Charles H. Lawshe, Jr.

Siop President 1957-1958

A KID FROM SWAYZEE (1908-1925)

My fascination with the world of work had its genesis in the small, rural town of Swayzee, Indiana, where I was born (May 26, 1908) and spent my first seventeen years. As a boy, I wandered and dawdled in the streets and alleys of this town of about 600 inhabitants, watching people engaged in "making a living." It seemed as though almost everyone in town did interesting work - moving houses, drilling wells, baking bread, making harness, and I watched them all.

I was awed by the two blacksmiths as they applied their skill to shoe horses and to form red hot iron into tools and parts for farm machinery. I watched Ollie Collins in the mill room of the lumber yard as he made windows and doors "from scratch." Goob Berry's tin shop taught me about sheet metal fabrication - forming, soldering, and riveting. The two automobile garages are where I learned about valves, differentials, and clutches. There was the short-lived knife factory where I was exposed to metal stamping and heat treating.

The local Indiana Railway and Light interurban station (people called it the eye-are-nell) was the locus for a converter which changed alternating current into direct current for feeding into the overhead trolley wire. Then, there were special, one-of-a-kind events: when men excavated for the school building addition basement. And when the crew of Italians came to town and laid the terrazzo floor for the First National Bank of Swayzee's new building.

At the local elevator I watched farmers bring in their grain, have it weighed, and then dump it into the pit from which it was "elevated" to the top of the structure. That's where I first learned about "gross" and "tare" weights. There were visits to Grandfather Lawshe's farm, usually at butchering time or harvest time; while I wasn't a farm kid, I learned a lot about farming.

Most exciting of all, however, was the Swayzee Grey Iron Foundry. It was on my paper route as I delivered the Marion Chronicle and the Indianapolis News. If I timed it right I could arrive at the foundry in time for the "pour" on Mondays, Wednesdays, and Fridays. There I would see the molten iron being poured into the sand molds to form castings. Other days I would watch the molders and core makers at work.

While the foundry was the most exciting, it was the town print shop that had the greatest impact on my later years. O.D. Melton was the owner, publisher, editor, newswriter, and typesetter of the Swayze Press, the town's weekly newspaper. In addition to printing the paper each week he also did job printing: handbills, invitations, stationery, programs, and the like. Here I learned the printer's jargon: e.g., pica, make-ready, pi, font, and of course, the difference between six-point type and ten-point type. I would watch "OD" by the hour as he sat on his high stool and, without looking at the font, pick up one type letter at a time to compose a line. And I recall vividly when "OD" purchased a used Line-O-Type machine which rendered most hand typesetting obsolete. At one time I kind of wanted to be a printer, or maybe a newswriter.

So, there it was - town and country - a broad spectrum of the world of work, all fascinating and all waiting to be absorbed by an impressionable kid; no security guards and no cyclone fences to keep an inquisitive kid from learning what work was about.

My parents naturally had a great influence on me. My mother was a very bright woman, the daughter of a stereotype woodsman/pioneer who had little schooling but lots of education (he learned to read and to cypher as a kid) and became a dry goods merchant in Swayzee. Mother graduated from high school in 1904. Her early married life was strongly influenced by my brother, Leland (three years younger than I) who was born with club-feet. Until he was about five (and I was eight), she was totally consumed with his treatment - surgery, casts, and braces. I had little attention until he entered school with his deformity totally corrected. My childhood was fairly normal for the next three years; then the 1917 Spanish influenza epidemic (the "flu") damaged his heart and he died soon thereafter, rendering my mother totally distraught, again leaving me on my own. Some six or seven years later, while I was in college, she took a short course offered by the Indiana State Library, and became librarian of the Swayzee Public Library, a position which she held for over 30 years. She lived to see her 98th birthday.

Jim Mullins was a neighbor of ours, across the alley. He had been a drummer boy in the Civil War and taught a lot of kids in town "to drum." My uncle Max Spears was one of them. He played in a dance band when he was at Wabash College, paid his way, and made Phi Beta Kappa to boot. I always wanted to learn to drum. My mother had many rules; one of them was that you couldn't take up any other instrument until you had mastered the piano. We tried that; the folks bought a piano and engaged Margurite Plackard (also my first and second grade teacher) to give Leland and me lessons. Leland did a bit better than I but not much. One of the problems was that, when I went to Miss Plackard's for my lesson, I had to carry the sheet music in a special case that unmistakably contained sheet music. Of course, I couldn't let the other kids see me carrying it ("sissy") so I had to go and come via the back alley. Miss Plackard might have been a great pianist; I don't know, but she wasn't much of a music teacher. Anyway, learning the piano finally petered out, and of course, I never got to the drums. I've often thought that if it hadn't been for that confounded rule, it might have been me instead of Gene Krupa!

My dad was the son of a country doctor (I.F. Lawshe, NED ) who earned his degree at the Kentucky School of Medicine, a proprietary school in Louisville. Dad graduated from Swayzee High School and went to Purdue University where he studied pharmacy and earned the PhG (pharmaceutical graduate) degree in 1904 when most pharmacists qualified by serving an apprenticeship. After working at a drug store in Mathews, Indiana for a while, he purchased the Bradley Drug Store in Swayzee and operated it for 42 years. I worked in the store from the time I was old enough to weigh a pound of epsom salts (which I did many, many times because it and most other preparations came in bulk and had to be packaged). I started working a few hours a week for which Dad paid me a few cents (twenty-five cents, I think). As I grew older and became more useful, Dad increased my hours and my salary. By the time I left for college I was working full-time as a clerk and "soda-squirt."

