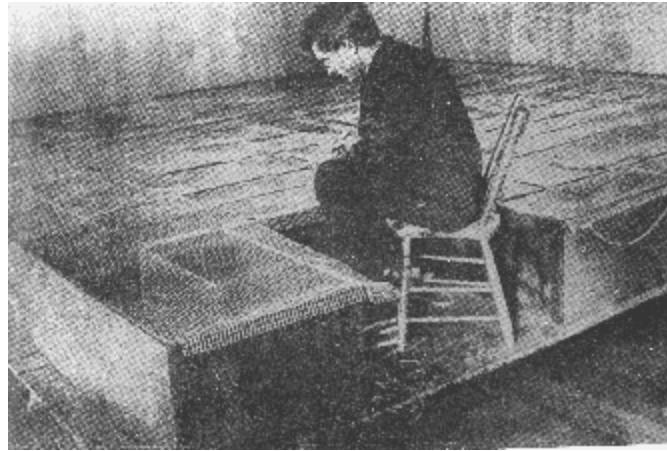
Professor John F. Shepard and the ant labyrinth (maze). 1912. (Courtesy of *The Detroit News Tribune*, March 10, 1912)

The third type of learning was the ability to apply the learning of one thing to the advantage of the learning of others. The fourth and highest type of learning showed evidence of a definite plan or purpose, with the realization that certain actions tend to lead to certain results. Persons of normal intelligence and some rats and cats, for example, tended to drop their errors quickly at the beginning as well as at the end of the maze.

²⁴ In later years Shepard solved this problem by actually constructing a human maze in the basement of Hill Auditorium. See Volume II for photos of the human maze.

These types were not seen as perfectly distinct but to overlap each other and to vary with different individuals.

The comparative course stirred up considerable interest on and beyond the campus. The *Michigan Alumnus* devoted a two page story to it.²⁵ *The Detroit News Tribune*, in its Sunday, March 10, 1912 edition ran a full page illustrated article entitled "A University Education for Mice: Professor John Shepard of the University of Michigan Conducts Some Remarkable Experiments to Learn How Animals Think." After reviewing the work the article concluded, "and so Professor Shepard's play work is seen to be worthwhile. At any rate it affords a lot of mice the benefits of a university training."



John F. Shepard and his first maze, 1912. The maze was located in the third room of the laboratory located between the room pictured above and the Professor's Home. (Courtesy of *The Detroit News Tribune*, March 10, 1912)

Another curriculum innovation introduced in this first decade was the offering of interdepartmental courses in the psychology of language. Pillsbury joined with Professors Clarence L. Meader (Latin, Sanskrit and General Linguistics), Fred N. Scott (Rhetoric) and Ewald A. Boucke (German) to offer work dealing with the elementary principles involved in speech. The course related the phenomena of language to the mental activity that underlaid it. Shepard and Meader collaborated in another course in experimental phonetics which was designed for students in language, psychology, oratory and singing. It dealt with the anatomy and physiology of the human voice, the production of speech sounds, description and classification of speech sounds, mechanics and methods of recording speech sounds and the study of speech records. Pillsbury and Meader produced a book, *The Psychology of Language* (1928), as an outgrowth of their joint effort.

Out of this interest there grew up at Michigan a complete laboratory of rhetoric research. Psychology provided all the physical support for the laboratory while the language departments were the major source of students. The laboratory apparatus consisted of equipment for photographing speech sounds directly from phonograph records, radio or telephone. There were kymographic devices to record by direct registry the physical aspects of voice sounds that were coordinated with physiological and anatomical structures. Several dissertations grew out of this research. The first one, in 1906, by Gertrude Buck was entitled, "The Metaphor: A Study in the Psychology of Rhetoric."²⁶

Despite the unique position the psychology subdepartment had in being one of the few groups in the nation to have its own building, it must be admitted that the structure was hardly adequate. By 1910, the three wooden additions, collectively referred to as "the old shack," were nearly thirty-five years old.

²⁵ "A New Course in Animal Psychology", *Michigan Alumnus*, 1910, pp. 75-76.

²⁶ Morris, Amos R., "Machines Aid in the Teaching of English", *The Michigan Alumnus*, 35, 1929, 521-523.

For ten years the University administration had been trying for legislative support for a new natural science building.

In the fall of 1921, President Harry B. Hutchins, after much lobbying, succeeded in getting William Nank, Chairman of the state legislature ways and means committee, to come to Ann Arbor to see for himself what the University's needs were. The President and the Secretary of the University acted as the legislator's guides as the group went from department to department on its inspection tour.

Mr. Nank said nothing at all was explained to him. Finally they came to the psychology shack, where Professor Shepard made some polite comments as he showed them around the laboratory. What Nank saw was apparently too much for him and he broke his silence to exclaim, "Why, Hutch, I own thirty horses and every one of 'em has a better place to live than this!"²⁷ That legislative session a \$375,000 appropriation was approved for a new building to house Botany, Forestry, Geology, Mineralogy, Zoology and Psychology.

Professor Pillsbury had become ill in the fall of 1912 and had gone to Europe. Anticipating some action by the legislature, he had left a list of rooms with their dimensions that he thought would be needed by the department. But the burden of planning psychology's space fell to Shepard.

During the planning for the housing of the six different departments, one of the more powerful and affluent regents, William L. Clements, took a representative from each of the six departments, the architect (Albert Kahn of Detroit), President Hutchins, the Secretary of the University and such fellow regents as were available on a tour to see the more important college buildings designed for scientific programs. Since Shepard had acting charge of psychology, he went along. The group visited the campuses of Rochester, Syracuse, Cornell, Columbia, Yale, Harvard, Princeton, Chicago, Illinois and Wisconsin.

Then the plans were drawn up. Each department was to have a complete section of the building from top to bottom. The total space assigned psychology was about 12,000 square feet divided up into forty rooms. On the lower level there was located a classroom, a shop, a research room with light shutters, a small storage room and Shepard's specially designed maze room. This latter facility was constructed so that all external cues were minimized. A trap door was located in the low ceiling in order to facilitate observation.

An inner set of stairs ran from this room to Shepard's office directly above. From his office level Shepard had another private set of stairs connecting his office to the laboratory and classrooms on the next level. (This system of interconnected levels led to the arrangement being called, "the three floor house that Shepard built.")

The second floor had the offices, staff research rooms, a phonetics room, a darkroom, and rooms with shutters for animal work. Nine rooms including a darkroom, olfactory room with an exhaust hood, chronometric room for use by the general and experimental classes were located on the third floor.

²⁷ Smith, Shirley, W., *Harry Burns Hutchins and The University of Michigan*, (Ann Arbor: University of Michigan Press, 1951), pp.42-43.

On the fourth floor were a sound-proof room, a series of connected rooms for acoustical work, research rooms and a system of darkrooms in which a clear space of sixty feet of darkness could be obtained. These darkrooms could be used in combination with an optic room. The optic room and darkrooms had northern exposures as well as skylights which were all equipped with light-tight shutters.

The entire complex was wired so that its rooms could be interconnected through a central switchboard system which also supplied low voltage A-C and D-C currents. Tubes in the walls and in the floors made possible other connections between different rooms. All parts of the laboratory were also supplied with gas and compressed air.

Lectures to large classes were given in the main auditorium of the building. The psychology section was also located adjacent to the Natural Science Library where all the psychology journals were on file.

When the preliminary designs were approved they were submitted to the architect and contracts on the building were let out about the middle of April in 1914. The old “psychology shack” was moved to the vacant space between the chemistry building and the site of the new building so that classes in psychology could continue to meet in it.



The construction of the Natural Science Building, 1914.

The old Psychology Laboratory can be seen in the middle ground of this picture. According to tradition, it was moved to this site from its original location on the site of construction so that psychology could continue to have facilities.

(Courtesy of the Michigan Historical Collection)

When the final building plans had been completed, the departmental representatives met in a joint meeting with Regent Clements. He asked them if the plans met with the approval of their various departments. After they had indicated that they did, Clements presented them with a paper and said:

. . . Fine! That's what this paper says. If there is no objection, will you sign it. They all cheerfully did. The Regent Clements stated that thereafter the representative of the departments would solely be

Professor Shepard and that no contracts were to be made to the architect or contractor except through Professor Shepard. . .²⁸

In that manner Shepard became the representative of all the departments and advisor to the contractor and architect throughout the entire construction of the building. He proved very successful as arbitrator between the interested parties. When the building was finished, the six groups of scientists were so pleased with the results that a luncheon was held in honor of the supervisor, the contractor and architect. In the fifty year history of campus building programs there had been nothing like the occasion. Buildings that were to house a single department had been known to produce more complaints. Psychology moved into the Natural Science Building in the fall of 1915 and remained, for the most part, in these quarters until 1952 when it moved to its present locations.

The success Shepard achieved as liaison officer during the construction proved to be a mixed blessing for him. On two later occasions he was again called upon to carry out this function. Eight years of his career were devoted to these activities and lost to his psychological research. Shepard attributed much of his failure to write up the results of his lifelong research to the time spent in this position.

During the early years Pillsbury and Shepard were able to carry the instructional load by themselves with occasional quiz section help from graduate students. By 1911 the time had come to expand to three men and Henry F. Adams (b. 1882) was engaged as an instructor to fill the new position.

Dr. Adams had attended undergraduate college at Wesleyan University where he studied psychology under Raymond Dodge.²⁹ He delayed his graduate work for a year and a half while he gained some experience in the newspaper and manufacturing businesses. He then entered the University of Chicago where he had courses with J. H. Tufts, G. H. Mead, A. W. Moore, and J. R. Angell and became well acquainted with other students and junior staff members like John B. Watson, Joseph Hayes, Walter Hunter and Harvey Carr. Adams completed his dissertation on the autokinetic effect under Carr and remained at Chicago for another year before he heard through Angell of the opening at Michigan.

Michigan needed someone to help Shepard in the laboratory, and since Adams had considerable experience as assistant to Watson and Carr the match seemed ideal. In his second year Adams was asked if he would prefer an independent course to some of the quiz sections.

He was very anxious to be on his own but the two senior men were already covering all the traditional subjects for which Adams had been trained and they expressed no desire to give up any of them. He had had experience in journalism and manufacturing and, drawing upon those experiences proposed two courses in advertising and salesmanship. In this somewhat indirect manner, applied psychology gained an early start in the psychology curriculum. Adams devoted the rest of his career at Michigan to advancing this specialty.

In 1915 a fourth member was added to the staff. Sven Froeberg (1880-1966) had received his graduate training at Columbia University under James McKeen Cattell, Robert S. Woodworth and Edward L. Thorndike taking his doctorate degree in 1908.³⁰ He had been teaching at Uppsala College

²⁸ Ibid. pp. 120-121.

²⁹ See Volume Two, Chapter 6 for additional biographical material.

³⁰ See Volume Two, Chapter 7 for additional biographical material.

(New Jersey) for seven years when he received the offer to come to Michigan as an instructor. Froeberg remained at Michigan only two years during which time he taught the quiz sections for the introductory courses, supervised some of the laboratory work and introduced work in the methods of mental and social measurements. This latter course was the first offered by the sub-department that dealt with the statistical procedures used to analyze psychological, educational, and social problems. Topics such as variable measurement, measurement of changes, correlation, reliability, tabular, frequency and graphic methods were covered. Froeberg left Ann Arbor in 1917 for Pennsylvania State College (1917-1918) and later taught at the University of Utah (1920-1921) and Gustavus Adolphus (1921-1945).

Before World War I the graduate students in the department never numbered over ten a year. Some assistantships were available and the following students served in that capacity: Harry Crane (1911-1915), Sara Devina McKay (1911-1912), Joseph E. DeCamp (1912-1913), Nellie Louise Perkins (1915-1916), Theophile Raphael (1915-1916), Carl R. Brown (1915-1917), Charles H. Griffiths (1916-1917) and Marion A. Bills (1916-1917).

The curriculum changed very little over what it had been at the end of the first decade. Pillsbury continued to offer the lectures for both the general and experimentally oriented courses. His *The Fundamentals of Psychology* was published in 1916 and was used in the year-long course. Pillsbury again wrote from his eclectic point of view:

. . . My own theory inclines toward a functionalism. The book is more concerned with what consciousness does than with what it is. As opposed to the extreme behaviorism, however, I am not concerned alone with understanding the movement of the organism and the function of the movements but also with understanding the knowledge and the way in which it develops. It is my belief that the content of the science is the same whatever the point of view from which the subject be approached and that this content is essential and changes slowly and then through growth the theories are less important and likely to change from decade to decade.³¹

Probably the most exciting curriculum innovation occurred in 1915 when the Psychology Journal Club was organized as a credit course. The teaching staff and graduate students would meet every other Thursday evening to review current literature and experiments or to hear papers presented by the staff or students. The Club lasted for over twelve years and provided the main stimulant for the departmental intellectual discussions.

Various speakers appeared on campus lecturing on topics of interest to the psychologists. In November 1912, the Education Club brought Edward L. Thorndike who gave two lectures entitled, "The Theory of Man's Original Nature" and "The Significance of Man's Original Nature." In these lectures Thorndike discussed the primitive instincts and impulses of man in the light of educational problems. John Dewey returned to Ann Arbor in the spring of 1917 to give a lecture in the Natural Science Auditorium on "Education for Democracy."

³¹ Pillsbury, W. B. , *The Fundamentals of Psychology*, (New York: MacMillan Company, 1916), p. viii.

When the United States entered World War I, Pillsbury encouraged his younger associates to join the group of psychologists who were serving with various army units. Shepard became a civilian member of a committee of psychologists attached to the Adjutant General's staff. Its main task was to establish standards for testing recruits for the various service branches. Later Shepard worked on problems of visual detection of camouflage. Adams did not enter the service but contributed to the war effort by offering a course in rehabilitation training and a series of lectures before Red Cross groups. Carl R. Brown, a graduate student, worked first as a civilian in the intelligence testing program.

Charles H. Griffitts (b. 1889), who was also a graduate student, was appointed an instructor to cover the work left vacant by Froeberg's departure and Shepard's absence.³² Griffitts, who had taken a master's degree at the University of Kansas (1914), came to Ann Arbor in 1916 and had served in the department as an assistant. In the fall of 1918 he accepted a commission as a First Lieutenant in the Medical Research Laboratory of the United States Air Service. The armistice was signed a month later, however, and Griffitts immediately returned to Ann Arbor.

The end of the war marked the completion of twenty years service at Michigan for Pillsbury. The University had grown from three to seven thousand students and its staff from one hundred and fifty to over four hundred and fifty. The psychology sub-department's growth had paralleled the University's. Pillsbury had three associates (Shepard, Adams, and Griffitts) and approximately a dozen students were enrolled in the graduate program.

Up to this time only five doctorates had been completed in psychology. These were earned by Shepard (1906), Harry W. Crane (1913), Joseph E. DeCamp (1914), Floyd C. Dockeray (1915), and William H. Batson (1915).³³ But psychology had made its mark beyond academic walls by its contribution to the war effort. Many people were becoming interested in the subject. The combination of this new interest and the post-war "boom" in college enrollment had its effect on the sub-department. Psychology at Michigan began to change.

