Being There: A Memoir

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I was born in Austin, Minnesota early in the morning of September 30, 1926. My father, Rodney, had graduated from the University of Michigan Law School in 1921, after having interrupted his education to serve in the Marine Corps during World War I.

He spent his first years as a lawyer in the small rural village of Fairfax, Minnesota. In 1923, he had the good fortune to be offered a desk in a back room of the offices of a well-known law partnership, Sasse and French, in Austin. Though he received no salary at first, he was privileged to work as an apprentice to the two partners. He was paid only for services rendered, but soon proved able to instill sufficient confidence in his capabilities that he was allowed to work with clients on his own as they were referred to him from the overflow business coming into the offices of Sasse and French.

It did not take long for my father to take notice of an attractive young woman working in the Register of Deeds office at the County Courthouse. In conversation with her, he learned that her pay level was less than that of a young male clerk whose job duties were much the same as hers. Together, they initiated a legal action which moved with surprising speed through the court system until my father found himself arguing the case before the State Supreme Court. Pay equity was won for this attractive young woman. And, in so doing, the two of them must also have won each other's hearts. So it was that Mildred Geneva Notestine married Rodney Arthur Dunnette in a small ceremony held at Iowa's "Little Brown Church in the Vale" in the month of June in 1925.

As seemed to be the custom then, the young bride gave up the job she had held in order to assume the role of organizing and maintaining the household for "that rising young lawyer, Dunnette, who was working with the Sasse and French Law Firm of Austin, Minnesota." Though she probably didn't resent this role at the time, it was apparent to me by the time my brother was born in 1934 that my mother wanted to "go back to work." But, then the country was in the midst of the Great Depression. The mood was that women should not compete with men for those few jobs that might become available. Apparently, this was especially true for women married to professional men. Though I don't recall specific conversations between my parents about this issue, there seemed to be an opinion that my father's reputation as a successful lawyer and provider would be tarnished if my mother were to be employed outside the home. As the years unfolded from then on, it became more and more apparent that my mother was growing increasingly resentful of being trapped as "just a housewife" carrying with it the perceived underutilization of her talents and limited opportunities for other accomplishments.

My parents had both been raised as Methodists, and they continued active membership in the Methodist Episcopal Church of Austin. My father chaired the Official Board of the Austin church for as long as I can recall, and my mother was active in the so-called "sewing circle" and most of the church-wide fund raising programs. I struck a bargain with my parents. I attended Sunday School every Sunday, but I could skip the actual church service on alternate Sundays. I recall those alternate Sundays of "freedom" very warmly. I spent those few hours alone at home reading the "funnies" and enjoying being alone.

My parents were active teetotalers. They saw alcohol as one of the major evils of that era. And, as a member of the Women's Christian Temperance Union, my mother (at a time unknown to me) consecrated me as a "White Ribbon Baby"--meaning that she pledged to do all in her power to be certain that liquor would never touch or pass through my lips. Her pledge was, in fact, quite successful. It was not until I was twenty-five and halfway through Graduate School that I first tasted "the demon rum."

As might be inferred, my childhood and adolescent years were calm, rather uneventful, protected in the sense that the town was small; and the types of dangers that seem so prevalent today were virtually non-existent. On the other hand, dangers from disease were frightening. The wonder drugs had not been discovered, and effective vaccines for most common diseases had not yet been developed. Cases of whooping cough, measles, scarlet fever, chicken pox, and especially pneumonia were widespread. Deaths from pneumonia were quite common during the cold months of winter in Minnesota. The homes of diseased persons were quarantined. My parent insisted that I should always cross the street when passing a quarantined home to be as far away from the "germs" as possible. One of the most serious of the recurring epidemics at that time was poliomyelitis, which had come to be known by lay persons as infantile paralysis because of its prevalence among children. The summer of 1932 witnessed one such epidemic.