Dad was treasurer of the Swayzee Cooperative Telephone Company and treasurer of the Masonic Lodge. The drug store was where people paid their phone bills and their lodge dues; I must have written hundreds of telephone and lodge receipts for my father. The drug store was the natural gathering place in Swayzee: school kids, college students who returned for the holidays, and farmers when they came to town. I built radio sets when I was a kid and remember making a "loud speaker" from an old morning glory phonograph horn and fixing it so farmers could get the daily hog market reports from Chicago.

It was Dad who saw that I got a paper route; I carried those papers from the time I entered the seventh grade until the day before I left for college. He insisted that I save all of my paper receipts and write checks only to the newspaper companies. About the time I became a high school sophomore, he had a talk with me as he gave me one of my raises. "Charles," he said, "now that you are getting this raise, I expect you to buy your own clothes from now on. " Which I did! I also augmented my bank account with part of my store earnings; when I entered Purdue University I had sufficient funds for my first year and a half. My dad taught me many things; perhaps the most important was, "Don't spend more than you earn." He died when he was 65; I took care of my mother for 35 years.

I never heard the word "aptitude" until I got to college. The way Swayzee folks said it was, "He's not cut out for it." When I was a kid I thought there were an awful lot of things I wasn't cut out for. Like playing the piano and athletics. Take tennis. A bunch of us kids built a tennis court on the vacant lot between Doc Hawkins' house and the First National Bank of Swayzee. But I had two problems! I could rarely get to the ball and, when I could, I couldn't hit it. Now, if you know anything about tennis, you know that anyone with those two problems isn't cut out for tennis. So, that's the main reason why I never became a great tennis player like Bill Tilden. Perry Wycoff was Swayzee's undertaker. His wife, Dolly, helped him; I can remember his ads in the Swayzee Press - "Lady attendant." Perry sang real loud in church. Besides burying people that had died, he had another source of income - renting folding chairs, like when they had a big banquet in Rudy's garage. Must have done all right. When they first passed the income tax, the government posted the names of those who paid any in the post office. Only two -Perry and the cashier of the First National Bank of Swayzee. I sort of wondered about that. I thought about taking up banking once, but burying didn't appeal to me. Don't think I was cut out for either one of them.

Swayzee had four churches: the Methodist Episcopal, the Methodist Protestant, the West Church, and the Christian Church (sometimes called Campbellites). Your pathway to salvation was different, depending on which church you belonged to. If you were a Methodist, they sprinkled you; if you went to the Christian Church, they totally immersed you in a special place they had fixed in the church floor with water in it. I don't remember the West Church; it burned when I was quite young but I think they took people to a river somewhere and submerged them.

My schooling probably wasn't world class, but it was good, solid journeyman quality. My mother taught me to read (Miss Plackard wasn't very good at that, either). Rose Starbuck taught me basic grammar, and Gladys Forest taught me to diagram sentences. In Swayzee there were two grades in each room; Miss Starbuck moved me from the fifth grade side of the room to the sixth grade side. My high school English teachers were all good: Gladys Comstock, Raymond Pence, and Esther Godwin. Bernice Mullins (my third and fourth grade teacher) gave me an excellent start in arithmetic which others helped polish. Curt Sprinkle helped me master algebra and geometry. I should mention Paul Norris; he did his best to teach me Latin (four years). It didn't take, though. I could never see the point. It might have come in handy if I had decided to be a priest. When I was a junior, I started a high school newspaper and served as business manager the first year. It was called Mercury-Nuntius Scholae (suggested by Paul Norris, the Latin teacher). My interest in journalism was evolving. I graduated in 1925. My formal schooling was bolstered by lots of books at home. We subscribed to the National Geographic and as far back as I can remember we had a set of the Encyclopedia Brittanica. Later the folks purchased The World Book for my brother and me. Dad sold books at the drug store and lots of these were brought home. We had four tiers of "Gunn Sectional Bookcases" in our living room.

When I was very young I was sensitive about coming from a hick town. ("Swayzee! Never heard of it.") But as a mature adult I began to realize how really, really lucky I was. I not only learned about the world of work and received a solid elementary and secondary education, but I learned about people. Where else but in a small town could an ordinary kid daily rub shoulders with the banker, the preacher, the lawyer, the doctor, the telephone lineman, the barber, the merchants, the mechanic, the baker, etc. - and the town drunk. They were all "just Swayzee folks" to me. I learned that most people who did well worked hard for what they had (no such thing as a free lunch). Some people saved; others didn't. Most Swayzee folks were genuine. But even Swayzee had a few phonies. Like the fellow who always prayed louder and longer than anyone else in church, but skinned everybody he could during the week. Quite young, I learned how to spot a phoney. Still can.

#### **CHAPTER 2**

# COMING OF AGE (1925-1929)

I do not recall that there was ever any talk around our house that "you should go to college." Somehow or other it was a given. Nor was there any insistence on my attending Purdue University. In fact, I almost did not go to Purdue; I had two uncles, Max (whom I already mentioned) and Harold, only six years older than I, who went to Wabash College, and I can remember that when I was in high school I attended Harold's Wabash graduation ceremonies. I teetered; I almost followed them to Wabash. But uncertainty regarding what I wanted to do led me to select a little larger school, one that in my judgment (?) had greater prestige. My personal rationale was, "When I make up my mind, I can transfer from here." This is how I wound up at Purdue. My parents were no help at all, and there was no vocational guidance then (at least, not in Swayzee High School). I can recall that my decision was not made until late summer after I had graduated.

So, on a hot September Sunday in 1925, I boarded the interurban in Swayzee and transferred in Frankfort. I arrived at the Lafayette station about 11:30 a.m. with my valise (given to me as a graduation present) and my check-book for the First National Bank of Swayzee where, as I said earlier, I had enough money for my first three semesters.