³² See Volume Two, Chapter 8 for additional biographical material.

³³ A list of the titles and faculty under which the theses were carried out for these and all subsequent doctoral students during the Pillsbury era (1897-1945) will be found Appendix B in this volume.

CHAPTER THREE

The Post-War Years: 1919-1929

The years after the war brought about a considerable expansion in the University in terms of staff, students and physical facilities. The enrollment increased from less than 7,000 in 1917 to over 11,000 in 1921. By 1929 there were over 15,000 students on campus. The number of graduate students in psychology increased dramatically from a low of twelve in 1920 to a high of thirty-six in 1928 (Table III-1).

Table III-1

Number of Graduate Students Enrolled in Psychology

<u>Year</u>	<u>Number</u>
1918-19	No Data
1919-20	No Data
1920-21	12
1921-22	No Data
1922-23	No Data
1923-24	17
1924-25	22
1925-26	15
1926-27	19
1927-28	36
1928-29	26

The University authorized several new staff positions in psychology to handle the increased instructional demands. As the decade ended, the sub-department had grown to a nine-man staff.

Upon his return to Ann Arbor from the service, Charles H. Griffitts resumed his instructorship and became the sub-department's sixth Ph.D. in 1919. Griffitts remained on the staff until his retirement in 1958. Carl R. Brown (b. 1892) had also been a graduate student in the sub-department when the war broke out.³⁴ He was recommended by Pillsbury and Shepard to the group of psychologists who, under the direction of Robert M. Yerkes, were establishing a testing program for the Army. When the war ended, Brown remained in Washington to help complete the analysis of the data collected in the program. He returned to Ann Arbor in the summer of 1919. Brown was appointed an instructor in 1921, completed his degree in 1928, and remained on the staff until his retirement in 1964.

To fill another position Pillsbury inquired of his old professor, Titchener, for suggestions. Titchener passed the notice of the opening on to one of his most recent doctorates, Forrest L.

³⁴ See Volume Two, Chapter 9 for additional biographical material.

Dimmick.³⁵ Dimmick was teaching at Northwestern University but desired to move eastward to be closer to what he considered the center of the psychological activity. After some correspondence with Pillsbury, he accepted the position and moved to Ann Arbor in 1921 where he remained for four years. While on the staff at Michigan, Dimmick, who was a thoroughly-trained introspectionist, was a strong advocate of the Titchenerian position.

Pillsbury divided the remaining two positions among various graduate students. The predoctoral candidates who held these instructorships were Adelbert Ford (1921-31), John D. Finlayson (1921-22), Martha Guernsey Colby (1921-50), Ernest B. Skaggs (1922-25), Clarence E. Ragsdale (1924-25), Howard R. Mayberry (1925-27), Leon B. Slater (1926-28), Theodore C. Schneirla (1927-29), Norman R. F. Maier (1927-28), John A. Glaze (1927-28), Burton D. Thuma (1928-50), and Margaret Wylie (1929-30).³⁶

In 1927 Edward B. Greene (b. 1895) was brought in to offer work in mental measurement.³⁷ He had taken his graduate work at Columbia University in 1928 and had previously held a series of positions which qualified him as a specialist in this field. Greene remained in the sub-department until 1941.

In summary, five new positions were added in the twenties to the previous four-man staff of Pillsbury, Shepard, Adams and Griffiths. Of the fourteen persons who in turn filled these positions, only two came from outside of the sub-department. One of these two instructors (Dimmick) remained in Ann Arbor only four years and the other (Greene) fourteen years.

Graduate assistantships began to be more readily available and many of the graduate students worked as readers, attendance takers and research assistants. Among the students who were so employed were Lowell Carr (1920-21), Martha Guernsey Colby (1920-23), Ernest B. Skaggs (1920-21), Laurence Cole (1921-22), Norman Cameron (1922-23), Burton D. Thuma (1923-24), Theodore C. Schneirla (1924-27), Norman R. F. Maier (1925-26), Wilma Donahue (1926-28), Sinfonso Padilla (1927-29), and Ella May Hanawalt (1927-28).

Professor Pillsbury responded to his release from the enlarged administrative and teaching responsibilities placed upon him during the war years by increased publications. His articles began to take the form of joint publications, reviews of current work and the status of various psychological topics. In 1919 he published *Psychology of Nationality and Internationalism*, in 1920 a revision of *Essentials of Psychology* and two years later a revision of *Fundamentals of Psychology*.

In 1925 Pillsbury brought out *Education as the Psychologist Sees It*. In this series of lectures he argued that the "results" produced by the American system of education were merely due to the selection process involved in admitting the students. Only the students with the greatest ability were successful in passing through the system and would be successful in life even without the collegiate experience.

³⁵ See Volume Two, Chapter 10 for additional biographical material.

³⁶ The dates following each name represent the years each person served on the staff. Additional biographical material on most of these people is presented in Volume Two beginning in Chapter 11.

³⁷ See Volume Two, Chapter 16 for additional biographical material.

Pillsbury published his *The History of Psychology* in 1929. The book was the outgrowth of the course in history he had offered since coming to Ann Arbor and which was considered by the students to be his most successful contribution to the graduate program. Pillsbury undertook the task of writing the text to fill a real need as no American had written one on that subject in recent years.

He finished a draft of the earlier periods while at Michigan and went to Berlin in the summer of 1928 in order to learn more of the Gestalt psychology. The book does not attempt to treat in depth either the earlier or contemporary systems. Rather, it was a brief and simply written account of what Pillsbury considered to be important. He did not present any experimental results or deal with a man in any way except in terms of his unique contributions to the field.

An example of this was his treatment of John B. Watson. Pillsbury was one of the few historians who considered Max Meyer of the University of Missouri as having stated all the essentials of behaviorism a few years before Watson published his theory. Therefore, he gave Meyer the credit for originating the new system.

The book was published the same year as were histories by Boring and Murphy. It was sufficiently successful for its time, was translated into Chinese in 1932, and received a second edition in 1937. It has not, however, had the enduring influence of the other two works.

Pillsbury spent the year 1922-23 on leave giving a series of lectures at French universities. His topics were reasoning, the application of trial and error learning, desire, and hate as a social force. Pillsbury delivered the lectures in French at the universities in Bordeaux, Portier, Montpellier, Toulouse, Grenoble, and Paris. While in Paris he was invited to give three lectures in American psychology. He also continued some experiments on fatigue he had begun in Ann Arbor utilizing laboratory space at the University which was made available by Henri Pieron. Pillsbury presented the results of this work that summer at the International Congress of Psychology which met at Oxford. These meetings provided him with a fitting climax to his year abroad when he was invited by one of the Oxford dons, F. C. Schiller, to have dinner with Edouard Claparede and Morton Prince.

In January 1925, Pillsbury was forced to request a sick leave and again traveled to Europe.³⁸ This same year he received the highest honor that could be bestowed upon a man by the American scientific community. Pillsbury was nominated to membership in the National Academy of Sciences.

During this same period Professor Shepard was devoting his time and energies to other than his professional activities. As mentioned earlier, from 1912 until 1914 he had served as the liaison person between the architect and contractor and the University during the construction of the Natural Science Building. In 1916 he was again asked to perform the same function for the new general library.

After the war Shepard continued on the library project involving himself not only in its construction but also in the details of its furnishing. The library was dedicated in January 1920, but that did not end Shepard's involvement in campus construction. That same year the University, under its new president, Marvin L. Burton, began its post-war building expansion which in five years added to the campus the University High School, Angell Hall, East Engineering Building, East Physics Building, as well as additions to the University Hospital and the Dental School.

³⁸ See Volume Two, Chapter 1, Section III for a more detailed discussion of Pillsbury's health.

Shepard was appointed Supervisor of Plans for this construction and had the responsibility for seeing that the new buildings adequately met their educational purposes. From 1921 until the fall of 1925, Shepard was released from most of his academic duties in order to handle the new responsibility. He offered only one course a semester during this period but did manage to keep active some of his research.

During the period between 1919 and 1929 sixteen dissertations were completed.³⁹ Among these studies were two of the best known research findings ever to come out of the early Michigan laboratory. One was Norman Maier's classic work on reasoning in white rats. The other was Ernest B. Skaggs's study on the effects of work, rest, time, and degree of similarity on retroactive inhibition.

Skaggs obtained the following results: That learning after a rest interval was better recalled than learning after a work interval; that within limits, the more similar the interpolated material was to the originally learned material, the more detrimental was the effect the interpolated material had on the original learning. This finding confirmed the earlier work of Robinson and together their joint data became known as the Skaggs-Robinson Hypothesis which has been the basis of most of the work on the effect of similarity on transfer. Skaggs also found that work introduced immediately after the original learning was more detrimental in its effect on retention than that introduced after a rest period. And finally, his results failed to confirm Tolman's hypothesis that evening learning showed greater inhibition than morning learning.

It is difficult to determine with any exactness under whom the doctoral students actually did their dissertations. Pillsbury, as Director of the Psychological Laboratory, insisted upon his right to be chairman of every doctoral committee regardless under whose direction the students were actually working. For some of Shepard's students joint chairmanships were arranged, but whenever a junior staff member was involved, Pillsbury assumed the sole chairmanship.

Pillsbury's attitude toward the committee chairmanships antagonized many of the junior staff and was a continuous irritant associated with the structure by which the sub-department was organized. In Pillsbury's defense it should be pointed out that at that time the University was organized from the president on down along lines of the traditional academic autocracy implied by the term "headship." It was the only type of academic structure Pillsbury had experienced and understood and as mild a mannered man that he was, he still thought of himself as the head of psychology at Michigan and expected the privileges of that position.

It appears, however, that Pillsbury and Shepard shared equally the direction of the dissertations completed during this period. The topics undertaken by Pillsbury's students were varied. They involved imagery, logical memory, threshold determination, temperament, attention, work, fasting, and abnormal behavior. All were studies of human subjects. Shepard's students dealt strictly with learning problems with one exception.⁴⁰ The studies were approached comparatively utilizing ants, rats, and humans as subjects. One student (Cameron) introduced the physiological technique of cortical destruction as a main experimental variable.

³⁹ For a complete listing of the candidates, dissertation titles, and chairmen see this volume, Appendix B.

⁴⁰ Carl R. Brown's dissertation was on achromatic visual contrast. Although the work was officially under Shepard's direction, Brown worked almost entirely on his own.

The contrast in the diversity of the thesis topics directed by the two senior men clearly reflects their essential difference in approach to psychology. Pillsbury, as he himself has indicated, was no systematist. His approach was eclectic and his interests ranged over a wide array of topics. Shepard, however, was basically a systematist. He narrowed his interest to a definite problem area and methodology that would allow his critical and analytical ability to develop a comprehensive body of fact and theory. It was no surprise, therefore, to find that it was to Shepard that the students turned in their search for a coherent approach to the science of behavior.

The curriculum itself changed very little during this decade. The introductory courses continued as they had since 1902. Psychology 7 was the one semester course offered as a general elective. In 1924 its number was changed to Psychology 31, a designation it held for another twenty-five years. Psychology 8 remained the year sequence in experimental-physiological work which could be elected for three, four or five credit-hours in various combinations of lecture, recitation and laboratory. In 1924 these options were designated 33-34, 35-36, and 37-38 respectively.

In 1925 Pillsbury decided to give up the lectures in Psychology 7 in order to have more time available for writing. The course had by this time become one of the seven largest offerings in the Literary College. The Wednesday afternoon lectures had an attendance that filled the entire Natural Science Auditorium. Pillsbury was not an especially effective lecturer, but he presented the introductory material with good organization in a manner that was easy to follow. Over the years he had developed a good reputation among the student body who always responded to him with attention and respect. He was not, therefore, an easy person to succeed.

Shepard and Griffitts refused to take on the assignment. Adams agreed to take the lectures although he had not previously handled such a large group. Moreover, he had a speaking mannerism which, though not too distracting in small classes, created difficulties in the large lecture hall. Whenever he wanted to place heavy emphasis on the end of a sentence he would lower his voice to a stage whisper.

In his first lecture to the large class, Adams did this several times and no one could hear what he had said. The students began to stomp their feet and call out, "What did you say?" Adams repeated his points but the mannerism crept into his delivery several more times before the hour was over.

The Natural Science Auditorium had a projection booth in its center whose wall extended above the cross-aisle. During Adams' second lecture he again fell into his idiosyncrasy and immediately a string of banjos and clarinets which had hidden behind the projection booth broke out in a wild burst of sound. A roar of laughter came from the entire class. Adams grabbed his notes and ran out of the auditorium. His only remark was that the "babies" could be given to someone else because he was through with them.

Pillsbury decided to give the lectures to two of the pre-doctoral instructors, Adelbert Ford and Howard Mayberry, who were to alternate weeks. Ford's turn was first and his lecture was completed without difficulty. When Mayberry's turn came he proceeded to present his material in good form but decided to keep on the good side of the students by entertaining them with a few "off-color" illustrations of his points. Though quite different a style from what the students were used to from the dignified Pillsbury (who was never known even by close associates to ever offer an "off-color" remark), the students laughed and Mayberry considered the technique a success.

Two weeks later it was Mayberry's turn again and this time he told a rather vulgar story. Again it evoked a good laugh from his audience. However, one of the young ladies in the class went home for the weekend and informed her father as to the type of material she was receiving in her psychology class. The next morning, Saturday, the father came to Ann Arbor and registered a strong complaint to the Literary College dean.

Dean John R. Effinger was a man of strong temper. On Monday morning the entire psychology staff minus Mayberry was summoned to the Dean's office to hear a pointed lecture on the undesirability of using off-color anecdotes of any kind in classes. His remarks were caustic and brief. One of the senior men attempted to defend the young instructor but Dean Effinger's face flushed and the blood vessels in his forehead began to throb in a manner forecasting the apoplexy which would strike him down in seven years. Nothing more was said and Mayberry's career as a lecturer at Michigan was over.

Ford took over all the lectures and continued to give them until his departure in 1931. Pillsbury was still listed as the main lecturer for several years but only came to the first and last meetings.

The advanced courses remained very much in the experimental physiological tradition established earlier and were mainly given by Pillsbury and Shepard. The old established courses (advanced systematics, comparative, history, advanced experimental, laboratory techniques) were supplemented by additional offerings in physiological psychology (comparative neurology, central nervous system and mental processes, physiology of the senses) and sensory-perceptual psychology (color vision, perception, visual space perception, and sensation, imagery and perception).

Adams continued to develop the applied area that he had pioneered at Michigan and was occasionally assisted with offerings by Griffitts, Ford and Greene. Advanced work in advertising and salesmanship was added to the introductory courses in those topics. Offerings in management, applied and vocational psychology were introduced. Griffitts gave work in mental measurement, individual and race differences.