On Independence Day of that year, I was in the midst of spending the day exploding firecrackers and blowing up tin cans when I developed a splitting headache and a fever of 105 degrees. My father had grown up on a farm about 15 miles from Rochester, Minnesota, the home of the Mayo Clinic. Thus, it was natural for him to summon specialists from the Mayo Clinic to come to Austin to examine me. They arrived late in the night and performed a spinal tap to confirm that I had, in fact, contracted polio. Fortunately, it proved to be of the non-paralytic type, and within a few days, I felt completely healthy, robust, and restless. But, even though I felt fine, I represented a source of contagion. The house was quarantined, and my father was excluded from being there. He took a room somewhere so that he could continue his work, and he came to my bedroom window to talk with me each evening. My mother, serving as my nurse, could not leave the house. Medical doctrine at the time dictated that all my toys had to be boiled and my clothing laundered with strong soap. The bedding had to be destroyed after the period of the quarantine was completed.

The meaning of this episode, as I have viewed it over the years, is that I became fully aware of how secure I was in the unqualified love of my parents. My mother's care and concern and constant surveillance over my welfare, and my father's nightly visits marked by love, respect, and good humor, provided me with a sense of self worth and quiet confidence that has been an important part of my self concept ever since. In addition, they served as models of compassion and helpfulness that I might from then on seek to emulate, albeit with less certain success.

From that time on, throughout my childhood and adolescent years, Independence Day ranked as the primary holiday of the year. Each year, as darkness fell on the Fourth of July, my father put on a magnificent display of fireworks for our family and all our neighbors. For the neighbors, it was believed to be in recognition of our Nation's birthday. But, for our family, we recognized that it also celebrated our good fortune and mine in particular for having been spared from the ravages of paralytic polio.

In school, throughout the primary grades and in high school, I was always shy and remain so to this day. I never said much in class unless called upon by the teacher or a classmate. Even so, I had many friends and apparently was quite popular. I excelled in all the grade school subjects with the notable exception of Art and Music in which I always received grades of F - which signified in those years FAIR, just a step away from the dreaded red U - Unsatisfactory.

I recall a warmth and security and a closeness to my parents during the grade school years. My father and I felt especially close, though we didn't really talk much together. His influence was transmitted through his telling of the day's events, his court cases, and his humorous characterizations of people in the small and closely knit circle of persons with whom my parents socialized. Both of them had little time for the so called "upper crust" of Austin society. In particular, they joked about the quasi-aristocracy created by the executives of the dominant employer in Austin, the Hormel Company. In fact, it was evident that my parents stood proudly apart from what they called the "society crowd." Perhaps my father's values were revealed most clearly by a bit of advice he gave me in a letter I received from him during my brief stay in a Rochester hospital after having my tonsils removed. His letter expressed sympathy for my very very sore throat and for "being a brave little trooper" in facing the frightening circumstances of hospitalization and surgery. But his central message was this: Even when you've done well and you have every right to be proud, don't ever brag. Let people recognize your merit on their own. Excellence does not require boasting. In fact, it is weakened thereby. In a word: Don't toot your own horn!

I have often thought of that advice. I have wondered why it apparently had such a strong impact on me and on my values and on the way I feel about myself and about other people. The clarity of what he said in that letter is with me still, just as strongly as if it were yesterday

My younger brother, Roger, was born just after my eighth birthday. That event marked the beginning of a different relationship between my mother and me, no less loving, but quite obviously a sense of shared love instead of the exclusivity I had enjoyed until then. My brother also suffered for many years from an extremely bothersome skin condition, eczema. Accordingly, his care as an infant and during early childhood required extended attention and almost constant care. After some years, this seemed to wear heavily upon my mother, and the latent resentment about no longer being employed seemed to surface and to be played out in the form of greater tension between my parents and within the family. It was during that time that she began to voice a refrain about "being cooped up in the house all the time." One result of these tensions was that I came to be a primary source of baby-sitting for my brother. It became rather frequent that I would be told to take him with me when I left to do things with my friends. As a result, my relationship with Roger in those earlier years developed into one of care-giving upon demand instead of being one of closeness and companionship. Fortunately, we are close now, though probably considerably less so than probably is the case for many siblings.