Both of my Wabash uncles had been members of the Lambda Chi Alpha fraternity and another Swayzee product, C.C. Hannah, had graduated from Purdue the previous June and had also been a member. "CC" had arranged for me to contact the Lambda Chi house when I arrived. The Purdue chapter house was on the "east side" then (rather than in West Lafayette), about six blocks from the interurban station. So I walked the six blocks (the last two of which were up South Street hill), carrying my valise, wearing my wool graduation suit, and arrived at the chapter house, hot and sweaty, where the brothers were assembled on the front porch (some with their girlfriends) awaiting Sunday dinner. Someone greeted me, introduced me to several members, and escorted me to dinner. After the meal, three upper-classmen took me to an upstairs room and invited me to become a fraternity pledge. As I recall, there were seventeen or eighteen in my pledge class. The Lambda Chi house became my home for the next three and one-half years.

I came to Purdue looking for the most general academic program available. I enrolled in the School of Science which was really misnamed; in any other institution it would have been the College of Arts and Sciences because, in addition to science, it encompassed the humanities and social sciences. The core requirements were quite minimal: something like a year in each of the sciences, a year of mathematics,

and two years of a foreign language. From there on, it was essentially "cafeteria style." By graduation time I had some 50 hours in English (writing and literature), courses in psychology and sociology, and a strong sprinkling of economics and political science, I remember, particularly, courses in "Labor Law", "Political Parties and Electoral Problems", and "History of American Foreign Relations". Purdue did not award a BA degree at that time so I received a BS. While my course selections may have seemed like academic floundering at the time, in retrospect I am convinced that I received a much more solid "general education" than many of today's undergraduates who seem to be prematurely forced into narrow specialization of one kind or another.

About the only constant during my undergraduate days was the urge, sometimes unconscious, to become a journalist. My writing courses included three journalism courses (news writing, feature writing, and editorial writing) two of which were taught by an ex-newspaperman. With my high school newspaper background, it was natural that I "go out for" the student paper, the Exponent. I was a reporter my freshman year and one of six assistant night editors my sophomore year; I lost the election for appointment to junior year night editor. Then I switched to the sports staff. I also was a member of the staff of the Debris, Purdue's student yearbook, and served as sports editor during my junior year. Early in my undergraduate career I developed a desire to transfer to the Medill School of Journalism at Northwestern University. The rude awakening came when I became aware that Northwestern is a private institution and that the tuition was too stiff for my meager means; my Purdue tuition was \$36 a semester.

It was during my sophomore year that I met Muriel Grace Knight through a blind date arranged by one of her Pi Beta Phi sorority sisters. Muriel's parents lived in West Lafayette. Her father was the first student pastor at Purdue University (and had a semi-faculty status) and was part-time choral director at the First Christian Church. The Rev. Robert Knight traveled a great deal to raise money for "the work", and Muriel's mother was the stabilizing influence in the family of seven children, of which Muriel was the eldest. Our dating was an on and off thing at the outset, but about the middle of my junior year (her sophomore year) we started "going steady." I've always been lucky. First, it was being raised in a small town. Second, and most important, was meeting Muriel. She has been the most important influence of my life; starting before we were married, she has constantly encouraged and supported me in every endeavor and, above all, it was Muriel who built my confidence and helped me escape my early feelings of inferiority.

There were no student grants when I attended Purdue; you either did it on your own or you didn't do it. Income from summer work was extremely important. During my first summer I published a telephone directory for the Swayzee Cooperative Telephone Company. I sold advertising, layed out the ads, and otherwise worked with the printer to design the directory. I was good at the editorial part but terrible when it came to selling advertising. After I paid the printer and delivered the specified number of copies to the telephone company, I didn't have much left for my efforts (about a hundred dollars, as I remember).

My second college summer was spent in Glacier National Park as a common laborer. My uncle Harold, a young speech instructor from Northwestern University, and I took the train to Glacier Park and became members of a twelve-man trail crew. I made a little money that summer, but the main reward was what I learned from living day in and day out with a group of itinerant laborers, misplaced cowboys, and

loggers. This is where I learned that people have lots of different value systems, many quite different from those held by most people in Swayzee.

The third summer was quite different. Muriel, an institution management major, urged by her faculty advisor to "get some practical experience," got a job as a waitress at the Beach Hotel in Charlevoix, Michigan. Her father arranged to drive her to Charlevoix in his Model T Ford and I rode along. I was immediately hired as second dish-washer and later promoted to bus-boy. There were 31 girls and four men, all college students, working at the hotel. We worked like hell, but had a lot of fun. The summer was cut short by the unexpected death of Muriel's mother. We left Charlevoix by train, and I accompanied her as far as Chicago; she went on to Lafayette and I to Swayzee.

My summer income was still not enough. I did all kinds of jobs while I was in school: mowing lawns, working for a laundry and dry cleaning company, and working as a "soda squirt" (fifteen cents an hour) at the Gold and Black, a student hang-out that sold ice cream and sandwiches.

At the start of my senior year I was employed as the "ticket taker" at the Mars Theatre in Lafayette and worked every afternoon from 12:45 to about 3:00. Some time around Thanksgiving, a Louisville firm purchased the theatre from local owners, totally refurbished it and converted from silent films to sound movies. I was promoted to House Superintendent; among other duties, I was responsible for hiring (and firing!) and training an usher staff of 32. It was a full-time job (12:45 p.m. until 11:00 p.m.) seven days a week. I arranged all of my final semester classes in the morning, moved out of my fraternity house into a West Lafayette room to improve my logistics, and sometimes saw Muriel after 11:00 p.m. for a brief while. It was a rigorous regimen, but Muriel supported me throughout and I received my BS degree in June of 1929. Muriel completed her junior year but, as the oldest of seven siblings, dropped out and attempted to replace her mother in the home.