Personality and clinical psychology, however, were only represented in the curriculum in a very peripheral manner. Pillsbury, of course, had been giving his popular "The Psychology of the Abnormal and the Occult" since 1906. But it was not particularly reflective of the growing national interest in the clinical area. Adams occasionally offered a course in "Volition" and Griffitts one in the "Psychology of Character." Dimmick reactivated a genetic psychology course which was based on Wundt's *Volkerpsychologie*, but when he left, Martha Colby took it over and oriented it toward experimental child psychology.

Carl Brown gave a statistics course, *Biometric Methods*, in 1921. He presented the methods of data analysis he had used and helped develop when he was working with the Army intelligence testing group in the First World War.

Finally, a set of specialty courses was given from time to time by various staff members in order to satisfy their avocational as well as vocational interests. Some of these offerings were the psychology of language (Pillsbury), psychology of religion (Finlayson, Shepard), aesthetics (Adams), psychology of social service workers (Colby), criminal and legal psychology (Mayberry), psychology of law (Mayberry), and psychology of music (Colby).

In those years the main intellectual stimulation was to be found in the informal departmental discussions which took place in the laboratories, seminars and Journal Club meetings. There was a great deal going on within the Michigan department but it was not representative of what was happening across the nation. The staff continued to consider itself to be a biologically oriented department and sought to establish itself within the Natural Sciences. It wanted no part of applied, social and clinical psychology and kept what little was done in these areas in the peripheral regions of departmental concerns. Pillsbury and Shepard did not say this in so many words but it was their main value and the graduate students took it in with the atmosphere.

The personal relationships among the staff members and students ran with reasonable smoothness. The staff, for the most part, was not only made up of good teachers but also of people who were approachable and open to discussion. Shepard's lectures often developed into stimulating interchanges between him and the students. Shepard would win but only by arguing back.

Among the younger men, Carl Brown was considered to be the high priest. If anyone had an idea he would bring it to Brown and try it out on him. Brown would subject it to unsparing criticism and more times than not, when he finished there would be nothing of the original idea left. Some graduate students had the unpleasant experience of having Brown destroy every idea they ever had. But his analyses did provide for many stimulating debates.

The informal departmental discussions had mainly to do with the conflict between Titchenerian psychology and behaviorism. Most of the staff were favorably impressed with behaviorism's critique of introspectionism. Pillsbury had recognized the trends and had begun to call himself a "kind of functionalist." Between 1921 and 1925 the pure Titchenerian view was represented in the department by Forrest L. Dimmick who was Cornell-trained and a thorough Titchenerian introspectionist. Several of the younger men, especially Brown, particularly disliked Dimmick's interpretation of sensory phenomena and many hours were devoted to this debate.

On one occasion an entire meeting of the Journal Club was devoted to such a discussion. Brown and Dimmick argued until almost midnight and gradually came to reach some kind of mutual understanding if not acceptance. Pillsbury, however, managed the class assignments so that both points of view could be expressed without detracting from each other.

Behaviorism's influence was primarily in its critique of the older schools. Its positive program did not appear to be accepted by anyone within the department with the exception of Clarence E. Ragsdale, a graduate student who replaced Adams on the staff in 1924-25 when the senior man was on sabbatical leave. Ragsdale had been a student of Max Meyer at Missouri and had absorbed the pure form of behaviorism that Meyer was teaching even before Watson pronounced his views. As an instructor in the elementary course, Ragsdale had to use the Pillsbury texts. This placed him in a difficult position since in his personal system there was no place for consciousness. In his quiz sections he would translate the text's language of consciousness into the behavioristic phraseology.

Gestalt psychology received a more favorable reception within the department. And the early Gestaltists were also interested in what was happening at Michigan. Kohler had been impressed with the

paper Shepard had done with Fogelsonger in 1912.⁴¹ In his *Gestalt Psychology*, Kohler made the following comments about the experiment:

. . . The same influence (of organization) upon recall has been demonstrated in a surprising form by Shepard and Fogelsonger. These psychologists made the subjects learn pairs of syllables. Some of these pairs had identical second members. . . At the time of the test the first syllable of a pair was given and its partner had to be recalled. But where two syllables had been followed by the same second syllable, both were presented together in the test. So long as organization is ignored one must expect that in the latter case the partner of the two presented syllables will be more easily recalled than a second syllable which has been associated with only one first syllable. . . Actually, however, just the contrary was observed. . . The disturbance was particularly striking when both syllables were presented simultaneously but it was also observed when they were given in rapid succession.

The explanation seems to be that during learning, the subjects had always been given a single first syllable together with its partner; that when two syllables appeared. . . those subjects would at first look unfamiliar in the new grouping; and that as a result, neither could immediately evoke the partner common to both. . . It follows from our explanation that any extraneous syllable which has never occurred during the learning but is presented with a first member of a learned pair, must have some disturbing effect. . . Our conclusion is that even a very slight alternation of circumstances will sometimes make recall difficult.⁴²

Kohler, then, saw Shepard and Fogelsonger's results as demonstrating the influence of organization upon the recall process, a basic point in Gestalt psychology. So when he was in the United States in 1925, he was interested in visiting Michigan and meeting Shepard. Kohler came to Ann Arbor and spoke to the graduate classes.

For his part Shepard was enthusiastic about Gestalt psychology. It must be remembered, however, that in the early twenties not very much was known about the new movement. To be enthusiastic about what the system might be saying, therefore, was not the same thing as identifying with it. As a matter of fact, Shepard never called himself a Gestaltist and in later years appears to have had serious doubts about it.⁴³ His thinking, as he presented it in his course in systematic psychology, however, came close to the Gestalt position on many topics so that his students were prepared for or at least were inclined by their Michigan experience toward what the Gestaltists were saying.

⁴¹ See Volume Two, Chapter 5, Section II for a more detailed discussion of this experiment.

⁴² Kohler, Wolfgang, *Gestalt Psychology*, (New York: Liveright Publishing Company, 1947), pp. 172-173.

⁴³ See, for example, Diana, S., "The Role of Past Experience in the Visual Perception of Masked Forms", *Journal Experimental Psychology*, 20, 1937, 29-59, which was carried out under Shepard's direction.

Norman Maier went to Berlin in 1926-27 to study with Wertheimer, Kohler and Lewin and became quite impressed with Gestalt psychology. Martha Colby also went there and was influenced to a lesser extent. They brought their enthusiasms back to Ann Arbor and through discussion influenced others of the staff and students. Brown and Thuma became very interested in the system and began to do more work in the sensory-perceptual area.

The atmosphere created by the staff's attempts to handle all the new "isms" made these years stand out as a most intellectually stimulating period. A climax occurred in the summer of 1929 when six outstanding European psychologists each spent a week on campus lecturing on their specialties in a course entitled "Phases of European Psychology." The speakers were James Drever (Edinburgh University), Robert H. Thouless (University of Glasgow), Wolfgang Kohler (University of Berlin), Llewellyn Wynn-Jones (University of Leeds), F. M. Roels (University of Utrecht) and Francis Aveling (University of London).

The International Congress of Psychology was to meet in New Haven that year so Carl Seashore of Iowa arranged to have the men come over earlier to lecture on their specialties. They were to spend one week at each of six cooperating universities where they would give a regular course of five meetings as well as a public lecture. In addition to Iowa, Seashore obtained the cooperation of the psychology departments at Wisconsin, Minnesota, Missouri, Pittsburgh and Michigan.

The course began in Ann Arbor on June 24th and lasted until the first week of August. The program was as follows:

<u>Week</u>	<u>Speaker</u>	<u>Topic</u>
June 24-28	James Drever	"Instinct, Emotion and Intellectual Behavior as the Basis of Character"
July 1-5	Robert H. Thouless	"Common and Scientific Background of Psychology"
July 8-12	Wolfgang Kohler	"Gestalt Psychology"
July 15-19	Llewellyn Wynn-Jones	"Spearman's Ability of Man"
July 22-26	F. M. Roels	"Psychology of Motor Processes"
July 29-August 2	Frances Aveling	"Personalism--A Psychological Approach to Reality"

The Michigan department enjoyed a very thrilling and stimulating summer with its visitors. The men lectured daily, met with the staff and graduate students and attended teas and cocktail parties. The sessions on the whole were well attended. Kohler's week appeared to be the most successful. His course



Professor Walter B. Pillsbury and Professor Wolfgang Kohler. Professor Kohler spent one week in Ann Arbor during July, 1929. (Courtesy of *Michigan Alumnus*, 1929, 35, p. 761)

was a brief presentation of Gestalt psychology -- the first to appear on campus. He covered such topics as the physical counterpart of psychology as found in the physical sciences, organization versus machine theory, organizational processes and principles, and organization in associative learning and social psychology. Kohler's public lecture, "The Mentality of Apes," attracted the largest crowd that up to that time had ever wedged its way into Natural Science Auditorium.

The staff's reaction to this summer program was quite positive and very different from the one it had shown in 1926 when Alfred Adler came to lecture in Ann Arbor. The department members attended his lecture but were not impressed. Adler had a mannerism which disturbed some of them very much. As he would speak he appeared to be wringing out his hands. Some of the staff, reflecting, unwillingly perhaps, the "new psychology", interpreted the affectation to mean that as soon as Adler uttered a thought he wished to wash his hands of it!

CHAPTER FOUR

The Departmental Reorganization: 1929-1935

On March 29, 1929 Professor Wenley died and as a consequence of the change in the administration of the Department of Philosophy, psychology was made a separate department. Professor Pillsbury was officially placed in charge of psychology.

The only remarkable aspect of the event was that it was so long in coming. From its earliest years under Pillsbury and Shepard, psychology had moved away from philosophy and sought its identification with the natural sciences. Graduate students were directed toward courses in the biological and medical sciences and the experimental physiological orientation dominated the department. Yet administratively, psychology remained a sub-department of philosophy, held in the iron fist of the domineering Wenley. As the administrative head, Wenley had the final say on promotions, salaries, and new personnel and, as one might expect, the philosophers fared somewhat better than the psychologists.

Pillsbury was not aggressive but was a rather mild, gentle and quiet man. He never complained about the union of philosophy and psychology which others in his situation may have viewed as an imprisonment. He did not push for recognition of the obviously separated disciplines nor for the furthering of the careers of his junior staff members. The separation finally came at the initiative of the College administration. There were, of course, some sharp words on the part of the philosophers: "You have taken the road to ignorance." But the psychologists were happy to have their freedom.

In assuming the chairmanship, Pillsbury was just accepting title to a role he had been performing in many ways for some time. It was that of the senior professor, the head, who ran the department with no necessary consultation, meetings, or committees. Courses were approved, time schedules set up, and other business conducted by conference with him on, if anything, a first come, first served basis. Pillsbury, as senior professor and head, expected to be chairman of every doctoral committee and chose the committee members as he saw fit, regardless with whom the candidate actually worked.

By present-day procedures his way of operating appears dictatorial and autocratic, and of course they were. It must be remembered, however, that Professor Pillsbury was only acting out what was in his day the normal way for chairmen to perform. He had been educated in the tradition of the autocratic, senior professor and this procedure had been reinforced by his experience at Michigan. Mild-mannered, gentle person that he was, Pillsbury presumably knew of no other way to act as a departmental head. The fact that he may not have been effective in that role is irrelevant to an understanding of why he acted as he did. From Pillsbury's standpoint, there was no other way to perform.

However, great changes had been occurring in the University. Clarence C. Little, who had become president in 1925, had become embroiled with the regents, faculty and the state legislature. At the beginning of 1929, Little suddenly resigned. Without detailing the many events which led to this resignation, it may be said that a large part of the difficulty Little encountered was due to the autocratic manner by which he attempted to put across his many advanced educational ideas.

Again, it should be noted, Little's autocratic procedure was not a new way for a university president to act. Corporate organizations were not yet common university structures. Presidents, deans and department heads very frequently acted in this manner. But times had changed. The University had grown too large to be operated as a one-man show at any level.

When Alexander Ruthven became president in 1929, he realized that a new university-wide organization was necessary. In his first presidential report, Ruthven stated his belief that the university administration at all levels must reorganize in order to delegate authority with responsibility. At the executive level, he created vice-presidencies and directorships with specific supervisory functions. The deans were encouraged to draw their faculties in the administration of their units by forming executive committees. Departments were also asked to reorganize in order to involve their staff members in more decision-making roles.

But such change takes time particularly when it implies a radical alteration in the ways that had been traditional in an institution. John R. Effinger had been dean of the Literary College since 1912 and was quite accustomed to the traditional way of operating. In August 1932, the faculty requested the Literary College Executive Committee to investigate the various ways by which the members of the faculty could be given more opportunity to participate in departmental administrations than in some instances had been possible in the past.

But Dean Effinger was not quick to implement this suggestion so no pressure was put upon the chairman to change. Dean Effinger died of a heart attack in June 1933. Two months later, Edward H. Kraus was appointed to the deanship and the reorganization of the departments was about to begin.

In the fall of 1933, the Executive Committee of the Literary College submitted to the faculty a list of recommendations relating to departmental reorganization. Their primary purpose was to set in motion a procedure for bringing about a greater degree of participation by the teaching staff in the administration of departmental affairs. Specifically, the committee made three recommendations:

First, that the entire teaching staff of each department be requested to meet, at the call of its chairman, not less than twice each semester for the purpose of the consideration of subjects of departmental concern other than budgetary matters and problems of salary and promotions.

Second, that at a special meeting to be held before November 1, 1933, each department was to determine by a written ballot of all the staff members entitled to vote whether it thought its existing organization satisfactory, or whether it desired to organize an executive committee to act for the department jointly with its chairman, or whether it desired to propose any modification of its existing organization.

Third, that the scheme of reorganization proposed by each department would be subject to the approval of the Executive Committee of the College.

During the next several years every department in the college presented a plan of organization. Some groups continued their informal arrangement under which they always had operated. Others adopted a partly elective and partly appointive executive committee. And still others operated by forming a deliberative committee of the whole staff or those with senior rank. The Department of

Psychology presented the most detailed plan of any of the departments and took the longest time to develop it.

Professor Pillsbury was not in sympathy with the movement toward a reorganization and was quite disturbed by Kraus' directive. But there was very little he could do about it except to postpone as long as possible calling the reorganization meetings. The change was, however, quite reflective of the times. The psychology staff was not to be put off any longer. The department was still small and it no longer made any sense to have it run by a one-man rule. As long as Dean Effinger was in office, however, nothing happened. Once, during this period, a delegation of staff members from psychology went to Dean Effinger about Pillsbury's failure to move in the direction of the Ruthven suggestion. Dean Effinger would not listen to the departmental complaint and dismissed the delegation with words to the effect that Professor Pillsbury was a member of the National Academy of Science and that was that.

When Dean Kraus took office, there no longer was any administrative support for Pillsbury's hesitancy. But hesitate he did. Though the Executive Committee's recommendations referred to above called for a meeting to consider departmental reorganization to be held before November 1933, Pillsbury refused to act. Finally, several of the staff members (Brown and Thuma) went to Dean Kraus and complained. The Dean called in Pillsbury and ordered him to call the meeting.