My high school years were filled with activities. I was on the track team, played intramural basketball, and appeared in several school plays. I participated in various clubs and was business manager for two years on the school yearbook. I also spent four years playing the clarinet in the marching band, reflecting no sudden transition to a love for music, but instead mostly a participative orientation. I took the sequence of courses called at that time "college preparatory." Thus, I took all the math and science courses possible, three years of German and all the various honors sequences in the usual English, humanities, and social science courses. My grades were excellent and I graduated with honors, not first in the class, but somewhere close to the top of the 201 seniors who graduated in June of 1944.

I was still shy. I dated only sporadically during the first few years, but by the time I was 15 and toward the spring of 1942, I was going steady with the person who would later become my wife.

It is at this stage of my life where it seems to me that events began to unfold for me in what I believe can best be described as happenstance. I reflected upon several of those events in the Invited Address I gave upon the occasion of receiving SIOP's Award for Scientific Contributions at the 94th Meeting of the American Psychological Association. The title of that talk was the same as I have chosen for this memoir-- Being There.

In the movie of that name, Peter Sellers played the role of a Mr. Chance, the gardener for a well-to-do old man. The movie never shows the old man because his death coincides with the opening scene of the movie. We do learn that Mr. Chance has never experienced the world outside the house except through his constant observation of the passing scene on television. But, with the death of the old man, and upon the insistence of lawyers for the estate, he must venture forth on his own. Shortly, while wandering through the streets of Washington, he becomes entranced by his own image on a TV monitor in the window of an electronics store. Backing up to get a better view, he steps off the curb into the street where he is injured slightly by a chauffeur-driven limousine. He is thereby whisked away by the kindly matron (Shirley MacLaine) to the mansion of a terminally ill and incredibly wealthy plutocrat (William Douglas) who just happens to be the power behind the election and governance of the president of the United States. In trying to introduce himself, Mr. Chance, the gardener, is misunderstood and becomes known as Chauncey Gardner.

During a visit by the President with the plutocrat, Chauncey is asked to voice his opinion about the nation's condition. Chauncey replies with three pronouncements: "If the roots are not severed, all will be well in the garden," "The garden must be fertilized," and, "Prepare in the Fall and Winter for growth in the Spring." The President, during his nationally televised speech the following evening, translates Chauncey's words into the administration's solution for the nation's economy. He states that his young friend, Chauncey Gardner, has counseled that the "roots of industry must be firmly planted in the nation's economic soil, that the economy will be stimulated by temporary incentives, and that the nation should gladly welcome the inevitable seasons of nature and anticipate renewed growth in the Spring."

From that point on, Chauncey can do no wrong. He is viewed as the principal architect of the President's policies. The plutocrat, Ben, dies happily after willing his wife and worldly possessions to Chauncey. The last scene of the film allows the audience to eavesdrop on a whispered conversation among Ben's pallbearers as they conclude that Chauncey is their one and only chance to hold on to the presidency, and Chauncey disappears in the distance, walking on the surface of a nearby pond.

In reflecting upon my career in psychology and how I might have been singled out for such an award, I could not help but be impressed by the importance to me and my career of simply being there.

Recall that my father had served in the Marine Corps during World War I. This fact had not been lost in his memory. He told many stories about his experiences, and whether through his intention or not, these tales caused me to hold the Marine Corps in high regard. Thus it was upon graduating from high school during the height of World War II that I entertained the notion of entering the Marine Corps. I guess at that time that it seemed desirable to choose one's poison so to speak instead of waiting to be drafted and assigned through some unknown means to something unknown. I investigated the various possibilities and learned that I might qualify for Officers' Training in the Marine Corps and thereby be sent to college via the V-12 program. The first step in the process required enlistment in order to quality. The recruiting officer convinced my father and me that I would first go to boot camp and then be assigned after boot camp to the V-12 program. Accordingly, I was sworn into the United States Marine Corps at the Federal Building in Minneapolis on June 26, 1944 and left immediately for boot camp in San Diego. During my medical exam, I learned for the first time that I was color blind. It was explained to me that I would ordinarily not, therefore, be qualified to be an officer or to be able to enter the V-12 program. The recruiter claimed that a "waiver" could be issued so that I would still qualify for V-12, and I left for San Diego confident that this was not only possible, but that it had, in fact, already been arranged.

