Biographical Tape Recordings - May 3, 1965 interview by M.J. Brichford (2 Reels)

Reel 1:

1-8 Identification of Tape

9-76 Development of Zetetics. Quotes from Research as a Science: Zetetics (1959). Experience in scientific research in 1920s: 1) lack of funds; 2) skepticism; 3) lack of space.

1 - Photographic reproduction of sound.
2 - Investigation of electromagnetic waves.
3 - Piezoelectricity.

Times were unfavorable for University research. Industrial research was considered as the primary function of the College of Engineering.

In 1926, I began to wonder what if none of the problems that I was interested in fits into this scheme of administrative circumstances so irrelevant to research. I sought a rational way of conducting research. I became interested in a scheme for all sciences that would disclose gaps in our knowledge. "The beauty of it appeared in its universality." It required neither space nor money, but it was not suitable for the Engineering Experiment Station.

77-136 First Phases of the Development of Zetetics.

1928 - Physics Colloquium lecture.
1931 - paper on classification of research problems in dielectric.

My first three observations were:

1 - group investigation.
2 - 2 - decreasing time interval between discoveries and applications of brought an erratic "chain reaction" development of scientific research.
3 - 3 - chance determines the usual selection of research problems. "Shall we be slaves of chance?"

I suggested "a method of generating problems." Example of the periodic chart, which predicted the existence of elements.

137-148 Development of Zetetics beyond the 1959 book is covered in two pamphlets: Evolution, History and Zetetics; Zetetics and Areas of Knowledge (1964)

Zetetics is treated as a new area of systematized knowledge.

149-179 Betatron and Kerst. kerst was a physicist who was interested in engineering problems. He represented a necessary combination of two areas of knowledge. Interconnected nature of research.

180-197 Discussion of tape recording procedure.

198-219 What is the importance of zetetics?

Definition of zetetics - "zetetics is the totality of recorded systematized knowledge related to such methods of research, mental processes. . . ."

What zetetics can do:

1 - collect and systematize data.
2 - improve methods of inquiry to disclose gaps in knowledge.
3 - suggest means of stimulating creative ideas.
4 - supply a basis of education for research.
5 - develop a discipline for the discovery of new knowledge.

220-259 Zetetics is more than a science, it is an area of knowledge. It has grown into 8 main subdivisions.

1 - Zetegeny
2 - Taxilogy
3 - Problematology
4 - Zetesis
5 - General methodology
6 - Education for zetesis
7 - Study of conditions and incentives
8 - Research centers

260-337 Purposes of Zetetics

1 - Unification of human knowledge
2 - means of studying gaps in human knowledge
3 - produce catalogs of human knowledge by use of computers
4 - provide a means of orientation for one's life work.

Examples of gaps in human knowledge:

1 - the science of peace - pacifics.
2 - zetetic education
3 - social ethics - religion and unification. Supernaturalism has not proved a valid basis for peace.

338-354 History of science demonstrates that significant discoveries have resulted from the study of interrelationships.

355-374 A main objective of zetetics is retrieval of human knowledge.

375-381 Discussion of tape recording procedure.

382-419 Broader concept of science - recorded systematized knowledge, including works of art and physics. Specialists' "islands of knowledge" should be unified. Barriers must be destroyed between humanists and scientists.

420-459 Institute of Zetetics has been proposed and reactions received. "My ultimate goal is to form a center for the development and study of zetetics."

It should counteract the tendency towards specialization. It will promote an understanding of areas of knowledge.

460-479 10% of researchers should be engaged in synthesis. They will be zetetists. Pure and basic research.

480-498 Scientific discoveries are made by studying two areas not previously connected.

Reel 2: (tape received from Mrs. Jennifer Johnson, WILL, on January 18, 1968. She stated journalism professor who taught course and student who interviewed Mr. Tykociner agreed to transfer the tape to the University Archives).