The first reorganization meeting was held on February 2, 1934.⁴⁴ Thus began a two-year period of tension, uncertainty, and backroom caucusing which is often recalled by the older staff members as the period of the "revolution." At that first session Pillsbury appointed Shepard and Thuma as a committee of two to study the problem of reorganization as it applied to psychology. Pillsbury agreed to set informally with the committee.

Three and a half months later the committee presented its first report which the staff returned to it for further study. Shepard and Thuma spent the next four days working on their report, meeting several times with Pillsbury and once with Dean Kraus. On May 26 they presented the results of their further discussions to the staff. The following recommendations were made and accepted by the members:

One, that the department would operate on a committee basis; two, that all decisions on departmental affairs were to be made by the department or by its delegated agencies. And three, that an executive committee be established.

Dr. Brown then moved, on the behalf of the committee on Graduate Study, that the personnel of each doctorate committee be decided by the Executive Committee after consultation with the staff members in direct supervision of the candidate's thesis. The candidate's own preference was to be considered.

Dr. Brown's motion was directed at the practice by which Pillsbury along with many other department heads had always operated. He made himself chairman of all the doctoral committees and

⁴⁴ The staff at this time consisted of Pillsbury, Shepard, Adams, Griffiths, Brown, Colby, Thuma, Greene, Maier and Meyer.

chose the committee members with little regard for whom the student was actually doing his work.⁴⁵ This procedure appeared to the younger men to be grossly unfair. The motion easily carried.

Drs. Griffitts and Thuma were then elected to the department's first Executive Committee.

As the meeting was about to conclude, Dr. Maier asked to whom one should now apply for requisitions and equipment orders. Professor Pillsbury, who had remained very quiet throughout the meeting, replied that in spite of all that had happened, he was still Director of the Psychological Laboratory and in that capacity, the power to sign requisitions was vested in him. Since Shepard had been delegated this power during one of Pillsbury's leaves and this delegation was never rescinded, both Shepard and he would continue to sign the requisitions. This was one function they were not taking from him.

This exchange between Pillsbury and Maier reflects well the hurt and disturbance the senior man felt about the change that was taking place. He objected to what was going on and felt that the younger men were trying to unseat him. Pillsbury would never have given way on his own and it took the pressure from the Dean's office to bring it about. But once the movement began he kept rather aloof from the discussions, contributing no more than an occasional derisive remark.

This meeting did not conclude the staff's deliberations concerning the departmental operation. The Executive Committee of the College had agreed that the above organization would hold for the 1934-35 academic year. It requested the department to evaluate its procedures at the end of the year to determine if they still appeared appropriate.

On May 20, 1935, the staff met to consider the question of continuing or modifying the present form of the departmental organization. Professor Shepard moved to vote on the general type of organization desired, headship-chairmanship versus a committee system. A secret ballot was taken and the committee system was approved, 5 to 3. Professor Griffitts was absent and Professor Pillsbury did not vote.

Then Shepard moved to vote on the question as to whether the present system should be retained in toto or modified. The vote favored modification, 7 to 1. A committee made up of Shepard, Griffitts, Colby, and Thuma was then appointed to develop a departmental constitution and a set of bylaws.

The decision to set up the committee system was not unanimous as the three negative votes indicated. Following this meeting, Griffitts indicated by letter to the department that he had serious doubts as to the effectiveness of such a system in so small a department.

No further developments occurred through the summer and fall of 1935. Almost all the other departments in the college had completed their reorganizations to the satisfaction of their staffs and the college administration. Dean Kraus had not received the final plan from psychology and became impatient with what may have appeared to him to be the staff's difficulty in reaching agreement. Twice during the fall of 1935, the dean's office wrote Pillsbury to remind him that psychology's decision as to its permanent organization was long overdue.

⁴⁵ This procedure applied only to the committees of students working with junior staff. Shepard usually was appointed chairman of his students' committees. Occasionally a joint chairmanship with Pillsbury was arranged.

On January 16, 1936 the Committee on Departmental Reorganization gave its preliminary report which raised many questions which the staff felt deserved further consideration. The staff expressed its desire to remain on the committee system but requested the college to allow it further time for the working out of the "more progressive and efficient details" of the organization. The college reluctantly agreed to the delay but stressed its expectations that a more detailed report would be delivered in the near future.

The Committee sped up its deliberations. Each member put down his ideas in an individual draft of a set of articles of organization. Griffiths' draft was considered the best and was selected as the one to be presented to the staff. At a long meeting held on Saturday afternoon, February 14, 1936, the following Articles of Organization and Bylaws were considered by the staff and approved:

ARTICLES OF ORGANIZATION

- I. The legislative authority of the Department shall be vested in the members of the staff of the rank of instructor or above.
 - A. They shall pass, subject to the approval of the proper authorities, such legislation as concerns:
 - (1) departmental organization;
 - (2) organization and content of courses;
 - (3) requirements for concentration and for higher degrees;
 - (4) the relations of the department to other units of the university; and
 - (5) in addition, such legislation as they may deem necessary for the guidance of the Executive Committee. (Carried 8-0)
- II. The executive and administrative authority shall be vested in an Executive Committee.
 - A. This committee shall be composed of the Chairman of the Department, who shall act as chairman of the committee, and three other members elected by the department, one of whom shall be of the rank of full professor or associate professor, one of whom shall be of the rank of assistant professor, and one of whom shall be elected at large from the members of the staff. (Carried 7-1)
 - B. The elective members of the Executive Committee shall serve for terms of three years. At the first election the terms of office shall be so specified that, thereafter, a new member shall be elected each year. (Carried 7-1)
 - C. The Executive Committee shall elect one of its members to the office of Recorder. His duties shall be:

- (1) to record the minutes of the meetings of the Executive Committee and to record and circulate the minutes of the meetings of the staff;
 - (2) to call meetings of the Executive Committee and of the staff;
 - (3) to make such communications as the Executive Committee or the department may direct. (Carried 7-1)
- D. The Executive Committee shall be responsible to the department for the efficient execution of the following duties:
- (1) the allocation of departmental funds, the adjustment of the salaries of the staff and the recommendations for academic promotion;
 - (2) the hiring and assigning of assistants, and departmental employees of non-academic status;
 - (3) the regulations of teaching loads of the staff and of the duties of assistants;
 - (4) the counseling of graduate and undergraduate students, the supervision of graduate examinations;
 - (5) the supervision of the physical equipment of the department, the expenditure of funds for books and new equipment, and the allocation of room space;
 - (6) the appointment of the Journal Club chairman. (Carried 8-1)
- E. The Executive Committee may distribute the responsibility for the execution of the above duties to its members, to other members of the staff, or to subcommittees at its own discretion. (Carried 8-1)
- F. Any elective member of the Executive Committee may be recalled by a two-thirds majority vote of all the members of the staff in residence. A recall election shall be held no sooner than one month after it has been requested by one-half of all the members of the staff in residence. (Carried 8-1)
- G. The decisions of the Executive Committee shall be subject to review by the staff as a whole and any decision may be revoked by a two-thirds majority vote of all the members of the staff in residence. (Carried 8-1)
- H. In the event of a tie vote on two successive ballots in the Executive Committee, the matter shall be referred to the department as a whole for decision, except when immediate action is required, in which case the matter shall be left to the Chairman of the Department for decision. (Carried 8-1)
- III. In the event of a tie vote on three successive ballots on motion in meetings of the staff, the matter shall be left to the Chairman of the Department for decision. (Carried 8-1)

- IV. Any member of the staff shall have the privilege of presenting to the Executive Committee or to the department at any of their regular meetings any matter which he may regard as meriting consideration. (Carried 8-1)
- V. Meetings of the staff and of the Executive Committee shall be held at times specified in the By-Laws and special meetings shall be called at any time at the written request of four members of the staff. (Carried 8-1)
- VI. Amendments to these Articles of Organization may be made by a two-thirds majority vote of the entire staff in residence after such proposed amendments have been presented in writing. Such amendments may not be voted on until all the members of the staff have signified their willingness to vote. In default of this consent a vote on the proposed amendment is mandatory at the second regular meeting following its proposal. (Carried 9-0)
- VII. The By-Laws may be enacted or amended by a simple majority vote of all the members in residence. (Carried 9-0)

BY-LAWS

- 1. Meetings of the entire staff shall be held at least once each month to hear the report of the Executive Committee, to enact such legislation as shall be necessary, and to elect members to the Executive Committee or to other committees as may be necessary. (Carried 8-1)
- 2. The Executive Committee shall meet once each week. Each member shall report such of his activities as are pertinent to his function as a member of the committee. These shall be approved or disapproved by the committee as a whole and if disapproved the member shall modify his decisions so as to meet with the approval of the committee. (Carried 8-1)
- 3. No requisition shall be signed for the expenditure of a sum exceeding fifty dollars without the approval of the Executive Committee. (Carried 8-1)
- 4. No project involving the expenditure of more than \$50.00 of departmental funds, including the labor of the departmental Instrument Maker, shall be begun by any member of the staff without the approval of the Executive Committee. (Carried 8-1)
- 5. The Executive Committee shall make a written report of its activities at each regular meeting of the staff. (Carried 8-1)
- 6. Copies of all minutes of departmental meetings shall be on file in the office of the departmental secretary. (Carried 9-0)

These Articles of Organization and By-Laws have remained substantially the same for the department throughout the years. There have been some minor modifications in the size and term of the Executive Committee and the staff has been given the right to pass on all new appointments. But otherwise, the committee system formally established in 1936 has been unchanged.

The vote, however, did not immediately terminate the tension and dissatisfactions that were aroused during this period. The articles were not unanimously approved. Professor Adams had strong

reservations about the adopted organization and voted against every article that pertained to the Executive Committee. Adams was sympathetic to the idea of reorganization. He had felt that the Pillsbury headship was a very frustrating experience. But he feared that the committeeship system as it was set up would be subject to the domination of the senior men -- particularly the domineering personality of Shepard. He favored a stronger Executive Committee. But his objection went even deeper than this. Following the vote he wrote Dean Kraus as follows:

. . . By common agreement there is something the matter with the department. I believe that the Committee on Reorganization should have discovered through interviews with impartial witnesses the nature and causes of the difficulty and should have shaped a legislation specifically to cover each difficulty. I am, therefore, dissatisfied with the report as a whole. We can only hope that it will work for the best. . .⁴⁶

Dean Kraus, however, was happy to have the job done. The psychology reorganization completed the task for the entire college two and a half years after President Ruthven first suggested it. In a letter to Professor Pillsbury, Dean Kraus offers a final word on the long process:

. . . We shall follow with great interest the functioning of the organization as set up which is the most detailed so far set up by any department in the college. . .⁴⁷

⁴⁶ Henry F. Adams to Dean Edward L. Kraus, February 17, 1936, in the *Kraus Papers*.

⁴⁷ Dean Edward Kraus to Walter B. Pillsbury, February 24, 1936 in the *Kraus Papers*.

CHAPTER FIVE

The Depression Years: 1930-1940

The Depression had its effects on the University as it did on every other national institution. By 1933 its enrollment had fallen from a 1929 high of 15,500 to a low of 12,300. That year the state legislature decreased the University's budget and there had to be a reduction of general services and functions such as student personnel, office staff, and accounts. Readjustments were also made in the teaching staff. Sixty-nine positions of instructor or above were eliminated and sixteen were put on reduced time (a salary which did not exceed twenty percent over a two-year period).

The department did not, however, suffer during this period as far as staff positions were concerned. By 1931 it had reached a size of ten full-time positions and was able to hold that number throughout the decade. Several changes did occur in the individuals who made up the roster.

Dr. Adelbert Ford resigned in June 1931 to accept the chairmanship of the Department of Psychology at Lehigh University. Pillsbury offered the position to Theodore C. Schneirla, a graduate of the department. When he turned it down, it was offered to Norman R. F. Maier, who accepted it. A pre-doctoral instructorship was also given to George Meyer, who remained on the staff until 1943.

Another addition was a part-time lecturer, Thorlief Hegge. Dr. Hegge was born in 1889 in Norway and took his doctorate in 1918 at the Royal Norwegian University in Oslo, where he did research on the classification and analysis of the introspective process. After receiving his degree, Dr. Hegge remained at the Royal Norwegian University in the capacity of assistant professor and university examiner. In 1927 he was awarded a Laura Spellman Rockefeller Foundation fellowship spending two years in Ann Arbor.

At the conclusion of the fellowship, Dr. Hegge decided to remain in the United States and accepted a position as director of research at the Wayne County Training School in Northville, Michigan. He held that position until his retirement in 1959. From 1929 until 1944, Dr. Hegge offered part-time courses at Michigan in the general area of mental retardation.

The department was fortunate to gain the services of Heinz Werner for three years beginning in 1933. Professor Werner (1890-1964) had been a professor at the University of Hamburg since 1917. When the Nazis came to power, he was forced to flee Germany as were many of his German colleagues. An organization was formed in the United States to raise money and secure positions for qualified refugee scholars in various institutions across the country. The Emergency Committee on Aid for Displaced German Scholars attempted to place the scholars by providing several years of salary in hopes that the institutions who accepted them on this basis would make the immigrants permanent members of the staff after they had proven themselves.

The Emergency Committee, aided by the Rockefeller Foundation raised \$8,000 for Werner's salary over a two-year period and the department and University accepted the arrangement, giving Werner a two-year contract.

Professor Werner offered a series of courses which were quite new in the department. Each year he gave courses in Gestalt Psychology (“a survey of experimental facts upon which Gestalt Psychology is based”), Characterology (“Theories and experimental facts in the organization of character”), Developmental Psychology of the Higher Mental Processes (“A survey of the special and general laws of development as seen in the comparative study of the child, primitive man, animals and phases of psychopathology”), Genetic Psychology and Special Problems in the Psychology of Music.

The staff appeared to like Professor Werner very much and was unanimous in regarding his work as distinguished. Werner was an interesting person whose teaching elaborated in depth the point of view which was closely shared by Drs. Brown, Maier and Thuma. There was good reason, therefore, to expect that he would have been invited to stay on in Ann Arbor when the two years covered by the Emergency Committee’s funds were over.

The Committee had adopted a policy of establishing their scholars only where it believed there was a chance of their receiving a permanent position. In the spring of 1935 the Committee inquired as to whether the University was prepared to make any kind of commitment to Professor Werner. Dean Kraus conferred with the department and replied that the University would not be able to make a commitment at that time for two reasons. First, the University was still operating on the depression budget and had no new staff openings. Second, Professor Werner was not the department’s first choice among foreign scholars. Therefore when an opening did occur it would not be able to give him preference over all other psychologists both foreign and domestic who might be considered.

It is somewhat surprising that this should have been the department’s attitude. But there were some jealousies among the staff members concerning what each man felt were his own subject prerogatives. There was the belief that the department adequately covered what should be covered in a psychology program. In addition, there was in Werner the German influence. The department was heavily imbued with Michigan graduates and was not very sympathetic to other national trends much less foreign ones. Pillsbury was never favorably inclined toward Gestalt Psychology and Shepard, though very close to it on many topics, was still critical of the system.