Upon arriving at the classification and processing station in San Diego, I meekly commented on my waiver and asked for confirmation of my eventual assignment to the V-12 program. I was greeted by raucous laughter. It was soon apparent that another "sucker" had been landed. I experienced what must have been one of the deepest feelings of despair in my life, either before or since.

The transition to this new and threatening environment was made immediately evident during introductory remarks by our squad's drill instructor whose first comforting words were: "Listen up Shitheads! Get your mind off that cunt at home. Somebody's already taking care of it by now, anyway."

The physical strain of the eight week boot camp was easy for me, but the homesickness was severe. Fortunately, I was made to feel very cared for by my parents and my high school girlfriend. I received daily letters from all of them, and I wrote daily also. I learned to swim abruptly and easily when it became known that leaves home would be canceled for anyone who failed to swim the length of the pool.

The time at home after the eight weeks was delicious, but marked by the continuing despair of the fictitious waiver affair. Upon returning, our unit was assigned to the newly formed Fifth Marine Division and we began training for action in the South Pacific at Camp Pendleton in Oceanside, California.

As the date for "shipping out" came closer and closer, my father did something absolutely remarkable. He wrote a letter to the Commandant of the Marine Corps in which he detailed the circumstances of my color blindness and the deceit of the recruiter. Incredibly, an order was received by wire that I should be returned to San Diego to be examined once more with a different form of color blindness test. After taking it, I was certain that I had done no better than I had previously. I asked the physician whether or not he could simply write "Passed with poor score" on his report. He hesitated, obviously bothered by such a request, but finally did so. I returned to my unit and showed my "passing" report to the sergeant. Within a few hours, in accordance with further directives from the Office of the Commandant, I was on a train heading toward Berkeley to begin my college career at the University of California.

Shortly thereafter, the Fifth Marine Division took the rocky atoll of Iwo Jima. Both of the high school friends who had entered the Marine Corps at the same time as I were wounded. One died of his wounds shortly afterwards. The other was returned to Letterman Hospital in San Francisco where I visited him. We were to spend time together again a few years later when we would both choose to enter Graduate School and major in psychology at the University of Minnesota.

I believe the above is perhaps one of the more significant and obviously important examples of where good fortune combined in part with considered action has affected my life and career in strange and remarkable ways. It has not been so much a matter of my being in the right place at the right time.

Instead, a more frequent scenario has found me in quite ordinary places, but surrounded by unusual people who created marvelous circumstances of opportunity. In effect, things that have happened to affect and shape my life and my career, though not necessarily sheer luck, have often been unanticipated and frequently serendipitous.

Upon arriving at Berkeley, I majored in chemistry for five full semesters. My intention then was to continue in chemistry to the Ph.D. and then to become a researcher. I was discharged from the Marine Corps in 1946 and for a time considered continuing at Berkeley. But my high school sweetheart was intent on staying in Minnesota. Thus, I returned to Austin in the summer of 1946. Jean Bentrude and I were married in Austin on September 14, 1946. In retrospect, we were not yet fully grown, though of course it seemed that we were at the time. She was just over 20 years old. I was still 19, just two weeks short of 20. We moved to Minneapolis. She had finished two years of Junior College and had worked as a laboratory technician. She obtained a job at the University in a bacteriology laboratory and I entered the University as a junior under the GI Bill with the intention of continuing to major in chemistry. Through a strange accident of registration, however, I ended up in Chemical Engineering. I graduated with distinction with a B.Ch.E. degree in 1948.

I spent a dissatisfying year working in a chemistry research laboratory. It seemed apparent to me at the time that chemical research was not my proper vocation; so I entered Law School at Minnesota with the thought, of course, that I might go into practice with my father. We needed additional income and I landed, quite by accident, a part-time job counseling with engineering students who were on academic probation. In order to get that job, though, I was advised that I must enroll in D. G. Paterson's course in Occupational and Vocational Psychology.

So it was that I found myself in the Fall of 1949 taking a full course load in Law School, learning all about how psychological tests could be used in vocational guidance, and "counseling" failing engineering students. I loved it all! But, I was most entranced by the substance of that psychology course and by the charisma and intellect of D. G. Paterson. Thus, it was in January of 1950 that I left my brief flirtation with the law and graduate school with the intention of getting a Ph.D. degree in psychology and of working with D. G. Paterson who was willing to serve as my advisor and mentor.

