

**The Barnard College Psychology Department**  
***History of Psychology Collection***

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**Richard P. Youtz**

## The History of the Barnard College Psychology Department

Barnard College, a four-year women's college, was founded in 1889 and the first courses in psychology were offered in 1906 over the strenuous objections of many faculty and administrators who maintained that psychology was not a fitting topic for young women. We have chronicled some of the major events and faculty in the descriptions below:

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*Letter from Professor Harry Hollingworth (the founder of the department and chair through 1946) to Professor Richard Youtz (chair 1946 - 1974 describing the earliest courses)*

Barnard College  
Columbia University  
New York

Department of Psychology  
Montrose, N.Y.

Dec 18, 1950

Dear Youtz:

The endeavors of the historian are truly full of hazard. Even the documents of the period he would reconstruct are likely to be deceptive. Thus, even if, the catalogue lists Cattell as giving a course in Experimental in Barnard, you can be sure he never did so. Instead he would have sent his assistant over, who could do the work but could not be officially charged with it.

Around 1905 and 1906 these assistants were F.L. Wells and V.A.C. Henmon, and if, they gave courses in "Experimental" they had neither laboratory nor equipment. In about 1906-07- and 07-08 Woodrow became Tutor In Philosophy in Barnard and he was allowed \$1,000 to spend for apparatus and equipment for a course in Experimental. He bought a Hipp chronoscope, a Jaquet

chronometer, and a few large electric motors. He had only four or five students, one of which was Emily T. Burr, in her junior year. Curiously enough Woodrow's Middle name was Hollingsworth. Perhaps that is why I succeeded him as Tutor In Philosophy in 1909, Inheriting the Hipp chronoscope, the Jacquet chronometer and the electric motors, all of which are probably still stowed away somewhere about the lab.

Up to that time the Dept. had been assigned only Rooms 419 and 420. Enrollments increased rapidly so that soon Crampton moved out of 416, 417, and 418 also became ours. We were allowed each year a pittance for apparatus and supplies, but it was really with Woodrow that what might justly be called an experimental course began there, and he remained not more than two years.

I gave a section of, Introductory, a section of Logic, and also Experimental; when the last named course had 75 students a couple of hundred dollars was allowed for what was called assistance, which meant some senior who had the course the year before. Beyond that time the catalogues are reasonably correct although due to the exigencies of catalogue printing, people are often included on the staff a year after they have left and some one else who was there for only one year is never mentioned in the catalogue. And so it goes.

Well, our very best wishes. Some of these days I'll drop into the department quarters again, perhaps, although the problem of finding parking space makes this less and less likely. When you are up this way drop in on us. We are nearly always at home and most of the time able to navigate.

Yours – Hollingworth

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Barnard College  
Columbia University  
New York

Department of Psychology

Feb 16, 1949

Dear Youtz:

What an everlasting problem: the status of experimental psychology seems to be, and how vigorously the so-called sciences fight to maintain their historic prerogatives. Anyway it doesn't make any great difference which way it comes out. But it's all interesting and amusing. I do not know just how those old sciences are taught now, - but in my own academic infancy I studied chemistry, physics, astronomy, botany, zoology and experimental psychology. The astronomy was just a lark. Chemistry, physics and psychology in, the laboratory really introduced me to scientific procedures and ways of thinking. Botany and zoology yielded only fat notebooks full of drawings, starfish, protozoans, and there was special emphasis on the naphridia of the

earthworm. The little animals were interesting, and since I was no good at drawing, the practice may have helped me some in that respect. But I never could see any science in those pictures.

Well my best wishes as to the outcome. Whichever way it turns you will continue to have plenty of students, and perhaps they will be even likelier to be the ones who will appreciate what they are getting.

No reactions to "the book" (Born in Nebraska) have come to my notice yet, in the form of reviews or sales reports. I hope, for the sake of the publisher who so gallantly undertook to do the job, that someone will say a few kind words in print. Of course it is still too early. There is another book in the hands of another publisher (actually I think it is in his desk drawer. or trunk, not in his hands for he has had it for two months now), which if it ever appears will be of a wholly different character. It is the story of a childhood, without benefit of psychoanalysis.