The University did, however, arrange for temporary funds to keep Professor Werner on the staff for 1935-36. The Emergency Committee contributed another \$750.00 as did the University and the Aaron Mendelson Jewish Charity Fund.

In the spring of 1936, Professor Pillsbury placed the “hypothetical question” before the Executive Committee as to whether the department should consider adding Professor Werner to the permanent staff in the event that additional funds became available. The committee gave no definite answer although the inclination toward the negative seemed to be the essence of the discussion.

In the fall Professor Werner moved to Harvard University for a year and then returned to Michigan as senior research psychologist at the Wayne County Training School in Northville. In 1947 he moved to Clark University as chairman and professor of psychology.⁴⁸

⁴⁸ In 1938, Gordon Allport wrote to ask the department if it would consider the appointment of Karl Buhler for two years in view of his exile from Vienna. Dean Kraus, perhaps having learned a lesson from his experience with the Werner appointment, was opposed to the appointment unless funds were available from outside. Buhler went to the University of Southern California.

The only additional staff appointments made during the thirties were those of graduate students receiving part-time predoctoral instructorships. One such position was given to Usevold Skitsky for two years beginning in 1931. Skitsky assisted Professor Adams in the instruction of the undergraduate statistics course. He was a refugee from the Russian revolution who claimed to be of Russian nobility. His dissertation, completed under Professor Adams had the following obtuse title: "Instances versus Generalization: A Quantitative Comparison of Discussive, Statistical, and Experiential Approaches to the Conceptual Subject Matter of Traits by the Method of Judgments Passed on the Performance of Judgments." The thesis was so closely reasoned that no one in the department who read it could be certain that Skitsky was wrong or really had said anything. He was awarded his degree, but for years afterwards there were lingering doubts in the department. Dr. Skitsky eventually married a Russian noblewoman and retired from psychology.

The use of teaching fellows by the department began around 1934, and for the remainder of the decade three or four graduate students were so employed each year. The first group consisted of Wilma Donahue (1934-36), William LeRoy Jenkins (1934-35), and Mary Van Tuyl (1934-40). In the following years, William Gilbert (1936-40), Jack Gebhard (1936-39), Robert L. French (1938-39), Robert W. Kleemeier (1938-40), and Stewart Armitage (1939-40) also held these positions. The teaching fellows' assignments were primarily with the introductory courses.

The number of graduate students increased substantially to an average of thirty-eight a year (Table V-1).

Table V-1

Number of Graduate Students Enrolled in Psychology.

<u>Year</u>	<u>Number</u>
1930-31	43
1931-32	46
1932-33	48
1933-34	26
1934-35	23
1935-36	No Data
1936-37	36
1937-38	25
1938-39	No Data
1939-40	48

The years 1932-33 and 1939-40 were top with forty-eight students. The worst depression year of 1934-35 enrolled the least. Graduate assistantships began to be available to aid the students in those financially difficult years. Some of the graduates who held these positions were Leon A. Pennington (1931-32), William LeRoy Jenkins (1931-32), Wilma Donahue (1932-34), Margaret Ives (1933-34), Mary Van Tuyl (1932-34), Jack Gebhard (1935-36), Stewart Armitage (1937-39), Urie Bronfenbrenner (1938-39), Robert W. Kleemeier (1938-39) and Stanley L. Wimberly (1938-39).

The number of doctoral dissertations completed during this decade almost doubled the number produced in the previous ten years. Thirty-three theses were completed.⁴⁹ As was true of the earlier periods, it is difficult to accurately determine who directed the theses until the 1936 date when Pillsbury was forced to forego his practice of being listed as the chairman of all the committees. The best determination is that Shepard directed eleven, Pillsbury nine, Adams, Brown, Colby and Maier three each and Griffiths one.

There appeared to be a decrease in the amount of work performed on animal behavior and an increase in the amount of work performed in sensory-perceptual problems. There was also a beginning of work on brain processes primarily under the direction of Maier who continued the research he had started during his post-doctoral fellowship with Karl S. Lashley at Chicago. Ten dissertations were in the area of sensation and perception, six in human learning, four in the higher mental processes, three in the developmental area, two each in animal learning, speech and brain processes and one each in sleep, noise, music and sensory-motor reactions.

By 1935 the department had acquired a secretary and a shop and had outgrown its quarters in the Natural Science Building. Some space was acquired outside of the building. In the late twenties space was obtained in the Pharmacology Building and Dr. Adams moved his office, research and classrooms there. In the thirties additional space was obtained on the third floor of the West Medical Building and, again, Dr. Adams moved his quarters. Dr. Greene joined him. Both men remained there for the duration of their associations with the department. Dr. Maier took over the space in the Pharmacology Building for his research. He retained this space until the early fifties.

Although Professor Pillsbury's professional activities began to decrease, honors continued to come his way. In 1930 he was appointed to a three year term on the National Research Council Division of Anthropology and Psychology. Three years later, he was named the Henry Russel Lecturer by the University and delivered an address entitled, "The Units of Experience." His alma mater, the University of Nebraska, recognized his accomplishments by awarding him an honorary Doctor of Laws degree in June 1934.

Professor Pillsbury's book, *The History of Psychology*, which had been published in 1929, was given a second printing in 1937. He also published two more works during this decade, *An Elementary Psychology of the Abnormal* (1932) and *Psychology of Memory* (1938). Of the ten articles he published, one was his autobiography for the Murchinson series,⁵⁰ and two others were on some aspect of the history of psychology.

Professor Shepard continued his research activity although nothing was published except for a brief report of a paper on the higher processes in rats which he presented in 1933 before the National Academy of Science. He also presented a brief paper at the 1935 American Psychological Association meetings. In addition to his maze research, Shepard served as a consultant to a project sponsored by the Kellogg Company on which he worked with Professor Ervin Nelson of the Department of Pharmacology. He was also voted membership in the National Institute of Psychology which had been organized in 1929. Shepard was also elected to the Executive Committee of the Literary College for three years beginning in 1936.

⁴⁹ See Appendix B for a complete listing of candidates, dissertation titles, dates, and chairmen.

⁵⁰ See Volume Two, Chapter 2 for a reprinting of this article.

Various department members began receiving small grants from the University in order to facilitate their research. One of the first awards was to Drs. Brown and Thuma for their work on visual acuity. From 1927 until 1938, they continued to receive about \$1,500 each year for this project. Professor Adams received grants from both the Rackham and faculty research funds for clerical aid, supplies and publication of work on theoretical as well as applied problems. In 1933 Dr. Maier began receiving annual Rackham funds up to \$4,500 a year for his research on the effects of brain damage in rats. He also completed a study of reasoning in children which he carried out in cooperation with the School of Education.

Dr. Maier also started his work on abnormal fixations in rats. In 1938 he presented some of his results at the meeting of the American Association for the Advancement of Science where it was judged the outstanding paper of the meeting and awarded a \$1,000 prize. These experiments received a great deal of publicity including a New Yorker fiction piece by E. B. White entitled, "The Door." Dr. Maier was presented with the Henry Russel Award by the University and his research became the best supported project in the department.

The curriculum offerings did not change a great deal during this decade. The general introductory course remained under Professor Pillsbury's nominal charge although he had almost completely withdrawn from it. Since the middle of the twenties he had given only occasional lectures leaving to Dr. Ford the major responsibility for the course. In 1931 Dr. Ford resigned and Dr. Thuma took over its direction. The 1932 Literary College catalogue listed the course as being offered by Dr. Thuma with occasional lectures by Professor Pillsbury. By 1936 its enrollment had become too large for the single lecture unit with recitation sections to be an effective arrangement. The course was divided into several independent lecture units each with its own recitation sections. In some semesters in the late thirties, as many as twenty-two recitation sections were scheduled. Drs. Thuma, Maier and Greene handled the lecture units with graduate students leading the recitation sections.

The two semester introduction to physiological and experimental psychology continued to be directed by Professor Shepard. It was listed under three separate numbers each distinguished by the combination of lecture-recitation-laboratory elected.

A third type of introductory course, Elementary Experimental Psychology, was offered for several years by Drs. Thuma and Brown beginning in 1936. The purpose of the course was to supplement the one semester general course by providing the non-concentrate with a more detailed treatment of normal human psychology with special reference to the experimental phase of the subject.

At the junior-senior and graduate levels, the program continued to be dominated by the experimental (comparative, sensory, perceptual, systematic) aspects of psychology. Professors Pillsbury, Shepard and Doctors Brown and Thuma offered these core courses. Professors Adams and Griffitts continued their work in the applied area.

The doctoral candidates were required to have courses in elementary statistics (Adams), mental measurement (Greene), comparative psychology (Shepard), theory of psychological measurement (Adams), psychological viewpoints (Pillsbury), history of psychology (Pillsbury), advanced systematic (Shepard), neural mechanisms (Maier), and two semesters of work in each of the following areas: genetic psychology (Colby), sensory processes (Brown, Thuma), and instinct, emotions and affection (Griffitts).

The department had some difficulty with the advanced systematic course. Professor Shepard was so anxious to have his students receive all the latest information in the learning-perception areas that his advanced systematic course was frequently continued far into the succeeding term. He would simply send in an incomplete grade at the end of the first term and continue his lectures. The department asked Shepard to renumber the second semester of his advanced systematic and to enter a grade other than an incomplete after the first semester. Professor Shepard's response was to increase the number of credit-hours and meetings for the course but without following the usual procedure of going through the departmental committees. It was, however, the core course of the entire graduate program.

There were some new developments within the curriculum which added to the department's theoretical-biological orientation. Professor Werner's offerings during his three year residency (1933-36), brought the department an in-depth experience in one of the most current systems. Not only did he offer work in the Gestalt system, but he extended the theory into other areas such as the development of higher processes, characterology and music.

Dr. Greene and the part-time lecturer, Thorlief Hegge, combined to offer a series of clinically-oriented courses that began to bring the department into contact with this rapidly developing area. Beginning in 1929 Dr. Greene offered courses, seminars and practicums in clinical and individual testing. Dr. Hegge held a seminar in clinical psychology as well as courses in mental deficiency and the diagnosis and treatment of reaching disabilities. Other members of the staff began to take an interest in those new developments. Professor Adams offered a course in the measurement of individual differences and, as a sign of the times, Professor Pillsbury finally dropped the word "occult" from the title of his popular course in abnormal psychology.

In 1935 Professor Adams gave a course in personality as a result of a request for such a seminar from a group of nursing students who were working in the psychopathic hospital. Dean Kraus was against the course being offered because he felt that not enough was known about the subject to justify the offering. But since the students came from outside the Literary College, Professor Adams gave the course anyway.

In 1931-32 the department offered a program in clinical testing but did not list a masters program in the subject until eight years later. A year earlier a joint program with the School of Education was approved whereby students who were enrolled in the Teachers Certificate Program could receive some special training for the position of clinical psychologist in the secondary schools. This program called for two teaching minors, a major in psychology, the required education courses and the fulfilling of the customary requirements for graduation from the Literary College.

In the mid-thirties Professor Griffiths approached the dean of the Graduate School about the possibility of establishing a psychological clinic. The Institute of Human Adjustment had been established in 1936 by the Mary A. Rackham Fund as a center for the rehabilitation of all types of behavioral problems. Its charge was to teach the deaf to read lips and the aged man vocations and avocations, to care for the indigent, expectant mothers and to rehabilitate the injured. The Institute was administered by the Horace Rackham School of Graduate Studies then under the deanship of Clarence S. Yoakum.

Dean Yoakum had been trained as a psychologist and had played a significant role in the development and administration of the psychological testing program during the First World War. After

the war he came to Michigan as a psychologist in the School of Business Administration and later entered university administration first as a vice president in charge of institutional research and evaluation and later as dean of the Graduate School.

Professor Griffitts and Yoakum were good friends and shared an interest in measurement problems. Professor John H. Muyskens of the Department of Speech had already established a speech clinic which was operating within the Institute of Human Adjustment. Griffitts' plan was to establish a psychological clinic to supplement the speech clinic by providing a diagnostic service. It could also offer a service to the community that would deal with vocational guidance, reading difficulties, adjustment of superior children, the causes of abnormal behavior, the determination of the capabilities and intelligence of children being placed for adoption and the problems of personality adjustment within the family.

Dean Yoakum reacted favorably to the idea and authorized Professor Griffitts to begin organizing the service while he convinced the University of the plan. Professor Griffitts set up the "clinic" on the fourth floor of the Natural Science Building in early 1937. Wilma T. Donahue and Lyla Bechtel Kleemeier were his first clinical assistants. They began by seeing some of the children being treated at the speech clinic.

Later that year Dean Yoakum was able to convince the Trustees of the Mary A. Rackham Fund to purchase a house at 1027 East Huron Street and Professor Griffitts and his staff moved to the building. The Psychological Clinic was officially established. Professor Griffitts became its first director and served in that capacity until October 1944. Although he continued to offer courses in the department, part of his official appointment was in the clinic. During the period of his directorship, a comprehensive program of clinical testing and counseling was developed that included thousands of school children in Ann Arbor, Port Huron, Ypsilanti and other Michigan cities.

The Department did not cooperate closely with the clinic in those early days. Nor was there a particularly warm feeling toward it. There were several reasons for this attitude. First, the department's experimental-physiological orientation was not sympathetic to any applied, non-laboratory development in psychology. Second, there appeared to be some resentment toward Professor Griffitts for having established the clinic without having consulted the department.

One of the purposes of the clinic, however, was to provide a training faculty for graduate students with some interest in clinical work. Students did come to the clinic to work mostly through the interest shown by Dr. George Meyer who taught courses in measurement. Some of the early workers were Stewart Armitage, Robert W. Kleemeier, Irvin A. Berg, Stanley E. Wimberly, A. Dudley Roberts, William F. Holmes, Woodrow W. Morris, William M. Gilbert, and Roger W. Heyns.

Two courses in social psychology were offered during this period. Dean Yoakum, after being ignored by the department during the previous seventeen years of his presence on campus, asked to be allowed to offer a course. He taught social psychology for three years. Dr. Colby began offering a course in social behavior in 1939.

There were some special interest courses added to the curriculum which brought a dimension of novelty to the program. Professors Pillsbury and Meader (Speech) gave the Psychology of Language and the Audience, Professor Shepard the Psychology of Religion, Professor Adams the Psychology of Motor

Skills, and Dr. Thuma a course called the Psychology of Law and one in Psychological Approaches to Art.

The department was not, however, responsive to every request for a course or program that came its way. The Extension Division asked for approval of a correspondence course in psychology but in 1936, the department felt it could not approve of such a proposal. There was a similar reaction to the School of Nursing's request that the department offer a course in The Psychology of the Bedside Manner. The departmental Executive Committee's minutes reads as follows concerning the request.

. . . a letter be written in reply. . . which would point out that the department's plan for the remainder of the year was already completed and suggest that a conference might be arranged to consider permanent arrangements for the more distant future, and further suggest, as an alternative for the School of Nursing a consultation with Mephistopheles. . .⁵¹

During the decade, an occasional speaker was brought in to add stimulation. Kurt Lewin came in the spring of 1933, as did Max Wertheimer in 1937. J. B. Rhine and C. A. Ruckmick were also invited to present University lectures. But a more exciting event was the holding of the Forty-Third annual meeting of the American Psychological Association in Ann Arbor in September 1935.