Graduate School was completely enjoyable. My interest in mathematics and my engineering training made statistics easy for me; so I didn't really need to work hard on those courses and chose to devote more time to those areas that were less familiar subject matter. I moved over the usual hurdles quite rapidly and was in the midst of developing a dissertation topic when our first daughter was born. In fact, her arrival capped off a happy Christmas Eve that we had just spent with both our families in Minneapolis. She was born about 6 a.m. on Christmas Day in 1952, and we named her Nancy Dawn.

I completed the Ph.D. degree in June 1954. It is not incidental that my doctoral dissertation involved the development and validation of a high level test of engineering knowledge, the Minnesota Engineering Analogies Test. One of the great high points of my career in fact, was the time I learned the Psychological Corporation was going to publish and market that test. It occurred over drinks at the Top of the Mark Hopkins Hotel in San Francisco where APA was being held that year.

What a fortunate, unexpected, and wonderful outcome given that I had actually enlisted in the Marine Corps at the height of a bloody World War only 10 years previously! I could have been dead. I could have remained an unhappy chemical engineer. I might have become a small town lawyer in practice with my father in the town of Austin, Minnesota. Instead, here I was with a Ph.D. in Industrial Psychology, married with a delightful 18 month old daughter and ready to embark on a new career in Applied Psychology. I honestly don't believe that Chauncey Gardner's early good fortune in meeting the wealthy plutocrat stretches the imagination much more than does the story of my good fortune over those last 10 years between 1944 and 1954.

Focusing on Applied Psychology

If getting a Ph.D. demonstrates that one knows about psychology, an important next step in a career must certainly be learning to do psychology. For me, that step took the form of a two-year internship at Minnesota's Industrial Relations Center and what might be termed a fiveyear residency at 3M Company where I was hired in 1955 as Manager of Employee Relations Research.

A key developmental step at the Industrial Relations Center occurred when I was summoned to the office of Dale Yoder, who at that time was supreme commander of the Industrial Relations Center. There, I was confronted by the Center's ruling triumvirate, Dale Yoder, D. G. Paterson, and Herbert Heneman, Jr. As soon as I was settled in my straight-backed chair, Yoder pronounced, "Dunnette, you can't write worth a damn!" The three of them proceeded to lecture me on the crucial role of clarity, succinctness, human interest and simplicity in writing. No direct instruction was provided, but the message was clear, namely: "Poor writing is a most obvious indicator of a muddled mind. If one's writing is not worth a damn, then the scientific stature of that person is typically inferred to be worth even less." I know I learned much from that timely intervention. But where simple clarity came very naturally to Chauncey Gardner, I had to sweat blood in order to achieve it.

In the meantime, however, I became involved in several team research efforts. One involved the development of criterion measures for Air Force Officers; another involved building a scale designed to measure attitudes about unions and membership in unions. We also studied the effect of the Undecided response in job satisfaction surveys and the affects on job satisfaction results of surveys administered by company officials versus surveys administered by Industrial Relations Center proctors. Both sets of administrations were, of course, answered anonymously; nonetheless, results suggested quite clearly that a threat to anonymity was evident when a company official administered the survey.

During the five years at 3M Company, my boss was the Vice President of Personnel. He was known by his friends as "Swisher" Fisher because he had been a basketball star at Northwestern. On my first day on the job, he told me he knew nothing about psychology and didn't want to learn anything about it. He managed by exception. My job was to avoid exceptions. His laissez faire style combined superbly with my own autonomous nature to give me opportunities to carry out a vast array of interesting studies in applied psychology.

My mentor at Minnesota, D. G. Paterson, had told me to "write up" everything I did. I adopted the strategy of writing a detailed technical report to be retained in my files, a clear and understandable executive summary to be distributed to managers who were in a position to take action on the recommendations, and an article to be submitted to a professional or trade journal for publication. I was surprised by the interest generated by the executive summaries and also by the compliments I received when I circulated reprints of the more technical and presumably "scientific" journal articles. I felt especially good about those compliments because it seemed to me that I had been able to learn to write clearly, after undertaking the long hard task in response to the Yoder, Heneman, Paterson inquisition that I had suffered through a few years earlier.