Financially, my pockets were shallow. All I could earn was still not enough. My mother was paid \$25 per month as the Swayzee Librarian. For ten months each during my junior year and during my senior year, she regularly endorsed her check and sent it to me (total, \$500). In addition, my uncle Harold loaned me \$200; Muriel and I agreed that marriage was on the back burner until I could pay off this loan.

While I had learned financial responsibility before I left Swayzee, I was immature in other ways. High school courses had been easy for me. My Purdue freshman year was largely a re-run and I did not need to study; this encouraged poor study habits. The demands of my various jobs and my involvement with the Exponent and the Debris coupled with my lax study habits resulted in my being a so-so student. I tended to concentrate on what interested me and to just get by on all else. But, I did learn (some!) and I did grow up.

While there were certainly deficiencies in my scholarship, they were compensated for by my extracurricular and out-of-school activities. My Exponent experience during my sophomore year is representative; every Monday night I "ran the paper." Starting at 4:00 p.m. and continuing till midnight, I decided what would be printed, how and how much it would be edited, and then how the paper would be made-up. My theatre experience was truly educational; it was Don Hammer, the theatre manager, who first taught me the meaning of delegation. I remember when he told me, "Chuck, if I find an usher chewing gum or sitting on his ass, I won't say a word to him; but I will have something to say to you." So, as a single, twenty-one year old college graduate, I was ready to face the world.

#### **CHAPTER 3**

### AN ABORTED BEGINNING: MY FIRST CAREER (1929-1931)

Today, employers seeking fresh college graduates visit Purdue University by the hundreds; the University maintains an elaborate mechanism whereby would-be employers and about-to-graduate seniors are scheduled for interviews. Such was not the case in 1929. So, after I graduated, with the permission of the manager of the Mars Theatre, I turned my duties over to my usher captain and made a four-day visit to Chicago. I stayed (for free!) at the Northwestern University Lambda Chi house and made job seeking visits to some twelve or fifteen companies. All cold turkey! Believe it or not, I hit the jackpot; R. R. Donnelly (The Lakeside Press) made a job offer. Today, the job would be called "management trainee." I was to work in the printing plant for two years and then move into the office for bigger things. I was to report in about ten days.

Euphoric, I returned to Lafayette but soon began a process of reconsideration. I was to start at \$25 per week; my current theatre job paid \$21. Muriel lived in West Lafayette. Somehow, the four dollar differential didn't seem worth it. I sent R. R. Donnelly a telegram and declined the offer.

Lady luck has always been my handmaiden. Two days after I sent the telegram, my theatre manager advised me of an opening as manager of the Luna Theatre at Logansport, Indiana, an hour away by interurban. My application interview was perfunctory; the skids were already greased. I accepted the job at \$40 per week with the proviso that for the first eight weeks it would be \$30. This ten dollar per week differential was to permit the company to recover the \$80 severance pay which it gave my predecessor.

So, about the middle of June I boarded the interurban for Logansport. The Fourth Avenue Amusement Company (of Louisville, Kentucky) operated three theatres there; technically, I was assistant resident manager of all three and house manager of the Luna, an old legitimate theatre converted to a sound movie house. While I had first line supervisory experience at the Mars Theatre, I now moved into a true management role.

By now, Muriel and I were making serious marriage plans. By agreement, however, paying off my college debt to my Uncle Harold came first. But there was a complication; the \$40 per week didn't materialize.

It was much longer than eight weeks before the company finally honored its commitment. But, eventually, it happened. Muriel and I were married on January 30, 1930. (One of the advantages of marrying a PK is that you don't have to pay the preacher!) We rented a furnished apartment in Logansport and began a marriage which, at this writing, has lasted sixty years.

The winds of economic disaster were already rising. The 1929 stock market crash had occurred less than two months before, and Fourth Avenue closed the smallest of its three Logansport theatres. Unemployment was on the upswing and, concomitantly, theatre attendance was on the skids. Finally, in November 1930, the Luna Theatre was closed. I received no severance pay as did my predecessor.

So, there I was, age 22, married and no job. We packed our few belongings, took the interurban to Swayzee and moved in with my parents. I did everything possible to help my father in the drug store with its dwindling business. Muriel helped my mother some in the library and, somehow, we got along.

We had saved a few dollars, all of which I spent for travel to Indianapolis and elsewhere in unproductive efforts to reestablish myself in the theatre business. Like many people, I believed the depression would be short lived and that the economy would pick up.

Not so; instead everything got worse. Efforts to find any kind of employment proved futile. Finally, in desperation, I decided to prepare myself to teach.

Throughout my undergraduate days I had always said that I did not want to be a teacher. But, I reversed my field, borrowed a couple of hundred dollars at the First National Bank of Swayzee, and enrolled for two terms at Marion College (now Indiana Wesleyan University) in Marion, just twelve miles away. Without transportation, hitch-hiking was the name of the game. I earned the credits necessary for a Secondary Teacher's License (English and Social Studies) and completed my practice teaching at McCullough Junior High School in Marion. It was there that my practice teaching supervisor told me of an opening in the high school at Van Buren, another small town about a dozen miles from Marion. Guess what; I got the job! So, in September of 1931, Muriel and I packed our few belongings, boarded the interurban for Van Buren, and, poorer but wiser, I started my second career - first as a public school teacher and subsequently as a school principal.

### **CHAPTER 4**

## LEARNING HOW PEOPLE LEARN: MY SECOND CAREER (1931-1941)

Starting with Van Buren, the next ten years encompassed a quantum leap in my personal development. The process of guiding (and observing) the learning of school children combined with the pursuit of organized graduate studies in education and psychology provided the ideal structure for gaining true insight into the nature of human learning.