In those days the Association preferred to hold its meetings in an academic setting. Ann Arbor was well suited, being close to Detroit and having some newly opened dormitories available for housing. The department had not previously attempted to host the convention and, as a matter of fact, the convention had been wished upon it. Ann Arbor was selected as the site over Boulder, Colorado.

Once the selection was made, the department members became excited about its prospects. The staff worked well together on the planning. Professor Adams was in charge of the hosting of the distinguished guests and the social activities. Dr. Greene arranged the special luncheons and dinners. Miss Margaret Sabom, a graduate student, was responsible for arranging living quarters and carried out the assignment in a well organized manner.

The meetings were well attended. A partial list of psychologists who were on the program includes:

Solomon E. Asch	Alvali R. Lauer
Nancy Bayley	Robert W. Leeper
Leonard Carmichael	Abraham H. Maslow
Dwight W. Chapman	John A. McGeoch
D. Meredith Crawford	Fred A. Moss
Elmer A. Culler	O. Hobart Mowrer
Chester W. Darrow	Carl Murchison
Roy M. Dorcus	Helen Peak
Knight Dunlap	Leon A. Pennington
Horace B. English	Carl Pfaffman

⁵¹ Executive Committee Minutes, Department of Psychology, p. 93.

Paul R. Farnsworth	Sidney L. Pressey
Florence L. Goodenough	Floyd L. Ruch
J. P. Guilford	Robert H. Seashore
Ralph H. Gunlach	Karl U. Smith
Harry F. Harlow	Charles E. Spearman
Starke R. Hathaway	Ross Stagner
Fritz Heider	Frank N. Stanton
Carl I. Hovland	S. Smith Stevens
William A. Hunt	Percival M. Symonds
Truman L. Kelley	Edward L. Thorndike
George A. Kelley	L. L. Thurstone
E. Lowell Kelly	W. L. Valentine
Ivan Krechevsky	Robert S. Woodworth

The following papers appear to be of special interest from the standpoint of the subsequent history of American psychology: "Causal Types in Mental Disorder" (Knight Dunlap), "Object Set Psychology: A Preliminary Name for an Embryo System" (Robert S. Woodworth), "The Onset and Primary Development of Reflexes in the Field Guinea Pig" (Leonard Carmichael), "Learning as an Operationally Defined Concept" (John A. McGeoch), "A New Method of Studying Radio Listening Behavior" (Frank N. Stanton), "An Attempt at a New Approach to an Applied Psychology of Learning" (Sidney L. Pressey), "The Dominance Drive as a Determiner of Social Behavior" (Abraham H. Maslow), "The Organization of Mind" (Edward L. Thorndike), "A Vocational Interest Schedule" (L. L. Thurstone), "Brain Mechanisms and Brightness Discrimination Learning" (Ivan Krechevsky), "The Effect of Local Cortical Anesthetization on Motor and Sensory Functions" (Harry F. Harlow), "Fascist Attitudes: Their Determining Conditions" (Ross Stagner).

Only Professor Shepard and Dr. Maier of the Michigan staff delivered papers. Shepard spoke on "More About the Floor Cue" and Maier on "Some New Tests of Reasoning in Rats." Professor Pillsbury served as a program chairman for a session on visual phenomena.

Other distinguished psychologists who also served as program chairmen were Albert T. Poffenberger, Harvey Carr, Walter Dill Scott, Walter R. Miles, Edward L. Thorndike, Knight Dunlap, Florence L. Goodenough, Harry L. Hollingworth, James McKeen Cattell, Robert S. Woodworth, Clark L. Hull, Walter S. Hunter, Henry E. Garrett, and L. L. Thurstone.

Charles E. Spearman of the University of London gave a special lecture entitled, "New Tests of Ability, General and Specific, Innate and Acquired." The presidential address, "Psychology and Life" was given by Poffenberger and was followed by a testimonial award given to James McKeen Cattell. After the award, the University entertained all the members at the Michigan League with "light refreshments."

All in all, it was a wonderful time for the Michigan psychologist. The staff members worked well together and were very accommodating. The activities were kept informal with many social gatherings at individual's homes. The convention was considered a great success and the department

received many letters of appreciation from the guests, some of whom considered the occasion to have been the best conducted convention they had ever attended.

CHAPTER SIX

Pillsbury's Retirement And The Search For A Successor: 1941-1945

Professor Pillsbury celebrated his seventieth birthday on July 21, 1942 and after forty-five years of university service, reached the age of retirement. In April, a letter was sent to his friends and former students announcing his impending retirement and a testimonial banquet to be held at the Michigan Union on May 16th. Letters came from all over the country bringing best wishes. Beyond the usual sentiments expressed on such occasions, the messages reflected the respect Professor Pillsbury's acquaintances had for his dignity, gentleness, and professional bearing. At the banquet the staff members (Shepard, Adams, Griffiths, Brown, Colby, Thuma, Maier, Meyer, and Donahue) presented him with the following tribute:

. . . On this "commencement" occasion, we want to express to you our appreciation of kindly personal relations and of your spirit of toleration of varied opinions. We cherish the memory of your friendship through the years that are gone and we hope for its continuance through a long future.⁵²

Contributions were also solicited and were later used to set up the annual Pillsbury Award for Undergraduate Research.

Professor Pillsbury had begun his retirement furlough in the fall of 1941 and the Dean's office turned its attention to the determination of a successor. Professor Shepard was generally believed to be the logical successor to Pillsbury. First, he was the senior professor being on the staff since 1906. Second, he had routinely been appointed acting chairman whenever Professor Pillsbury took a leave of absence. This usual procedure had occurred as recently as the previous fall. Third, he had worked diligently for the University and the department. For years he had been the one senior staff member who was most in contact with the graduate students and was certainly extremely active in research. Finally, he had offered the courses that defined the Michigan psychological tradition -- experimental and physiological psychology.

Almost everyone within the department assumed that Shepard would receive the appointment. This expectancy was also shared by psychologists outside the University. Karl M. Dallenbach of Cornell University wrote Shepard, "You, I trust, are to be promoted to Professor Pillsbury's place. . . just recognition of your services to Michigan. . ."⁵³

Dean Edward H. Kraus of the Literary College began holding interviews with the members of the department as early as the fall of 1941. He also counseled with other persons on campus who were interested in psychology. As a result of the conversations and his own observation, Dean Kraus and his Executive Committee did not come to regard very highly the department as it was then constituted. He

⁵² Testimonial Statement to Professor Pillsbury from the Department of Psychology staff members, May 16, 1942 in *The Pillsbury Papers*.

⁵³ Karl M. Dallenbach to John F. Shepard, April 21, 1942 in *The Shepard Papers*.

concluded that psychology at Michigan would have to be strengthened and reorganized as soon as possible in order to improve its general status. He decided to look outside the University for a successor to Pillsbury.

Although this decision did come as a surprise to most of the staff, there was a vague uneasiness about the department that was felt on occasion by its members. In the awareness of the college administration perhaps its causes were easier to discern.

The department was and always had been highly inbred. Of the twenty-six persons appointed full-time instructors during the Pillsbury years, only six were not Michigan trained. And of these six only Professor Adams reached a tenured position. Four remained less than five years and one (Werner) was supported entirely by non-university funds. The two non-Michigan men who remained on the staff the longest time, Adams and Greene, were never really accepted into the main core of the department.⁵⁴

Inbredness is not in itself a negative factor, but it does tend to perpetuate and eventually make dominant the less desirable features of an organization. To some extent this was true of the Michigan department.

First, there was no one on the staff, with the exception of Dr. Maier, who clearly had national distinction. Pillsbury, of course, was an important figure in the history of American psychology, but his publications during the last half of his career had been of a very general nature and not of the research type. Very few young psychologists had ever heard of him. Shepard was a dominant, intelligent individual who did a great deal of research and had a strong effect on students. But he published little and had no national reputation. Thuma and Colby were good teachers and Brown was an excellent critic and a stimulating seminar teacher. Brown and Thuma spent hours working on an undergraduate laboratory manual and in the shop building twenty-five complete sets of equipment. They enjoyed doing it and the senior staff never criticized them nor pushed them in a different direction.

The ironic fact was that the department did not have the reputation it deserved. There was a great deal going on at Michigan. The staff was composed of superior teachers who had the respect of their students. They were very much involved with the students who found it easy and stimulating to interact with them. And there was much research activity but with the exception of the work of Maier, very little of it was ever published.

Second, the department was not keeping up with what was happening on the national scene. Its experimental and physiological tradition had placed it squarely among the natural sciences. The applied and clinical activities that did occur within the department were, to say the least, not warmly encouraged. Michigan, continuing to draw its sustenance from its own trainees, had become insensitive to newer emphases.

Third, there is some reason to believe that Dean Kraus did not have a good opinion of the departmental morale. He apparently thought that the staff members could not get on with one another. It was true that there had been a longstanding "disagreement" between Professors Shepard and Adams. But it was a quiet kind of feud of which only those very close to the department were aware. It was in no

⁵⁴ The "exclusion" was physical as well as intellectual. For the last twenty-seven years of his forty-two year university service, Professor Adams had an office across campus from the main psychology staff. Dr. Greene shared quarters with him.

way active or punitive. Professor Adams was not interested in teaching graduate courses or in having graduate students, hence, the disagreement between the two men never affected the graduate program in a divisive manner.

There was much discussion and argument within the department particularly in the twenties and early thirties. But it was an academic and intellectual dispute and was what made psychology alive during those years. This was not always understood by persons outside of the department.

Finally, the college had changed its view on the position of departmental chairman. The older notion of a chairman as "head professor" more gifted in research than administration had been abandoned. What was desired was a chairman who could function well in the search for staff and the improvement of the teaching program and who had the willingness to perform the routine duties of administration with thoroughness and energy.

Given the context of this definition of the ideal chairman and ills of the department as viewed with reference to the national scene, it is understandable that the choice was made to look outside the University for Pillsbury's successor. The department had need, it was decided, for rejuvenation and a new direction.

Although Dean Kraus asked the staff for suggestions and nominations, it was clear that his office would direct the search for the new chairman. By the spring of 1942, Dean Kraus had already contacted several men prominent in the field of psychology and had repeatedly received the suggestion name of Ernest R. Hilgard. Nevertheless, because of budgetary and emergency conditions, it was decided to delay the appointment of a chairman for the duration of the war. But the search for likely candidates was continued.

The administrative affairs of the department were taken care of by the appointment of Dr. Thuma as the Executive Secretary of the department. It was understood that he would perform the various administrative duties that were previously carried out by Professor Pillsbury and that he would act as chairman of the departmental Executive Committee. If there were any doubts as to the fact that Professor Shepard was being passed over, they were stilled by this appointment. Even the interim chairmanship was to be denied him.

However, the following spring (May 1943), Dr. Thuma left for an assignment in the United States Navy. Professor Shepard was then appointed acting chairman of the Executive Committee. There was to be no acting chairman of the department nor even an executive secretary of the department. These limitations were specifically mentioned in the announcement of Shepard's appointment.

In August 1943, Dean Kraus went to Washington D.C. to visit with Dr. Hilgard and to determine the extent of his interest in the chairmanship. The following month, Dr. Hilgard returned the visit, coming to Ann Arbor for two days. But Hilgard was not offered the position and received no further communication from Michigan. He had just been made chairman of the Department of Psychology at Stanford. The appointment was made in absentia since Hilgard was involved in war work in Washington. What he would have done if a Michigan offer had been made is unknown, even to him.

The fact remains, however, that none was made.⁵⁵

Dean Kraus did nothing more about the chairmanship until the latter part of January 1944. At that time two names appeared as possible candidates. They were Clarence H. Graham of Brown University and Norman A. Cameron of the University of Wisconsin.

Dr. Graham, who was thirty-eight years old at that time, had received his A.B. degree (1927), M.A. (1928) and the Ph.D. degree (1930) from Clark University. He became an instructor at Temple University for the year 1930-31 and did research on a part-time basis at the Johnson Foundation for Medical Physics at the University of Pennsylvania. The next two years, he continued the work on a National Research Council fellowship. In 1932 Graham returned to Clark University as an assistant professor and remained there until 1936 when he moved to Brown University with Walter Hunter when the latter accepted the chairmanship.

Dr. Graham's major interest was in the sensory area and he had published significant work on the functioning of basic visual receptor units. During the war years he served as Contractor's Technical Representative for a number of National Defense Research Committee contracts in the field of psychophysiology. He was also on the Applied Psychology Panel of the N.D.R.C. Dr. Graham came highly recommended as a scientist who was almost certain to have the respect of the research-oriented colleagues in the psychology as well as other departments. He was already a member of the Society of Experimental Psychologists and had received its Warren Medal in 1941. A rather quiet and reserved individual, Dr. Graham had not had a great deal of administrative experience.⁵⁶

Norman A. Cameron's candidacy was actually offered by some of the department members. The staff had reacted to Dean Kraus' early request (spring 1941) that it decide upon candidates with little enthusiasm. The committee system upon which the department operated after Pillsbury's retirement provided little leadership and even less organization. No selection committee was formed nor was there much communication between the staff as to desirable candidates. One member would discuss it with another if and when the subject came up in a general conversation. Dr. Maier suggested Wolfgang Kohler to Kraus but the Dean never acted upon the idea. After two years of drifting along, the department held a meeting and came up with the name of Dr. Cameron who had earned his doctorate at Michigan in 1927.

After receiving his degree, Dr. Cameron served as an assistant professorship at the University of Wisconsin for two years and then went to Johns Hopkins University to complete a medical degree and a residency in psychiatry. Cameron spent a year at Cornell University as an associate professor in the Department of Psychology and an attending psychiatrist at the New York Hospital. In the fall of 1939 he accepted a professorship at the University of Wisconsin. Cameron's wife also held a medical degree and was actively engaged in professional work.

⁵⁵ Personal communication from Ernest R. Hilgard, February 28, 1967.

⁵⁶ In the later years of his career, Dr. Graham was to receive many other honors for his scientific contributions. Among these awards were membership in the National Academy of Sciences and American Academy of Arts and Sciences, the Presidential Certificate of Merit, the Tillyer Medal of the Optical Society of America and an honorary degree of D.Sc. from Brown University. He also served as a member of the Armed Forces National Research Council Vision Committee from 1946 to 1959 and was Deputy Chairman of its Executive Committee from 1956 to 1958.

Professor Adams brought the department's nomination to Dean Kraus who, upon examining Dr. Cameron's qualification, observed with regret that he had a professional wife. He was strongly opposed to having two members of the same family in university employ.

The Dean, however, did accept the nomination and in late January, wrote for the complete credentials and recommendations for both Graham and Cameron. He was particularly interested in knowing about their ability as teachers, investigators, and administrators. After receiving this information, he invited both Graham and Cameron to come to Ann Arbor to give addresses before the staff and students of the department.