We are having a good winter, doing as little as possible. But lots of times I could wish I was back in the laboratory, with my data spread out on the tables In room 419, calculating coefficients and drawing curves again. Just now I am making a sort of "item analysis" of the insight test.

We send you all our best regards - Hollingworth

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*Obituary describing the life of professor Harry L. Hollingworth, the founder of the department of psychology*

Presented at Barnard College faculty meeting in 1956.

Resolved: That the faculty of Barnard College express its sorrow at the death of Professor Harry L. Hollingworth.

In the "seventy-six years since his birth in DeWitt, Nebraska, Professor Hollingworth led a varied and productive life as experimental scientist, teacher, and author. After an A.B. at the University of Nebraska and a few years as teacher and High School principal in Nebraska, he came to Columbia University in 1907 as an Assistant in psychology. After receiving his Ph.D., he moved to Barnard In 1909 as Tutor in Psychology in the Department of Philosophy and Psychology, teaching the recently instituted Introductory and Intermediate courses in Experimental Psychology. He was made Instructor in 1910, Assistant Professor in 1914, Associate Professor in 1918, Professor in 1922, and on his retirement in 1946, Emeritus Professor.

During his years at Barnard he gained eminence and friends in many areas. As an experimental scientist he made fundamental contributions to a wide range of psychological problems, including learning (which he defined in terms of "redintegration"), thinking, character analysis, the functional neuroses, the forms of human judgment, and the effects on human behavior of caffeine and alcohol. The caffeine investigations performed in 1912 and still quoted was done in connection with federal court action when a well-known soft drink was found to contain this popular drug.

He also applied his clarifying theoretical acuity and experimental ingenuity to practical problems in the world of business, and published two books on the practice and principles of advertising. After service as a Captain in the psychological branch of the Army in World War I, he summarized his findings in "The Psychology of the Functional Neuroses". Near the end of his career he brought to fruition a longstanding interest in ethical problems and after his retirement published a radically new technique for the measurement of the perception of ethical concepts, an area previously thought not to be open to objective psychological methods. Throughout his career his interest was in ingenious experiments, yielding reliable, objective results, which could be used in the construction of useful theories.

In teaching, his understanding of his audience and his coordinated presentation of experimental facts and theoretical principles were major forces in inspiring students and in the creation and development of the Barnard psychology department. As a result of his work, the great majority of all Barnard graduates have had, as an elective course, at least the introductory survey in psychology. More than twenty of his major students in this new field went on to earn a Ph.D., and under Professor Hollingworth's direction at Columbia more than forty-eight Master's theses were completed. His effective teaching was carried on in addition to duties as department administrator and as a recurrent welcome member on faculty committees.

Known as "Holly" to his colleagues - and we expect to many of his students, he was once charged with conducting his own book-of-the-month club. He was the author of 19 books, 4 monographs, and 72 articles, along with numerous reviews and notes. These publications were received with interest, not only by psychologists, but by students in other fields, both academic and non-academic. His writing presented experimental findings and summarized theoretical positions clearly and engagingly, in his most widely used book, a text on "Abnormal Psychology", published in 1930, he achieved a new high level in this difficult field by basing his exposition principally on experimental findings. In addition he expressed a theoretical position on the 1930 statements of psychoanalysis by titling his chapter on this topic: "Psycho-analogy".

He was an active participant in many professional organizations, the principal ones being the American Psychological Association, The American Association for the Advancement of Science, The N.Y Academy of Sciences. In 1921 he received the Nicholas Murray Butler Medal of Columbia University. He received the highest honor of his profession, the presidency of The American Psychological Association In 1927, and in 1937 an honorary LL.D., from his Alma Mater, Nebraska. In 1954 the Hollingworth Psychological Laboratories were opened in Barnard's Milbank Hall in honor of the man who had introduced the new science to Barnard and had so effectively guided the growth of the new department.