In my first teaching months I discovered that treatment of a subject in class did not, in any way, ensure that learning would take place. From that point forward, my teaching was a continuous exploratory, trial and error experience; how can I arrange the classroom/ teaching process so that kids can and will learn? I realized that I needed more insight than my Marion College courses provided, so I made application for admission to the University of Wisconsin graduate school and was summarily rejected because of my undergraduate grade record. (Trivia: Many, many years later the University of Wisconsin paid me a substantial fee for presenting a seminar on the Madison campus.) I then made application to the University of Michigan and, surprisingly, was admitted. At the close of the school year we were out of debt and had \$125 which I invested in a used 1929 Chevrolet. So, with the used car as our only asset, I borrowed \$200 at the bank and Muriel and I took off for Ann Arbor. My objective was not to obtain a master's degree but to better understand the learning process. The summer was productive; courses in teaching methods, mental measurement, and individual differences made me a much better teacher.

But, the economic struggle was real. My first year's salary of \$1,120 was reduced to \$980 the second; it seemed that I could not continue teaching. That summer, I took my meager second year savings, went back to Logansport and, on my own, reopened the Luna Theatre. This foolish venture lasted about four or five weeks and, broke again, we returned to Van Buren for my third year of teaching (\$1,000 for the year!).

After the theatre fiasco, it became evident that the only way to enhance my income was to become a school principal - but that required a master's degree. The next summer we returned to Ann Arbor and I

began serious pursuit of that objective. Initially, course concentration was in administration and school management. But there was a graduate shift to psychology. My thesis, done under the guidance of a psychologist, Dr. Stuart A. Courtis, was entitled, A Study of the Relationship of Certain Factors to the Rates at which Children Learn and Forget Word Meanings as Indicated by Vocabulary Tests. The project involved seven weekly testings of ninth grade students in one of my classes at Rockcreek High School where I taught for one year after leaving Van Buren. it was a carefully designed experimental study and represented my first research effort.

After three summers at the University of Michigan I was awarded the Master of Arts degree, obtained my principal's license and moved from Rock Creek to Liberty Center as principal of the twelve-grade Liberty Center Schools. My salary for the year was \$1,320. I thought I was on my way as a school administrator!

However, as the school year was coming to a close, my Uncle Harold who was then with the Evansville, Indiana school system, advised me of an opening at Bosse High School for a teacher of English and journalism. I was interviewed and got the job (\$1,530). Here is where I learned that there is more to family economics than salary; the \$210 increase was more than devoured by our increase in rent. During my two years at Bosse I taught an American literature class, several sections of newswriting, and served as advisor for the weekly school paper, The School Spirit. We entered the major national contests and won them all. During this period, I collaborated with my uncle, Harold Spears, who had previously held the journalism job, in writing a textbook, High School Journalism. It was published in 1939 by the Macmillan Company. Later I participated in the preparation of the second (1939) and the third edition (1940), then relinquished my rights to the co-author. For years it was the leading high school text in the field with numerous subsequent editions.

Having returned to the University of Michigan for two summers following award of my master's degree, I had developed the "PhD bug." During my second year at Bosse, I kept in continuous contact with my Michigan professors in an effort to obtain some kind of appointment. I received all kinds of encouragement, but no commitment. "We can't promise," they said, "but your chances are good." So, at age 30, I resigned, and in June, Muriel and I packed our few belongings in our used car and headed for Ann Arbor. Her father still lived in West Lafayette, and we stopped on the way for a brief visit. I became bored, wandered over to the Purdue University campus and visited with a former English professor, Dr. Herbert Creek. After I told him about my uncertain plans, he asked, "Have you considered doing your PhD at Purdue? The president has brought Dr. Frederic B. Knight here from Iowa and created the Division of Education and Applied Psychology. I think things are going to move. Why not talk to him?" I did and, to make a long story short, I came out with an appointment and never got to Ann Arbor. My earlier exposure to psychology provided a great foundation. I was assigned to Dr. Joseph Tiffin and began a truly in-depth study of psychology. My fellowship was funded by the Joint Highway Research Project, a collaborative effort between the Indiana State Highway Commission and Purdue's School of Civil Engineering. It was all F. B. Knight's idea; my thesis was entitled Psychological Studies of Some factors Related to Driving Speed on the Highways.

I spent an academic year and two summers on the Purdue campus, during which time I completed my course work (augmented by my University of Michigan credits) and collected all of the data for my thesis research. I fully expected to spend the next year on campus but received a call from the Evansville school superintendent. He said, in effect, "We are opening a new trade school and if you are interested

in becoming its first principal, get down here and we'll talk about it. I went, we talked, and I accepted the appointment. My residence requirement had been satisfied and I received approval to complete my thesis "in absentia." So, in September, 1939, Muriel and I returned to Evansville where I became the first administrator of Mechanic Arts School, a trade preparatory high school for junior and senior boys (no girls yet!). While at Mechanic Arts I began to learn about industry and industrial training. I associated with industrial managers, industrial trainers, and labor union leaders. In the school we taught five trades: electrical maintenance, mechanical maintenance, machine shop, mill-room work, and machine drafting. For two years, each student spent half of each day in the shop of his trade specialty and the remainder of the day in general and supporting subjects. At the end of his two years he received a regular high school diploma from his "home" high school. Most of our graduates moved into apprenticeship where, by agreement of the labor management apprenticeship committees, they completed their apprenticeships in three years instead of four. In addition to providing me with the opportunity to learn about apprenticeship, the trades, and industrial training in general, my Mechanic Arts experience "rounded out" my understanding of human learning. I had moved from general academic education, to journalism instruction, then to trade education. I began to appreciate and to understand more fully the importance of purpose for the student's motivation to learn: the more meaningful (to the student) the activity at hand the more likely it is that learning is self-propelled. It is no happenstance that applied psychology became my forte.