Wayne Kirchner joined me at 3M after my first year there. Together, we reported everything we did in the form of internal technical reports and publications in the business and academic literature. Our experiences ranged across job analysis, performance appraisal, validation studies for sales, clerical, research and development, and management jobs, individual assessments, measuring job satisfaction, evaluating consumer reactions to 3M products, and even carrying out human factors research on matter related to highway safety for 3M's Reflective Products Division. In effect, we served as internal consultants to the managers and various divisions of 3M Company.

Those early years of learning to be an applied researcher at the Industrial Relations Center and at 3M Company were marked by high productivity- stimulated by circumstances, opportunities, and by close collegial working relationships. Between 1952 and 1961, my co-authors and I published over 50 articles, chapters, and reviews all, of course, of inestimable scientific merit.

Our second daughter was born about midway during those exciting years at 3M. She barely missed being our second Holiday baby. Peggy Jo popped into the world on July 3rd, 1957 just ahead of our annual Independence Day celebration. Where Nancy had been a good-natured and rather docile child, Peggy seemed to be wired. She rarely slept for more than a few hours. Jean and I alternated nights getting up with her. She was most difficult to console and seemed often to be in pain. She was hyperactive from the moment of birth. Interestingly, she also showed very early indications of extremely impressive verbal ability. She knew eight or ten words by the age of six months and was conversing in sentences by the time she was a year of age. She was a hyperactive child who seemed to be the source of all sorts of difficulties in any situation where the persons in charge attempted orderliness and constraint. By age 14, however, the "difficult years" had passed and she flowered quite suddenly and surprisingly into an achievement-oriented and intelligent young woman. She graduated from the University of Oregon in 1978 with a major in Romance Languages. She had gone to Oregon to live with her older sister, Nancy, who had also graduated from Oregon several years earlier with a double major in Dance and Psychology. Nancy had begun college at Reed College in Portland and had transferred to Oregon at the beginning of her Junior year.

Becoming an Academic

The outpouring of publications during the 3M years made it rather easy during the academic year 1961 for Minnesota's Department of Psychology to justify hiring me as an Associate Professor with tenure to replace D. G. Paterson, as if anyone could, upon his retirement. This action was, in fact, part of the plan that had been made between Paul Meehl and me at the time I had taken the 3M job. At the time, Paul was chair of the Psychology Department, and I had suggested to him that my career aspirations were to return to the University within a span of five or six years to handle that part of Paterson's functions that entailed Industrial Psychology. At about that same time, Lloyd Lofquist and Rene Dawis were brought in to cover respectively, the Counseling Psychology and Differential Psychology facets of Paterson's teaching that had over the years developed what came to be known as the "Minnesota Tradition" in applied psychology. Over the span of Paterson's career at Minnesota, from 1921 until his retirement in 1962 a total of 83 students obtained their Ph.D. degrees with him.

I was much less aware at that time than I am now that I was indeed exercising great wisdom by shrewdly avoiding having to serve an academic apprenticeship as an assistant professor. The timing of this move was also important because my 3M salary had already climbed to over $11,000 per year, a figure that threatened to make the transition quite difficult financially. But, as mentioned, I suffered from a strong urge to at least try to carry on that facet of Paterson's work which emphasized the psychology of individual differences and the development of properly constituted Industrial and Organizational Psychologists.

In spite of my gaining immediate tenure, the move was not an easy one. My teaching load was rather heavy and diverse. Over the first few years in the department, I taught general psychology, statistics, survey research methods, differential psychology, and undergraduate courses and graduate seminars in I-O psychology. The reinforcement schedule was notably different. At 3M, morsels of reinforcement were frequent and tasty; in academia, they were infrequent and usually ambiguous. Getting underway on a research program required different strategies and a much more obvious individual effort than had been the case at 3M.