In 1908 Harry L. Hollingwrth married Leta Statter, who had been a fellow student at the University of Nebraska. She was a psychologist too, and followed a career of teaching and research as Professor at Teacher's College. Her interests were in the education of exceptionally intelligent children. She was for many years head of Teachers College's Speyer School and was widely known for her studies on the problems and joys of training gifted children. Although few people know of it, the Hollingworths provided financial support for the advanced education of many of the children whom Mrs. Hollingworth had known. Leta S. Hollingworth died in 1940. Just before he retired, professor Hollingworth married Mrs. Josefine Weischer, a friend of the

family. For the past ten years they lived in Montrose where the Hollingworths have had their home for many years.

Professor Hollingworth's principal interest was always in the joy of seeking truth. In a letter a few years after his retirement he wrote as follows: "We are having a good winter, doing as little as possible. But lots of times I could wish I was back in the laboratory, with my data spread out on the tables, calculating coefficients and drawing graphs of the results". He will be long remembered as an inspired researcher and wise friend.

Richard P. Youtz

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*Obituary describing the life of professor Richard P. Youtz, the chair of the department of psychology from 1946 to 1974*

Richard P. Youtz, 1910 – 1986

Richard Youtz was born January 14, 1910, in Henry, South Dakota. He grew up in Iowa and Pennsylvania and attended Carleton College in Minnesota, where he majored in psychology and education.

His college career included a two-year fellowship teaching English in Shansi province, China. After graduation in 1933, he began his graduate training in Clark Hull's laboratory at Yale University and received his doctorate in experimental psychology in 1937. Youtz's dissertation research was the first extensive study of extinction and spontaneous recovery of a "Thorndikian" (instrumental) response. In a series of articles, he showed that resistance to extinction increased as a function of the number of training trials and as a function of the delay between training and extinction, that the degree of spontaneous recovery was directly related to the delay between extinction sessions but was not affected by the number of training trials, and that extinction of one response reduced resistance to extinction of another response (secondary extinction). These articles were frequently cited, and the phenomenon of spontaneous recovery after extinction of an instrumental response is considered to be of such importance that contemporary laboratory courses in learning frequently include an experimental exercise that is modeled after Youtz's original work.

Youtz's belief that the scientific method could be applied to the analysis of behavior guided much of what he did. No phenomenon seemed too far out to approach scientifically. He presented one paper in which he speculated that some reports of flying saucers might be due to visual afterimages. In another line of research, he spent three years studying the perception of colors through the skin. In the early 1960s, there were reports that scientists in the Soviet Union had demonstrated that some people were capable of dermatoptical perception. In careful experiments, Youtz demonstrated that the ability to detect colors was eliminated if the objects were covered by thick glass or if the skin temperature was below 24-degrees C. Furthermore, performance deteriorated if the colored objects were made of material that did not have good thermal conduction properties, such as wood or sponge. These experiments showed that about 10% of the population could discriminate colors by touching objects but that the basis for the

discrimination was the thermal properties of objects. Youtz's was a rational voice in the sometimes wild discussion of dermato-optical sensitivity that was taking place.

After one semester in which Youtz worked as a research assistant for S. S. Stevens, he began working as an instructor at Barnard College in the fall of 1937. After two years at Barnard, Youtz accepted an appointment as an Assistant Professor at Oberlin College for the 1939- 1940 academic year, but he returned to Barnard as an assistant professor in 1940. In 1942, Youtz entered the U.S. Army Air Force, where he was a Psychology Research Officer for the duration of World War II. He returned to Barnard in 1946 and succeeded Harry Hollingworth as chairperson of the department.

He remained in that position until 1974. Youtz built a strong undergraduate major during his time as chair. He was an experimentalist who believed that the best way for people to learn was by doing. He implemented an undergraduate curriculum that had, at its core, courses that provided hands-on experiences in experimental psychology. This curriculum led many Barnard psychology majors to pursue graduate training and careers in the field. After his retirement from the Psychology Department, Youtz served as an advisor in the Barnard Dean of Studies Office, and from 1979 until his death, Youtz was the director of Barnard's Resumed Education Program. His sensitivity, good humor, and commitment to the students he worked with made him a very effective advisor. There are many students that owe a large portion of their success to the extra effort that Youtz put in for them.