I finished my thesis at the end of my first year at Mechanic Arts and was awarded the Doctor of Philosophy degree in June of 1940. I had five publications based upon my thesis. I spent that summer on the Purdue campus assisting a visiting professor, Dr. Albert Harris, in the teaching of a three week course for teachers: subject, "How to teach non-readers to read." Near the close of my second year, I was invited by Dr. Knight to return to the campus the next year to fill a one-year vacancy created when Prof. Russel Greenly took a year's leave to serve as training director of a steel mill. I requested, and received, a one-year leave of absence from the Evansville schools. We moved back to West Lafayette in June, 1941, just six months before Pearl Harbor. While I did not know it at the time, my second career had ended. It was a case of "The Man Who Came to Dinner."

### **CHAPTER 5**

#### LADY LUCK CONTINUES TO INTERVENE:

### MY THIRD CAREER (1941-1958)

When an object moves into a jet stream, the forces of nature clearly influence the speed (and direction) at which it moves. That is the way it was with me; I was "swooped up" by these forces. The war-time effort was gathering momentum; every industry needed help in selecting and training employees. It was not uncommon for an industry to double, or even triple, the size of its work force by adding farmers and women. The University provided travel money, and I spent most of my time during the first three years designing and implementing selection and training programs in industry. My first year contract expired; Professor Greenly, whose budgeted positions I was filling, was granted a second year's leave and my leave from the Evansville School System was extended. When Professor Greenly requested, and was granted, a third year's leave of absence, I made a request but was refused. So, for the second time, I resigned. It all worked out, though, because when Professor Greenly asked for a fourth year, he was refused; the budgeted position was then open, and I was hired. So, after being a "guest professor" for three years, in 1944, I was appointed Associate Professor of Psychology.

With this appointment came the responsibility for all of Purdue's elementary psychology. I had lectures at 8:00, 10:00, and 11:00 on Monday, Wednesday and Friday. This was an extremely demanding assignment, because a part of the time we taught three semesters a year (with no time off). Someone once said, "If you want to truly learn a subject, teach it. " This really applied in my case. It was similar to a "post doctoral" assignment, in that I relearned my elementary psychology in order to be able to lecture to my 900 students each semester. I had lots of graduate assistants, but it was still a lot of work. I carried this load for six and one-half semesters before I was relieved.

During the war years, we all tried to join in the effort. I was turned down twice by the Navy because of my vision. I did contribute, though, by becoming a hearing officer for the War Labor Board. Sometimes I served as a single hearing officer and sometimes as the chairman and public member of a tri-partite panel. All-in-all, I tried about thirteen cases - enough that I thought I wanted to be a labor arbitrator; I did join the American Arbitration Association, but nothing ever came of it.

During the seventeen years that I was a member of the Psychology faculty, I attended every Midwestern Psychological Association meeting and all but one American Psychological Association meeting. I presented papers at perhaps three-fourths of them. I never had my expenses paid by the University. There was simply no money. Nor were there any federal grants.

The year, 1945, was an important one. Our daughter was born, and that was the year in which we bought our first house. The economic pinch was off, and I was on my way.

Meanwhile, a pattern began to emerge. I discovered that I could combine my consulting work with a grant to the University (actually the Purdue Research Foundation). I would write a contract with the industrial client for my services, which contract involved the client setting up a fellowship (at the going rate) through the foundation. I would name a fellow who would accompany me on my trips to the firm. I would then bill the client for the fellow's travel expenses. This pattern started with a single client; at one time I had five of these. It was a busy time. I had been promoted to Professor of Industrial Psychology in 1947 and I was, now, spending 100% of my time in directing graduate research, conducting a graduate seminar, and teaching one course in industrial training.

At this juncture it is well to point out the major factor which contributed to our success at Purdue. The first edition of Joe Tiffin's book, Industrial Psychology, was published by Prentice-Hall, Inc. in 1942. It was adopted by USAFI (the United States Armed Forces Institute), published in paperback, and sent to GIs all over the globe. So, after the war had ended, here came the GI's. They were four years older than their peace-time counterparts, they all had the GI Bill plus a pocket full of money, and (so it seemed) they all wanted to study under the great Joe Tiffin. We had two or three times as many applicants as we had places for them. We set up a simple, but effective, selection system. Everyone took the American Council mental ability test (later, the Graduate Record). Transcripts were carefully analyzed to identify those with a "quantitative bent." And everyone filed a personal data form which indicated what he had done - besides go to school. This package, for each applicant, was routed to four faculty members (Tiffin, Lawshe, Kehart, and McCormick), each of who rated the candidate, A, B, or C. An applicant who got four A's was automatically "in", one who received four C's was automatically "out", and those who got' a mixed vote had their names placed on the agenda for our next Friday staff meeting. Here, they were thoroughly discussed, and a decision was reached.

We admitted about 23-24 each September. For the last seven years I was in the department, this contributed to a selection ratio of .3. I don't suppose that there has ever been a more capable group of graduate students. As faculty members, we would have had to have been complete dummies not to succeed.

Professor always write books. So, I guess some reference is necessary. In 1948, the McGraw-Hill Book Company published the first edition of my book, Principles of Personnel Testing. Up until that time, little attention had been given to methods of presenting validity results, other than the coefficient of correlation. This book explored various methods of presenting data, and laid the groundwork for my later work on expectancy charts. My second book, The Psychology of Industrial Relations, was published, also by the McGraw-Hill Book Company, Inc. It had six contributing authors, all members of a seminar in which the production of the book was a project. My third effort, Machine Shop Operations and Setups, was a throw-back to my Mechanic Arts School days. Both of my co-authors were students of mine and the book was based upon research conducted by one of them. Actually it was designed to specifications identified by the research. It was published by the American Technical Society.