Dr. Cameron's address was scheduled for March 14, 1944, and was presented in the Rackham Amphitheater. He spoke on "Contemporary Trends in the Psychology of Abnormal Behavior." Dr. Cameron stayed with the Pillsburys during his visit.

Dr. Graham accepted the invitation to speak on March 29. He arrived that morning, met Dean Kraus, and had lunch with some members of the College Executive Committee. His address, "Some Problems in Visual Psychology" was delivered that afternoon. Dr. Graham left the following evening.

During his visit, Dr. Graham spent much more time with Dean Kraus and members of the Literary College Executive Committee than he did with the members of the department. The consequence was that he received only a rather vague impression of the department. The main thing was that it did not appear to be well regarded by the Dean or the Committee. Graham was told that the department would be reorganized and strengthened and that every possibility would be considered for improving its status.⁵⁷

After the two visits Dean Kraus continued his correspondence with Dr. Graham but ceased with Dr. Cameron. It appears that the dean never seriously considered the Cameron nomination. He was very interested in Graham.

On April 17 he wrote to Leonard Carmichael relating the favorable impression Dr. Graham had made during his visit to Ann Arbor. Kraus, however, wanted to learn more of his ability as an organizer and administrator since from what had been learned, Dr. Graham had little experience in these activities. Carmichael, who had been at Brown before becoming president of Tufts University, had worked closely with Graham. In reply President Carmichael stressed the candidate's administrative experience as the contractor's technical representative at Brown under N.D.R.C contracts which involved the supervision of over a hundred persons. President Carmichael also reaffirmed an early positive recommendation.

In May, Dean Kraus traveled to Boston to interview several persons for vacancies in the Literary College. Dr. Graham came up from Providence and met the dean for lunch. They discussed matters relating to the Michigan chairmanship. After the Boston meeting Dr. Graham received a letter from the dean which asked if he would be receptive if an offer were made to him by Michigan. Dr. Graham desired to have some time to consider the matter and promised to write the dean his decision in a few weeks.

The departmental staff appears to have been unaware that a "Harvard offer" had been made to

⁵⁷ Personal communication from Clarence H. Graham, March 17, 1967.

Dr. Graham. On May 18, a communication was received by the dean's office which had been signed by Professors Adams and Griffiths and Drs. Brown, Colby and Donahue. The communication contained the recommendation that Professor Shepard be appointed permanent chairman of the Departmental Executive Committee. This appears to have been the first time that any group of the staff had publicly united behind Shepard. It is not clear as to what motivated this decision after three years of living with the obvious fact that Professor Shepard was being passed over.

Dean Kraus, however, was somewhat on the spot since the offer had been made to Dr. Graham and he was momentarily expecting an answer. He replied to each of the departmental members to the effect that the communication had been presented to the Executive Committee which had discussed the recommendation and its implications. The Committee instructed the dean to invite each signee in for a personal conference to discuss with him some of the problems involved in the department.

On May 26 Dean Kraus received Dr. Graham's reply which was meant to turn down the University's offer. It was written, however, in language which did not indicate a definite declination. Dean Kraus replied immediately suggesting another meeting in New York, at which time they could discuss the various reasons that Dr. Graham had offered in his letter.

Dr. Graham's decision to stay at Brown was motivated largely by two principle factors: First, his marriage had just broken up and he was in the process of being divorced. Thus he was passing through a difficult personal period. Second, and quite important for him was the fact that as Contractor's Technical Representative at Brown under the N.D.R.C. contracts, he had the administrative responsibility for about 125 people. He did not see how a change in the administration of the contracts could be carried out effectively. In addition he had an intense emotional investment in these projects. As a member of the Applied Psychology Panel of N.D.R.C., Dr. Graham felt a considerable amount of responsibility to that organization.⁵⁸

In effect, then, the factors which influenced him not to accept Michigan's offer were mainly personal. In a second letter to the Dean, Dr. Graham made these reasons known and his declination more definite. On June 5 Dean Kraus acknowledged Graham's decision and the correspondence was ended.

Dean Kraus still had on his desk the departmental recommendation regarding Professor Shepard. There was no longer the obstacle of an offer outstanding to Dr. Graham. However, the Shepard candidacy did not appear to be a real alternative. The dean wrote again to President Carmichael at Tufts College. He thanked him for his strong endorsement of Dr. Graham and summarized Michigan's vain efforts to engage him. He concluded with the following request:

. . . This means that it will be necessary for us to canvas further the available men we should consider and accordingly, I would welcome further suggestions from you. Our position is one that would permit a competent man with good administrative ability to develop a very strong department but, however, it would require high standing in the profession together with patience and a large amount of diplomacy in administration. If possible, we should like to make the appointment in

⁵⁸ Ibid.

the near future. I shall eagerly await your recommendation. . .⁵⁹

President Carmichael replied immediately with the name of Dael Wolfle. But Dean Kraus had already narrowed the candidates down to three men and had written for their credentials. The three new nominees were B. F. Skinner (University of Minnesota), E. G. Weaver (Princeton University), and Donald G. Marquis (Yale University). Once the letter of recommendations arrived in Ann Arbor, only one of these men was pursued further. This was Donald G. Marquis.

Dr. Marquis had received his undergraduate training at Stanford University and completed his graduate work at Yale University taking his Ph.D. in 1932. He had remained at Yale as an instructor and associate professor and had become chairman of the department in 1942. During 1935-36 he had a Rockefeller Foundation fellowship to Oxford. Dr. Marquis' major contribution to psychology had been his book co-authored with Hilgard, *Conditioning and Learning* (1940). This classic work systematized the field of learning in a very original manner making popular the basic distinctions between classical and instrumental learning. The work reflects clearly Dr. Marquis' outstanding faculty for criticism and organization.

Another great asset that well-qualified Dr. Marquis for the Michigan appointment was his wide acquaintance with psychology and psychologists.

He had trained at Yale during the period which turned out many productive psychologists (e.g., Hilgard, Sears, Hovland, Spence, Miller). In addition, during the 1940s he was in close contact with the many psychological activities connected with the war thus widening his acquaintances.

Dr. Marquis visited Ann Arbor in the middle of the summer. The psychology staff did not know he was being considered and when he arrived on campus, only Professor Adams and Mrs. Donahue were available to meet with him.

Dean Kraus retired that fall and was succeeded as dean by Hayward Keniston, Professor of Romance Languages. The change in college administration delayed the negotiations and Dr. Marquis was not appointed until the spring of 1945. His term as chairman was to begin the following fall.

The charge that Dr. Marquis accepted from the University was to rejuvenate the department in order to bring it in step with contemporary trends in psychology. To simply say that he completed this task would be to underplay the magnitude of his accomplishment. In the twelve years that he was chairman, the department's reputation increased to the point where it was rated as one of the top three in the country, a position it has continued to maintain. In acquiring this status, new personnel and new programs were acquired. These additions were primarily in the areas of clinical and social psychology which greatly changed the context of Michigan psychology.

The former staff members were not unaware of what was happening and although there was obvious resentment, there was not open obstinacy toward the changes. The junior men saw the department begin to blossom. They realized that for better or for worse, the rest of the psychological world had gone beyond the department's stance. Things were happening in areas that had been locally ignored. They were not enthusiastic about the introduction of groups of clinical and social psychologists

⁵⁹ Dean Edward H. Kraus to Leonard Carmichael, June 1, 1944 in *The Kraus Papers*.

but it was clear that these were rapidly developing fields and it was time that Michigan did something about them.

On his part Dr. Marquis went about his task with a minimum of pressure and tension. The departmental Executive Committee and faculty meetings were regularly held and he brought to these groups for full discussion the various proposals he had for the department. He would take the time to persuade the groups of the worth of his plans. Sometimes they agreed immediately, sometimes six months later, and, only rarely, not at all. But he never acted on any plan until he had their approval.

As for the older staff members, Dr. Marquis did not directly interfere with their courses, research or space. Professor Shepard was the most well-established of the older staff. As long as the department remained in the Natural Science Building, he was always asked if his classrooms could be used, if younger staff members could use some of his research space . . . asked about every question that concerned him. But the questions were put in content and time in such a manner that he could not often object to Dr. Marquis' intentions. If there was any decline in Professor Shepard's sphere of influence, it came as a result of a series of decisions made by himself in response to questions put to him by the chairman. In the end, Professor Shepard simply withdrew. His retirement began in 1950.

Of the older staff members, only Drs. Brown and Maier continued to offer courses and research that effectively contributed to the graduate program. Professor Adams had always been somewhat removed from the main departmental currents and this did not change after Dr. Marquis' arrival. He retired in 1952. Professor Griffiths was ill during this period and although he continued to offer courses until 1958, he was not an effective departmental member. Dr. Thuma left the department in the late forties to become an assistant to the Dean of the Literary College. Mrs. Donahue was devoting her full energies to the Psychological Clinic and later the Division of Gerontology. Dr. Colby continued teaching but in 1949, she resigned to be with her husband who was in Washington D.C. on special assignment with the Atomic Energy Commission.

Dr. Marquis accomplished the modernization of the department with gentle but firm persuasion rather than by revolution. The manner in which the change was experienced and accepted by the older staff members is, perhaps, best illustrated by the following passage from a letter Martha Colby wrote to Professor Shepard in 1949:

. . . Despite all the nebulous and unclear circumstances of the last four years. . . or the change and thus inevitable toll of discomfiture to an established regime, my heart and mind are very deeply rooted in the Natural Science Building. Last spring it would have been much easier to leave under the conviction that genetic and experimental psychology was dead (nationally, I guess). But the students and the classroom and the plans for the maze were as usual, healing agents, and the old happiness had very much returned. . .⁶⁰

⁶⁰ Martha G. Colby to John F. Shepard, December 28, 1949, Washington D. C., in *The Shepard Papers*.

POSTSCRIPT

It is not the intention of this writer to deal with the many developments in psychology at Michigan since 1945. They have been many and are perhaps vastly more important than those of the entire sixty years that preceded this period. But the task of detailing that record will be left for another. It may be appropriate, however, to supply some continuity between the record as presented in this narrative and the one that shall someday be written describing the last twenty years. For it is our belief that the operating procedure that Dr. Marquis introduced in the forties had a great deal to do with the successful growth of the department's esteem.

In the first five years of Dr. Marquis' chairmanship, the total staff size increased from eight to forty men (Figure One). Some of this growth was normal due to the need to handle the post-war increase. Advantage was taken of the college administration's commitment to Dr. Marquis to strengthen the department by making a series of senior level appointments. E. Lowell Kelly was appointed professor in 1946 and Daniel Katz, a year later.

But the growth in staff was much greater than could be expected from the facts of enrollment alone. To be specific, in comparison to the last pre-war year, by 1950, the University population had increased 72%, the number of graduate students in psychology 200%, and the staff size in the department 400%.

The department began to take on an interdisciplinary character through the use of joint appointments (Figure Two). The number of staff members for whom the department assumed only partial or no salary responsibility increased dramatically. By 1950 only thirteen of the forty men listed on its roster drew full salary from the department's budget.

Psychological activities were recognized wherever they were found. Joint appointments were set up with the School of Education (Willard Olsen), the Department of Sociology (T. M. Newcomb), the Psychological Clinic (Wilma Donahue, Daniel Miller), the Bureau of Psychological Services (Clyde Coombs) and the Counseling Bureau (Edward Borden).

In addition, self-financing institutes were invited to Ann Arbor to form an association with the University and the Department. By 1948 the Survey Research Center and the Research Center for Group Dynamics were established on campus with over two dozen staff members and were completely supported from the proceeds of contracts, grants, and services. Men like Angus Campbell, Rensis Likert and George Katona from the Survey Research Center and Leon Festinger, Dorwin Cartwright, Ronald Lippitt and John R. P. French of the Research Center for Group Dynamics all received joint appointments in the department. In 1949 the two units were joined in a single unified administration to form the Institute of Social Research.

The Vision Research Laboratory was another early institute that came to Ann Arbor. The laboratory under the direction of H. Richard Blackwell arrived on campus in 1947.

This "open-door" policy toward joint appointments was not a mere courtesy move. These staff members were encouraged to become a part of the department and to participate as fully as they desired

in its activities. They taught courses, chaired and served on doctoral committees, and helped organize and execute interdisciplinary programs of instruction and research. As of 1965 the department held joint appointments with at least twenty-five other university units, offered joint or cross-listed courses with five other departments and participated in at least five joint programs. The distinction that Michigan enjoys social psychology can surely be attributed to the cooperative efforts of the department with other university institutes and departments in training, teaching, and research.

Dr. Marquis' success in creating the momentum which has continued to carry forward psychology at Michigan can be, in part, attributed to his persuasive presentations to the department as well as the college and university administrations. He appears to have been masterful in preparing and marshalling the evidence for his various proposals. Success breeds success and, as one former administrator recalled, after the success of Marquis' early efforts in the department, he had the administration half-sold before he made a request.

And so the department grew in size and with size, in diversity of programs. With such growth organizational problems were bound to develop. In 1959 "academic surgery" had to be done in order to allow for the continuation of the vigor and flexibility that characterized the post-war years. To quote from a departmental report,

. . . under this plan, the staff was organized into interest areas under the direction of a number of subdepartmental chairmen. The divisions are: Experimental. . ., Clinical, Physiological, Mathematical, Developmental, Personality, Industrial, and general. The activities of these sub-disciplines are regulated centrally through the office of the Graduate Studies of the department. . .⁶¹

One reads this passage with some feeling of historic irony, for the department appears to have come full circle back to the position of the Pillsbury era, when psychology itself was a subdepartment of philosophy. Today, of course, it is psychology that appears as a set of sub-disciplines, but the analogy is at least, formally appropriate.

What then may the future hold for psychology at Michigan? The many diverse activities currently characterizing the department already seem to be too disparate to be included in one organization. It is not at all unlikely that they shall go their separate administrative as well as scientific ways and eventually seek a union with areas in other departments and/or colleges with which they share functionally similar characteristics.

And if this does occur, might we not look differently at the kind of psychology that characterized the Pillsbury era which, in 1940, was assessed as isolated and narrow? Perhaps the passage of time may again demonstrate that history often provides its own kind of strange and unexpected vindication.

⁶¹ Departmental Statement to the Dean with Respect to the Five Year Review of the Chairmanship, (Mimeographed First Draft Copy), November 8, 1965, pp. 4-5.