Even at home, Youtz was a scientist. Many years ago he discovered that the public drinking water contained levels of heavy metals that he considered unhealthy. He began distilling water to remove the impurities. The distilled water lacked valuable minerals and tasted terrible. He experimented with various additives until he created a water that was both healthy and palatable. Not only was Youtz a scientist, but he was a good-humored scientist. One of his children once asked Youtz if he thought that the distilled water contributed to his good health and long life. Youtz quickly responded that he thought he benefited greatly from the distilled water. He continued, after a pause, by saying that all the exercise he got carrying around five gallon water bottles was good for him.

In September 1984, Youtz had a severe heart attack. During the last 16 months of his life, he remained active and involved in his work and the college, despite worsening health. He died on February 13, 1986.

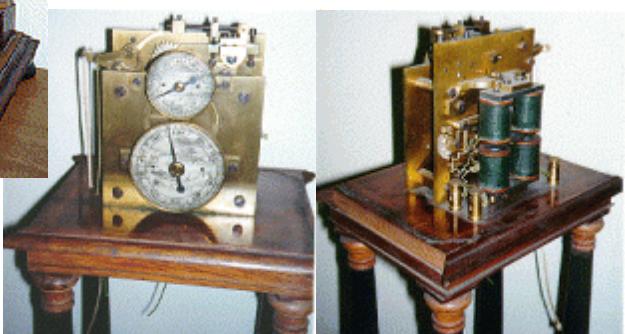
Peter Balsam - Barnard College, July 1988 - American Psychologist Vol. 43, No. 7, 595

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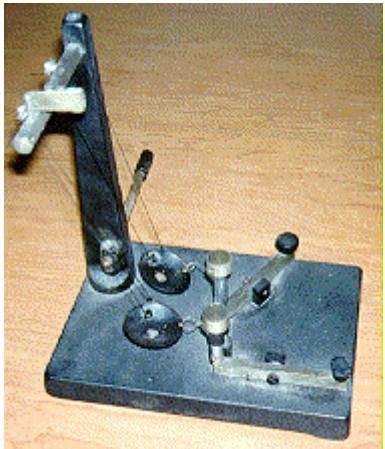
### Hipp Chronoscope

This finely made timing device was powered by a heavy weight which hung down under the clockwork mechanism. The two dials indicated elapsed time in seconds and tenths of seconds. The mechanism was controlled by a pair of electromagnets which were mounted on the rear of the main clockwork timing gear box. The device was used to time short elapsed intervals in reaction time experiments. It was manufactured by Royer Tavarger & Co., Neufchatel Suisse and carries number 20659.



### Stanford White Swinging Reaction Time Apparatus

This reaction timer was "set" by swinging the lever to the far left where it was held in place by a catch. The experimenter released the catch which simultaneously presented a visual stimulus to the subject through the round hole and started the pendulum swinging. When the subject pressed the response key, electromagnets mounted on the swinging pendulum instantaneously clamped it to a curved metal plate and stopped it. The distance that it moved along the calibrated scale indicated the elapsed time. It was manufactured by Stanford White, 300 Broadway, New York., and carries serial number 142.



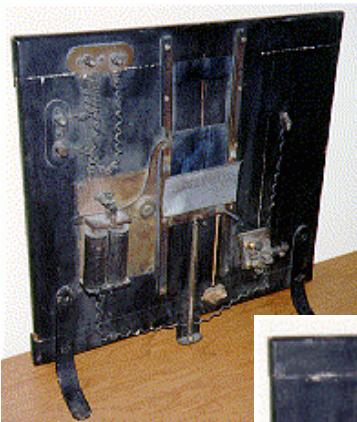
### C. H. Stoelting Dual Pendulum Reaction Timer

This apparatus allowed the time elapsing between two key-pressing responses to be measured. Pressing either of the two black buttons released the corresponding metal disk and a count of the number of swings before they became synchronized allowed calculation of the elapsed time difference. The pendulums were set to exactly equal lengths by running the metal rod through the holes in each pendulum and adjusting the strings to equal tension. It was manufactured by C. H. Stoelting Co., Chicago, Illinois.