In 1951 I was appointed to a four-year term on the Graduate Council, a body which at Purdue establishes policy for all graduate work. Dean E. C. Young and I became close friends and, at the close of my term, be appointed me Assistant Dean of the Graduate School, a part-time position, for a three-year term. This meant that I would serve another three years as an ex officio member of the Council. This seven year stretch gave me a broad perspective of the University. Dean Young was a high-trust, high-delegation executive. He literally turned the graduate work of about a third of the University over to me with the admonition, "You run it!" And I did.

Meanwhile, back in the department, things were going extremely well. All of the incoming students enrolled in my seminar, "An Introduction to Published Research in Applied Psychology." This provided the opportunity for me to look over each of the new aspirants. I literally had my pick of the litter, which had already been rigorously chosen. They did well; I pushed them and they pushed me. I still say that the quality of a graduate program is as much a function of the quality of the students as of the quality of the faculty. Good students make a quality faculty better. Finally, in 1957, my colleagues elected me President of Division 14. I gave my presidential address and turned the gavel over to Joe Tiffin, my major professor, in September of 1958, a little less than two months after a series of events which changed my entire life.

I was President of my national society. I received a call from President Frederic L. Hovde's secretary saying that the President wanted to see me. Little did I realize, as I walked from the Psychology Building to the Executive Building, that seventeen of the happiest years of my life were coming to a close. In short, he asked me "to join his top administrative team" and to head up the on-campus continuing education program and the four branch campuses which then were little more than extension centers. They were under-staffed and under-funded; they were not respected by those in the mainstream of the University. Continuing education was in a shambles and, here, the President asks me to give up all I have and take on the rebuilding job.

When I told the President that I didn't know whether I could make the emotional break or not, he said, "Oh, you can still run a seminar and keep three or four graduate students." My answer was, "The hell I

can. I have seen a good engineer thrust into the job of Manager of Engineering. I know what can happen." After agonizing for three or four days and talking it over with Muriel, I took the bait.

I immediately went on my scheduled vacation, went to the APA where I gave my farewell address, and returned to the campus. I arranged to transfer all but three of my graduate students to other faculty members.

I never went back to the Psychology Building for five years, and I never attended another APA meeting. It was "cold turkey" all the way!

#### **CHAPTER 6**

#### APPLIED PSYCHOLOGY IN THE REAL WORLD:

MY FOURTH CAREER (1958-1974)

So, in September of 1958, I left the Psychology Building and moved my office to Memorial Center (now Stewart Center). I knew little about the "extension centers" or about the continuing education program on the main campus. It was time to roll up my sleeves and find out what was going on.

My only commission from the President was to combine the Division of Technical Extension, the Division of Technical Institutes (both of which had reported to Dean C.W. Beese, now deceased), and the Division of Adult Education which was under the direction of Dr. George Davis. My first official act was to move Dean Beese's staff from the Engineering Administration Building to Memorial Center.

Many of my professional colleagues asked me why I made the move. My public response was, "I'll be damned if I know." Privately, I was saying to myself, "I want to see if this stuff I've been teaching for seventeen years really works." I had become weary from trying to push the organization decision makers into making the right choices. Now, I was a decision maker; it was up to me. The verdict: it really does work. During the ensuing sixteen-year period, the four extension centers (Calumet, North Central, Fort Wayne, and Indianapolis) became stand alone, degree granting campuses. The Technical Institute, a non-collegiate level program, was transformed into the School of Technology which, after twenty-five years, is the University's third largest undergraduate school with its own building. The Lafayette evening class program had become successful and the non-credit conference program served over 88,000 adults during the last year. All of this was accomplished by applying sound psychological principles.

In the regional campuses, in sixteen years, we grew from 95 full-time faculty members to 466. Through careful monitoring of performance we were able to gradually upgrade the quality of our faculty.

Early decisions established a single faculty throughout the system with academic control vested in the head of the department on the West Lafayette campus. Once faculties had matured and quality was assured, a carefully thought-out program was developed whereby regional campus faculty autonomy was achieved.

Initially, the extension centers offered only a sprinkling of relatively high volume courses. Our first objective was to offer all freshmen and sophomore courses in selected University curricula. Next, we developed master's degree programs (in Education and Engineering) for employed professionals. And, finally, we developed complete baccalaureate sequences in selected areas. In 1967, the Trustees of the

University awarded the first bachelor's degrees at the Calumet campus. All of this had to be arranged so as to be supported by faculty recruitment and development.

As the programs grew, additional facilities were necessary. Hundreds of faculty committees, over the years, contributed countless hours in defining space and equipment needs. Long-term master plans for each campus were developed. And plans were made for staged occupancy as the various buildings came on stream. From 1958 to 1974, over 58 million dollars was invested in new facilities.

From an organizational change perspective, the most significant event was the creation of the School of Technology. This took about two and one-half years. By the time that the proposal went to the Board of Trustees, formal action had been taken by the Schools of Engineering faculty and every member of the faculty implicated in the reorganization had signed off on the proposal. The school became operational July 1, 1964. This past year, it celebrated its twenty-fifth anniversary. I served as the first dean and, in 1966 when I was appointed a Vice President of the University, I relinquished my duties to my Associate Dean.

As I indicated at the start of this chapter, I disassociated myself from any professional activities. The one exception was the International Association of Applied Psychology; I did attend meetings in Rome, Copenhagen, Amsterdam, Ljubljana and Lsige. I did manage to produce the second edition of Personnel Testing with the co-authorship of one of my former students, Mike Balma, who was then a Vice President of Abbott Laboratories. Beyond that, I was a "professional drop-out" for sixteen years. But it was almost like everything I had ever done had prepared me for the job. It was truly "applied psychology in the real world."