APPENDIX A

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APPENDIX B

Psychology at Michigan: 1880-1950

I. Teaching Faculty with Rank of Instructor or Above

A. The Period of the Philosophers (1852-1897)

	Years on Staff as Instructor of Psychology
Henry P. Tappan (D.D. Union, 1845)	1852-1863*
Erastus O. Haven (D.D. Union, 1845)	1867-1869
Benjamin Cocker (D.D. DePauw, 1870)	1869-1883
John Dewey (PhD, Johns Hopkins, 1884)	1884-1888*
Williston S. Hough (Ph.M., Michigan, 1884)	1888-1889
James H. Tufts (PhD, Yale, 1889)	1889-1891
Alfred H. Lloyd (PhD, Harvard, 1893)	1891-1894*, 1896-1899*
George H. Mead (A.B., Oberlin, 1883; A.B., Harvard, 1888)	1891-1894
John Bigham (PhD, Harvard, 1894)	1894-1895
Edgar Pierce (PhD, Harvard, 1895)	1895-1896
George Rebec (PhD, Michigan, 1897)	1895-1897

* Part-time Instructor in Psychology

B. The Pillsbury Period (1897-1945)

	Years on Staff as Instructor of Psychology
Walter B. Pillsbury (PhD, Cornell, 1896)	1897-1942
Carl V. Tower (PhD)	1898-1899*
John W. Slaughter (PhD, Michigan, 1901)	1900-1901*
J. E. Wallace Wallin (PhD, Yale, 1901)**	1902-1903
Charles E. Galloway (Grad Work, Michigan, 1902)**	1903-1904
John F. Shepard (PhD, Michigan, 1906)	1903-1950
Louville E. Emerson (PhD)	1908-1909*
Floyd C. Dockeray (PhD, Michigan, 1915)	1908-1909
Harry W. Crane (PhD, Michigan, 1913)	1910-1913*
Henry F. Adams (PhD, Chicago, 1910)	1911-1953
Sven Froeberg (PhD, Columbia, 1908)	1915-1917
Charles H. Griffitts (PhD, Michigan, 1919)	1917-1958
Carl R. Brown (PhD, Michigan, 1928)	1920-1962

Forrest L. Dimmick (PhD, Cornell, 1920)	1921-1925
Adelbert Ford (PhD, Michigan, 1926)	1921-1931
John D. Finlayson (Th.D., Harvard, 1916; Grad Work, Michigan)	1921-1923
Martha Guernsey Colby (PhD, Michigan, 1922)	1921-1950
Ernest B. Skaggs (PhD, Michigan, 1923)	1922-1925
Clarence Ragsdale (PhD, Michigan, 1927)	1924-1925
Howard R. Mayberry (Grad Work, Michigan)	1924-1927
Leon B. Slater (PhD, Michigan, 1928)	1926-1928
Theodore C. Schneirla (Sc.D., Michigan, 1928)	1927-1929
Norman R. F. Maier (PhD, Michigan, 1928)	1927-1928, 1931-
John A. Glaze (PhD, Michigan, 1928)	1927-1928
Edward B. Greene (PhD, Columbia, 1928)	1927-1941
Burton D. Thuma (PhD, Michigan, 1930)	1928-1950
Margaret Wylie (PhD, Michigan, 1928)	1929-1930
George Meyer (PhD, Michigan, 1934)	1930-1944
Lloyd S. Woodburne (PhD, Michigan, 1932)	1931-1932
Usevolad L. Skitsky (PhD, Michigan, 1940)	1931-1933
Thorlief Hegge (PhD, Royal Norwegian University, 1918)	1929-1938*
Heinz Werner (PhD, Vienna, 1914)	1933-1936
Wilma Donahue (PhD, Michigan, 1937)	1938-1945*
Clark Crandell (Grad Work, Michigan)	1941-1942
Stanley Wimberly (PhD, Michigan, 1944)	1944-1945

* Part-time Instructor in Psychology

** Assistants

C. The Post World War II Period (1945-1950)

	Years on Staff as Instructor of Psychology
John F. Shepard (PhD, Michigan)	1903-1950
Henry F. Adams (PhD, Chicago)	1911-1953
Charles H. Griffitts (PhD, Michigan)	1917-1958
Carl R. Brown (PhD, Michigan)	1920-1962
Martha Guernsey Colby (PhD, Michigan)	1921-1950
Burton D. Thuma (PhD, Michigan)	1928-1950
Norman R. F. Maier (PhD, Michigan)	1927-1928, 1931-
Wilma Donahue (PhD, Michigan)	1938-1945
Donald G. Marquis (PhD, Yale)	1945-1957
Willard C. Olson (PhD, Minnesota)	1946-
Theodore Newcomb (PhD, Columbia)	1946-
Lowell E. Kelly (PhD, Stanford)	1946-
Rensis Likert (PhD, Columbia)	1946-
Angus Campbell (PhD, Stanford)	1946-

Urie Bronfenbrenner (PhD, Michigan)	1946-1948
George A. Satter (PhD, Purdue)	1946-1952
Clyde Coombs (PhD, Chicago)	1946-
Harold Guetzkow (PhD, Michigan)	1946-1947
William F. Soskin (PhD, Michigan)	1946-1947
Lloyd Woodburne (PhD, Michigan)	1946-1950
Daniel Katz (PhD, Syracuse)	1947-
Max Hutt (A.M., Columbia)	1947-1960
George Katona (PhD, Goettingen)	1947-
Louis Granich (PhD, Columbia)	1947-1950
Edward L. Walker (PhD, Stanford)	1947-
Roger Heyns (PhD, Michigan)	1947-1958
H. Richard Blackwell (PhD, Michigan)	1947-1958
Donald W. Fiske (PhD, Michigan)	1947-1948
Clellen L. Morgan (PhD, Iowa)	1947-1948
Harold H. Kelley (PhD, MIT)	1948-1950
Leon Festinger (PhD, Iowa)	1948-1951
Gerald S. Blum (PhD, Stanford)	1948-
Donald W. Lauer (PhD, Michigan)	1949-1951
Darwin Cartwright (PhD, Harvard)	1948-
John R. P. French (PhD, Harvard)	1948-
John W. Atkinson (PhD, Michigan)	1948-
Edward S. Bordin (PhD, Ohio State)	1948-
Robert M. W. Travers (PhD, Columbia)	1947-1949
Ronald Lippitt (PhD, Iowa)	1948-
Ralph Norman (PhD, Ohio State)	1948-1949
Daniel R. Miller (PhD, Stanford)	1948-
Wilbert J. McKeachie (PhD, Michigan)	1948-
Joan Longhurst (PhD, Michigan)	1948-1949
Mortimer Appley (PhD, Michigan)	1948-1949
Barbara Cook Potthurst (PhD, Michigan)	1949-1951
Richard Sanders (PhD, Michigan)	1949-1950
Abraham Carp (PhD, Stanford)	1949-1951

II. Doctorates in Psychology Awarded During the Pillsbury Period (1897-1946)

Date	Name	Thesis Title	Chairman
1906	John F. Shepard	Organic Changes and Feelings	Pillsbury
1913	Harry W. Crane	Association Reaction and Reaction Time	Pillsbury
1914	Joseph E. DeCamp	A Study of Retroactive Inhibition	Shepard
1915	Floyd C. Dockeray	The Effects of Physical Fatigue Upon Mental Efficiency	Shepard
1915	William H. Batson	Acquisition of Skill	Shepard

1919	Charles R. Griffitts	Individual Differences in Imagery	Pillsbury
1920	Sarah D. MacKay Austin	A Study of Logical Memory	Pillsbury
1922	Martha Guernsey Colby	A Study of Liminal Intensities and the Application of Weber's Law to Tones of Different Pitch	Pillsbury
1923	Ernest B. Skaggs	Further Studies in Retroactive Inhibition	Shepard
1925	Nellie L. Perkins	Human Reaction in a Maze of Fixed Orientation	Shepard
1925	Mildred F. Baxter	An Experimental Study of the Differentiation of Temperaments on a Basis of Rate and Strength	Pillsbury
1926	Adelbert Ford	Attention Automatization: An Investigation of the Transition Nature of Mind	Pillsbury
1927	Clarence E. Ragsdale	A Study of Interrupted Work	Pillsbury
1927	Norman Cameron	Effects of Cerebral Injury on the Maze Learning of the Albino Rat	Shepard
1928	Carl R. Brown	A Quantitative Study of Achromatic Visual Contrast	Shepard
1928	Norman R. F. Maier	Reasoning in White Rats	Shepard
1928	Theodore C. Schneirla	The Maze-Learning and Orientation of Ants	Shepard
1928	John A. Glaze	Psychological Effects of Fasting	Pillsbury
1928	Margaret Wylie	An Experimental Study of Recall and Recognition in Abnormal Mental Cases	Pillsbury
1928	Leon B. Slater	An Investigation of Memory in the Pre-School Child	Pillsbury
1929	Lois Garrett (Gill)	A Study of One Hundred Cases of Psychopathic Personality	Pillsbury
1929	Ella M. Hanawalt	Whole and Part Methods in Trial and Error Learning	Pillsbury
1930	Doris Twitchell (Allen)	An Investigation of Higher Thought Processes	Pillsbury
1930	Sinforoso G. Padilla	Further Studies on the Delayed Pecking in Chicks	Shepard
1930	Burton D. Thuma	A Contribution to the Study of the Auditory Sensitivity of the White Rat	Shepard
1931	Roy K. Immel	Muscle Synchronization in Normal Speech	Pillsbury
1931	Marion L. Billings	An Experimental Study for the Purpose of Comparing the Ability for Solving Problems in Different Fields of Endeavor	Pillsbury

1931	Paul P. Brainard	An Experimental Study of the Factors Involved in the Problem Solving of Children from Six Months to Six Years of Age	Pillsbury
1931	Sugi Mibai	An Experimental Study of Apparent Movement	Pillsbury
1932	Phyllis E. D. Swann	On the Inheritance of Spasmophrenia, Stammering and Stuttering	Adams
1932	Lloyd S. Woodburne	The Effect of a Constant Visual Angle Upon the Binocular Discrimination of Depth Differences	Brown
1933	Dji-Lih Bao	Plateaus and the Curve of Learning in Motor Skills	Shepard
1933	Mary C. VanTuyl	Studies in the Monocular Perception of Distance	Shepard
1934	Stella Whiteside	Spontaneity of Normal and Mentally Deficient Subjects in Selective Learning	Pillsbury
1934	Nathene Turk (Loveland)	The Effect of Cerebral Destruction in the Performance of the White Rat in the Various Maze Situations	Shepard
1934	George Meyer	The Influence of Memory on Certain Examination Sets During Learning	Pillsbury
1934	George Conrad Seeck	The Form of the Curve of Memory in Rote Learning	Shepard
1935	Siao-sung Djang	The Role of Past Experience in the Visual Apprehension of the Masked Form	Shepard
1935	Samuel A. Kirk	The Effects of Unilateral Cerebral Lesions on Handedness, Pattern Vision, and Reasoning in the Albino Rat	Maier
1936	William L. Jenkins	Adaptation in Isolated Cold Spots	Brown
1936	Richard D. Hollister	Relation Between Hand and Voice Impulse Movements	Shepard
1936	Quin F. Curtis	The Effect of Floor Cues Upon the Mastery of the Unit-Alike Maze	Shepard
1936	Wilbur D. West	A Study of Speed versus Accuracy in the Acquisition of Skill	Shepard
1937	Charles H. Crudden	Symmetry and Asymmetry in Form Abstraction by Children	Shepard
1937	S. Wallace Calhoon	An Experimental Examination of the Gestalt Theory of Traces	Pillsbury

1937	Charles C. Irvin	A Study of Differential Pitch Sensitivity Relative to Auditory Theory	Pillsbury
1937	Wilma T. Donahue	Psychological and Physiological Effects of Noise	Griffitts
1937	Margaret Sabom (Coile)	The Effects of Cerebral Destruction Upon Motor Skill in Rats	Maier
1938	Margaret Ives	The Flight of Colors Following Intense Brief Stimulation of the Eye	Brown
1938	Agnes Ann True	A Study of the Development of Prehension in the Northern Colored Infant	Colby
1938	Kenneth L. Bean	An Experimental Approach to the Reading of Music	Colby
1938	J. Wallace Nygard	Cerebral Circulation Prevailing During Sleep and Hypnosis	Shepard
1939	Bing-Chung Ling	Form Discrimination as a Learning Cue in Infants	Colby
1940	Usevolad L. Skitsky	Instances versus Generalization: A Quantitative Comparison of Discursive, Statistical, and Experimental Approaches to the Conceptual Subject Matter of Traits by the Method of Judgments Passed on the Performance of Judgment	Adams
1940	Barbara Sherburne (Stewart)	Qualitative Differences in the Solution of a Problem Involving Reasoning	Maier
1941	Miriam R. Bonner	Changes in the Speech Patterns under Emotional Tension	Pillsbury
1941	Tooi Xoomsai	Measurement of Emotional Reactions	Adams
1941	William M. Gilbert	The Temporal Locus and the Nature of Retroactive Inhibition	Maier
1941	Jack Wendell Gebhard	Color Phenomena Produced by Stimulation of the Retina with Intermittent Light	Brown
1942	Nathan M. Glaser	Autonomic Changes Associated with Abnormal Behavior in the Rat: (I) Analysis of Changes in Heart Rate Occurring as the Result of Responses in an Auditory Situation; (II) The Effect of Metrozal Upon Heart Rate	Maier
1942	Robert W. Kleemeier	"Fixation" and "Regression" in the Rat	Maier

1942	Henry S. Curtis, Jr.	A Statistical Study of the MacQuarrie Test for Mechanical Ability	Griffitts
1942	Virginia H. Johnson	The Effects of Distribution of Practice on Maze Learning in Rats	Shepard
1942	Irwin A. Berg	Development in Behavior: The Micturition Pattern in the Dog	Shepard
1942	Estefania Aldaba-Lim	A Study of the Resemblance of Siblings in Various Tests of Functional Efficiency	Griffitts
1943	James B. Klee	The Relation of Frustration and Motivation to the Production of Abnormal Fixations in the Rat	Maier
1943	Seymour Wapner	The Differential Effects of Cortical Injury and Retesting on Equivalence Reactions in the Rat	Maier
1944	Stanley E. Wimberly	The Isolation and Measurement of Certain Evaluative Attitudes	Griffitts
1944	Harland N. Cisney	The Stability of Vocational Interest Scores During the High School Period	Griffitts
1944	Lyndon R. Babcock	Factors Affecting Success or Failure of Psychiatric Patients on Parole	Griffitts
1945	A. Dudley Roberts	Patterns of Performance on the Revised Stanford-Binet and Arthur Point Scales as Related to Success on the Metropolitan Achievement Test	Griffitts
1946	Dorothy Marquart	The Pattern of Punishment and its Relation to Abnormal Fixations in Adult Human Subjects	Maier
1946	Samuel Waldfogel	Individual Differences in the Frequency and Affective Character of Childhood Memories	Maier

III. Selected Lists of Other Psychologists who Attended Michigan

James R. Angell (A.B., 1890, A.M., 1891)
 Herbert Woodrow (A.B., 1904, Graduate Work)
 Florence B. Barnes (Mrs. John F. Shepard)
 (A.M., 1907)
 Clark L. Hull (A.B., 1913)
 Howard S. Liddell (A.B., 1918)

Lawrence E. Cole (A.M., 1922)
 Leon A. Pennington (A.M., 1932)
 Robert L. French (A.M., 1938)
 Harold L. Raush (A.M., 1942)
 M. Ray Denny (A.M., 1943)