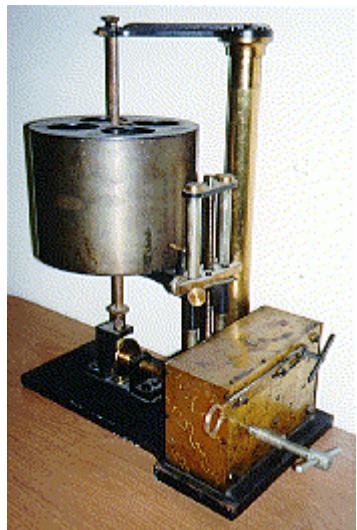
### Columbia University Fall Tachistoscope

This device used gravity with or without additional spring tension to move a metal aperture down across a slit in the stationary plate and expose a visual stimulus. The speed of movement of the falling aperture and therefore the exposure time of the stimulus could be measured by timing the closing of electrical contacts which were mounted on the stationary portion of the apparatus. It was manufactured in the machine shop of the Columbia University Psychology Department and carries the engraved words "Columbia University" on its base.



### Fall Tachistoscope - Manufacturer unknown

This device used gravity with or without additional spring tension to move a metal aperture down across a slit in the stationary panel and expose a visual stimulus. The exposure was initiated electrically by passing a voltage through the coils of an electromagnet. The subject saw a plain black panel with a window in it and the stimulus was presented through the window.



### Spindler & Hoyer Rotating Vertical Drum Kymograph

This clockwork spring driven kymograph rotated the vertical drum at a constant speed. Electrically operated, fluid operated or air operated pens traced physiological and/or behavioral changes on paper which was taped to the drum. It was manufactured by Spindler & Hoyer., Gottingen.



### Spindler & Hoyer Mercury-Dip Contact Relay

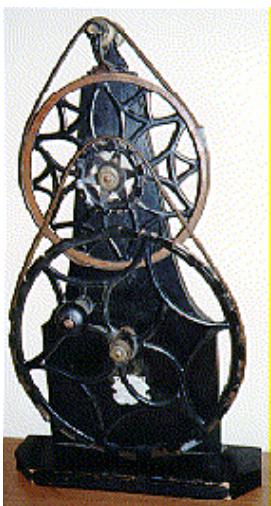
This relay was activated by an external circuit during an experiment. Upon activation, the electromagnets pulled down the armature which dipped a metal pin into a pool of mercury and closed an electrical circuit. The heavy weight on the far end of the armature could be used to slow the operation of the relay and therefore introduce a delay into the circuit closure. It was manufactured by Spindler & Hoyer of Gottingen, and imported by Arthur H. Thomas., Philadelphia.

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### L. E. Knott Apparatus Co. Single Axle Color Mixing Apparatus

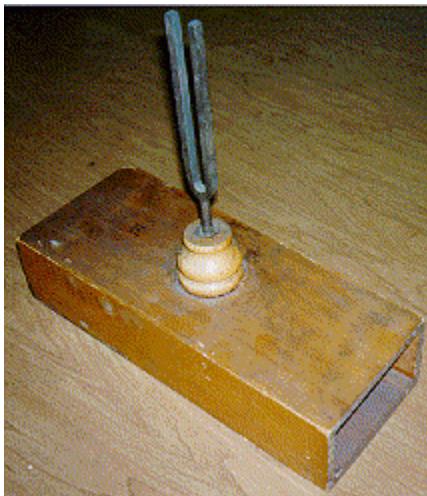
This device used a large pulley turning a small pulley to increase the rotational speed of a stimulus wheel beyond what could be achieved by direct hand rotation. Wheels with different combinations of colors were used to demonstrate the principles of color mixing. Wheels with black and white patterns were used to demonstrate motion aftereffects and to produce colors using Bentham's patterns. It was manufactured by L. E. Knott Apparatus Co., Boston, Mass.