During my tenure as a dean and a vice-president, I broadened my perspective and had a number of "pro bono" assignments. I served for eleven years as a member of the United States Air Force Air Training Command civilian advisory board. This was a broadly constituted group that accepted assignment of a problem from the commanding officer each year, studied the problem, and terminated with a report. I served as chairman of the group during the final year. I maintained my interest in trade training when the governor of Indiana appointed me to the State Board of Vocational and Technical Education; I served as chairman of the Board. And, President Ford appointed me to the Advisory Board on Extension and Continuing Education for a three-year term. All of these were enriching experiences and I, as well as the University, profited from the assignment.

Five of my subordinates, who all served as administrative heads of my regional campuses, eventually became college presidents.

Finally, in July 1974 I succumbed to the University's mandatory retirement policy. I was 66. And I felt like I had jumped (or been pushed) off of a 200-foot cliff.

**CHAPTER 7** 

**PUTTING IT ALL TOGETHER:** 

MY FIFTH CAREER (1974-1990)

When I left the University I had no idea that I could re-establish my professional career. After all, it had been sixteen years. No one could possibly be a professional drop-out for sixteen years and re-establish

himself; right? Wrong! What I had not factored into the equation was a unique combination of circumstances which combined to make possible the impossible.

First of all, personnel selection was fading into the background as the cutting edge about the time that I left the psychology faculty. My contemporaries were retiring and were replaced by young professors with other interests. Consequently, there was little research done in the selection field. There were few graduate students trained in the selection field. The new professors were focusing on organizational matters; in fact, it was during this era that Division 14 changed its name to more nearly reflect what members were doing. In short, by 1974 there were few true "experts" in the field of selection.

Second, the Equal Employment Opportunity Commission had come into being and was riding high. Generally, speaking, those companies that had been testing eliminated all objective selection methods. The result was that, with no methods for determining which employee or applicant was better, seniority became the sole standard for selection or promotion. Personnel departments in industry, for the most part, became enforcers of "equal opportunity." Things drifted for a while and then operating management began to scream for some kind of a selection system. This first manifested itself in maintenance areas where the quality had eroded in the face of rising personnel requirements. Maintenance management pressed personnel departments (now called human resource departments) into some kind of action.

My inactivity after retirement from the University didn't last long. People found copies of my old Principles of Personnel Testing on their shelves, and then they found me. Soon, the equal opportunity legislation had become the applied psychologists' full employment legislation. The fact that I had, personally, managed an operation with a \$20 million annual budget certainly helped. I had all I could do.

During the past sixteen years I have installed testing programs, evaluated existing programs, planned litigation defense strategies, given depositions, appeared in court as an expert witness, and represented employers in arbitration cases. My posture has been that I will not commit myself to defend a client until I have carefully reviewed the case and concluded that it is winnable. I have been wrong only once; this was early in the game when I still believed that judges merely interpreted the law (instead of making the law).

Meanwhile, I picked up on my professional activities. Soon after I left the University (October, 1974), 1 called my former student, Bob Guion, and suggested that he assemble a small group to discuss content validity. He did. The conference was not particularly productive, except that it provided the groundwork for a more structured Content Validity II on July 17 and 18, 1975. 1 well remember that, after I presented my paper, "A Quantitative Approach to Content Validity," Milt Hakel came up to me and said, "If you will fine-tune that a little bit, I'll publish it in the next issue of Personnel Psychology." In that conference I discovered that the concept of content validity was so new that hardly anyone really had a handle on it. I'm glad that I could help define it.

As I write this, I'm looking forward to the fifth annual SIOP Conference in Miami, where I will participate in the program. These last sixteen years have been rewarding, financially and emotionally. I cant imagine my life having been any more fulfilling than it has been.

It was during this period that Purdue University conferred the honorary Doctor of Science degree. In addition, I received the Doctor of Laws degree from Kent State University and from the Saginaw Valley

State University. And finally, the Trustees of Purdue University named a major building on the Calumet Campus C. H. Lawshe Hall. (I really didnt expect a tombstone that big.)

### **CHAPTER 8**

### **RETROSPECTIVE**

What makes a good applied psychologist? I cannot answer the questions in a generic sense. I think I can answer the question, What made me a good applied psychologist? In addition to a good grounding in general psychology, seven characteristics come to mind.

Possessing a High Level of General Cognitive Ability.

This is a given. Anyone who is going to deal with psychological constructs must be able to function at a high level of abstraction. But, there are many, many people who have this and who are not good applied psychologists.

Understanding the World of Work.

There is a pedagogical adage: A person cannot teach that which he does not know. So, a person must know psychology, but he must also know industry. This is one place where I have had a great advantage over many people.

Distinguishing Between the Relevant and the Irrelevant.

Here, I have had a great advantage. The greater the breadth of ones exposure, the more he is able to develop a system of values that help him say, This is unimportant. The narrower the track which he pursues, the more important unimportant things seem.

Writing Clearly and Concisely.

Someone once said, There is no such thing as unclear writing; it is unclear thinking. Ive always believed that if one can think clearly and logically, he can write clearly.

Finishing What You Start.

Since my first job, persistence has been my trademark. First of all, I dont undertake everything. I subscribe to the doctrine of the possible. When I undertake something, I stay with it until it is finished. Much of what I have accomplished is the product of dogged persistence.

Practicing Good Work Habits.

All any of us have is time. If we fritter it away, we never recover it. Time management has been my forte. This involves the effective use of secretaries and others to do what they can do as well (or better) than I can. This, of course, involves training and delegation, something that most individual contributors generally do very poorly.

Willingness to Work on Someone Elses Problems.

Many people are so immersed in their own agendas that they cannot, truly, accept anothers problem. They are always thinking, Gee, this is a good place to test an hypothesis, regardless of whether or not it is relevant to the problem. They tend to lead clients down pathways of confusion and obfuscation.

So, thats the story of my life, such as it is. Ive liked everything I have ever done, mostly because I wasnt looking for the perfect job. As Dean E.C. Young once told me, There is dish-washing or manure-hauling in every job; take the bitter with the sweet.

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