5-6 March 9, 1967 interview of J. T. Tykociner by student Wayne Kaplin at 7.5

IPS.
7-19 Boyhood interest in sound recording. Dissatisfaction with needle and cylinder.
20-26 Decided sound must be recorded photographically.
27-31 Decided to leave Poland.
32-39 Difficulty with requirement for practical experience. Came to U. S.
40-63 In 1896-97, film was not known.
64-94 Came to New York in a time of depression. Edison's Bioscope displayed in a vacant store. Moving picture, but no sound.
95-135 Reluctance to support this "fantastic" idea. Proposed to photograph the modulation of light. Physicists did not understand. I began experimentation. Signals were too weak. I needed a good amplifier.
136-149 After 1 year, 4 months, I left U. S. for Germany. Graduated in 1901 or 1902. Became interested in radio.
150-184 Found no jobs in Poland and Germany. Went to London, England and joined the Marconi Company. Research engineer for 2 years.
185-193 Received an offer from the German Telefunken Company for research work in radio telegraphy.
194-229 Russo-Japanese war broke out and was the only engineer who knew Russian and radio. Stayed for 15 years, three revolutions and World War I. I then went to Poland and to the United States in 1920.
230-251 Decided to work on sound pictures. One year with Westinghouse in Pittsburgh, but I could not convince Mr. Skinner, laboratory director, that there was anything in sound pictures.
252-303 Came to University of Illinois as a research professor in September, 1921. I was disappointed with research plans. A committee was appointed to determine if the research was possible. I had to convince them with an experiment. Worked 10 months in the Physics Department.
304-372 First public demonstration took place on June 9, 1922. In April, 1922, Board of Trustees, President Abbott, President Kinley and Vice-President White came to the laboratory. They liked the demonstration and encouraged me. At a meeting of electrical and radio engineers on June 22, 1922, I demonstrated the sound on film.
373-421 Problem of lack of money and help for the research. Needed glass blowers. Had to borrow form other departments - Chemistry, Agriculture, Signal Corps. Delays in getting equipment. Physics mechanism helped me.
422-429 I had no assistants, except at demonstrations.
430-478 Demonstration made an impression. Newspapers published feature stories. New York World Telegram article that I wrote.
479-510 Public reaction. Josef Wright, public information director, had clippings from 700 newspapers. People came for individual demonstrations.
511-578 Specialists resisted innovations. Hollywood man said costs were high. Stars don't speak very well. Poor diction. "They drink too much."
579-591 A psychologist said it was based on illusions of both sound and the eye.
592-659 Sound and televise - Eastman Kodak representative said "he wouldn't give a dime for it." Our physics professor Watson asked why and the representative said "the public

doesn't want it."
660-697 First sound on film production. My wife, bell and a question.
698-750 First commercial film came 6 or 7 years later. Western Electric produced film and separate records. e. g. "The Jazz Singer."
751-768 Fox, General Electric and Bell.
769-832 Other inventions. Most important is zetetics - the new science of research on which I have worked for 39 years. We have a lecture course, published three books. Great promise: the knowledge of how innovations are made.

Personal Tape Recordings, ca. 1952

Reel 1, Side 2:

1 - Joseph Tykociner asks Mr. Adams what he is studying
7-23 Mr. Adams is taking Electronics, is satisfied with courses
24-83 Classical music
84-90 Background
91-96 Classical Music
100-139 Background and the discussion in Polish, Helenka and Joseph and Mr. Adams
140-814 Classical Music and end of tape

Reel 1, Side 1:

1-814 Classical Music continued

Reel 2, Side 2:

1-4 Adjustment
5-25 Introductory statement by John Honnold describing recording session with Mr. and Mrs. J. T. Tykociner (Uncle Joseph and Aunt Helenka), Mrs. Jakob Kunz and five members of the Honnold family, June 26, 1952, (Honnold's thirteenth wedding anniversary)
26-56 Heidi Honnold
57-82 Carol Honnold
83-98 Eddie - 1 - background - noise Helenka and Joseph
99-118 Mrs. Honnold (Margaret Kunz Honnold)
119-133 John Honnold sings "Let Me Call You Sweetheart"
134-136 Background Music
138-143 John Honnold introduces Mrs. Kunz
144-153 Mrs. Kunz thanks Honnolds and Tykociners
154-156 John Honnold introduces Helenka Tykociner
157-172 Helenka Tykociner - comments
173-176 J. Honnold introduces Joseph Tykociner
177-195 95 Joseph Tykociner expresses thanks and best wishes, congratulates John on his full professorship at University of Pennsylvania - goodby

At Tykociner House, Urbana:

200-207 Joseph Tykociner says hello to Richard, Ellen and Marian Parmelee, June, 1952
208-215 Richard Parmelee - on their way to Colorado
216-129 Ellen Parmelee
2210-228 Marian Parmelee
229-230 Joseph - thank you
230-243 Helenka - says goodby, asks Marian to sing a song
244-251 Marian sings, "Be kind to your web footed friends"
252-254 Helenka asks Richard and Ellen to sing a song
255-281 Richard and Ellen sing, "On top of 'Ol Smokey"
282-288 July 15, 1952 - Helenka says goodby
298-318 "On top of 'Ol Smokey" again
325-358 Ed Scott introduces segment: (105 W. Michigan) Joseph and Helenka paid a visit. (Harriet and Johnny there), August 14, 1952. Scott going to NYU on sabbatical year, discusses plans
359-381 Johnny
382-399 Harriet
400-411 Johnny sings, "I'll Be Working on the Railway"