### Milton Bradley Two Axle Color Mixing Apparatus

This device used two large pulleys turning two small pulleys to increase the rotational speed of a stimulus wheel beyond what could be achieved by direct hand rotation. The two axle color mixing apparatus could achieve much higher speeds than the single axle version. Wheels with different combinations of colors were used to demonstrate the principles of color mixing. Wheels with black and white patterns were used to demonstrate motion aftereffects and to produce colors using Bentham's patterns. It was manufactured by Milton Bradley Co., Springfield Mass., and was patented Feb 28, 1893.

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### C. H. Stoelting Tuning Fork

This tuning fork is mounted on a wooden box which amplified the sound intensity. The tuning fork vibrated at a fixed frequency and could be used for auditory demonstrations or to produce auditory stimuli for experiments.



### C. H. Stoelting Adjustable Tuning Fork

This tuning fork is mounted on a wooden box which amplified the sound intensity. The tuning fork frequency could be adjusted by sliding the weights up or down the tines. It was used for auditory demonstrations or to produce auditory stimuli for experiments.



### C. H. Stoelting - Olfactory Test Apparatus

This piece of apparatus was found with several tuning forks that were mounted on similar wooden bases. It consists of a vertical metal plate with a circular piece of material mounted in its center and with two holes drilled all the way through the material. It was finally located in an old Stoelting catalog. It was used to introduce separate olfactory stimuli into the right and left nostril of a subject. Two glass tubes ran through the two holes and into the subject's nostrils. The subject was prevented from seeing the stimulus as it was introduced into the tubes by the metal screen. It was manufactured by C. H. Stoelting., Chicago, Illinois.



### Gorton Codfish Cake Cans and History

These various designs of codfish cake can labels were used in an early psychological test of product preference which is described by then-chairman Dr. Richard P. Youtz as follows:

#### *How Come Gorton Codfish Cans Have Hand-Painted Labels and Letters On Top?*

Professor Harry L. Hollingworth (1882 - 1956) taught at Barnard from 1912 to 1946. He was chairman of the Psychology Department from about 1923 (when Psychology became a department separate from Philosophy) until 1946. When he retired he told me he had moved out everything he wanted and said that I should throw out anything not useful to the department. The

Gorton codfish cans with the variety of hand-painted labels led me to ask him about them. He reported as follows (as I remember it):

After Hollingworth's approximately 15 months of service in World War 1, the success of the Army Alpha and Army Beta intelligence tests led him and several other psychologists into further exploration of the ways that psychological techniques could be applied in civilian life. (Albert T. Poffenberger and John B. Watson were two others.). Some companies started the then-new idea that perhaps the ways in which their goods were packaged might influence buyers, or at least call the buyers' attention to their products.

After Holly had made a number of talks to business luncheon groups, he was approached by several companies, among them the Gorton Codfish Company. He was asked if his psychological techniques could help them decide which of a number of different can-labels would be best.

Hollingworth told me that the method he used was a basic psychological one, probably paired-comparisons, in which subjects expressed their choices in terms of various criteria such as - better looking? better codfish? prefer to buy? etc. You'll note that each can has a large capital letter on top for identification. (He didn't recall which can label was chosen as best so I can't tell you.)

Holly reported that college professors didn't do much consulting in the early 1920's. He said that there were whispers at the APA meetings that he and some other professors had 'taken money' for doing studies for companies. However, applied and industrial psychology soon became "respectable" and it became acceptable for psychologists to earn money through consulting.

(June 15, 1976. Richard P. Youtz, Chairman 1946 - 1974.)

## Early Psychological Research Bibliography

**Note:** This bibliography was prepared by **David Pantalony** of the Institute for the History and Philosophy of Science and Technology, with the support of the [Psychology Department](#) at the [University of Toronto](#). It is included in this museum with his permission and it includes a link to his own excellent internet sites.

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