It was at this point that simply "being there" paid off handsomely for me yet again. This time, opportunities came in the form of an influx of intelligent, energetic, and creative graduate students. In fact, from that time on, throughout my career, I have often had the feeling that I was being led instead of leading. It has often seemed that I was barely hanging on as one fine mind after another would come along to study at Minnesota and thereby to keep me abreast of interesting and important things going on in the field of psychology.

Let me cite some examples: My very first student, Richard Hatch, called my attention to the burgeoning research literature during the fifties in the area of interpersonal perception and empathy; research which, late in that decade, had been severely criticized on methodological grounds by such notables as Donald Campbell, Lee Cronbach, and Nathaniel Gage. My student Hatch, for his dissertation research, proceeded to invent a new item format (called the Forced Choice Differential Accuracy method) which successfully overcame the sources of spurious empathic accuracy--assumed similarity, stereotype accuracy, and social desirability response sets--which had been so roundly criticized. He demonstrated the practical usefulness of his method by showing that 30 3M sales managers could accurately discern job satisfaction levels of their subordinates and that these predictions accurately reflected their own prior judgments about how well they knew their various subordinates. Hatch's research won the Ford Foundation's Outstanding Dissertation Award for 1962 and was subsequently published in book form by the Foundation.

Hatch's contribution resulted in my continued interest and research in interpersonal perception. Research on the empathic process led ultimately to results that were reported in my Division 14 presidential address and also to a significant paper on processes of interpersonal accommodation given a year later at APA. In addition, T-Group training methods, as they were applied in business settings, attracted John Campbell's and my attention, and we jointly published significant review articles in two journals (Psychological Bulletin and Industrial Relations) in 1968.

As you can see, Hatch's research did stimulate several years of activity in the area of interpersonal perception. However, avenues of research in several other areas were also undertaken at about the same time.

These other areas included research on non-linear prediction models, theories of human motivation, issues related to the effects of various pay methods on work motivation, and research on employment interviewing.

The research on non-linear prediction was stimulated by another stroke of good fortune. Lyman Porter arranged to have me spend a visiting semester at Berkeley in 1962. While there, I became aware of Ghiselli's demonstrations that moderator variables could have practical usefulness in predicting job performance. Over the years from then on, many Minnesota dissertations examined the prospects for non-linear prediction models; Wayne Sorenson's and John Campbell's in 1964, Robert Hobert's in 1965, Paul Johnson's in 1970, John Kokosh's in 1975, and Tom Janz's in 1976.

Over the same span of time, much research was done on several aspects of motivation. A number of us, including Paul Wernimont, George Graen, John Campbell, Milt Hakel, and I produced evidence convincing to us at that Herzberg's notions about two factors of motivation were not sustained when more rigorous methods than "storytelling" were used to collect information about previously satisfying and dissatisfying events.

Virginia Loehr, Rich Arvey, and Steve Motowidlo did their dissertation research on several aspects of expectancy theory and on various parameters (such as goal specificity) related to the motivational effects of goal setting.

One of the students working with us during the middle sixties was Robert Opsahl. You may recognize his name as that of the senior author of the Opsahl and Dunnette review article on the effects of financial compensation on work motivation. Opsahl completed most of a dissertation in the area of interpersonal perception, but he made an even more important contribution when he conceived the idea of setting up a dummy organization for the purpose of studying the effects of different levels of expectancy and of differing conditions of perceived pay equity on productivity. Using his design, he and I successfully applied for funding from the National Science Foundation.

The basic design of the study was that 269 students were hired at 6 different locations in Minnesota to work for 1 week during their spring break. At the time they were employed, they believed they were working for a "manpower overload company." Their work consisted of a simple clerical task. Some were made to feel overpaid, others equitably paid, and others underpaid. Their expectancies concerning the relationship between effort and pay were manipulated by paying some on an hourly basis and others via a modified piece rate plan. Groups worked under one expectancy condition for three days and were then placed under the other expectancy condition for the final three days; thus, the design allowed for a repeated measures comparison between the effects of low and high expectancy. Three outstanding dissertations were written from the data gathered in this experiment. Bob Pritchard dealt with the equity manipulation; Dale Jorgenson dealt with the expectancy manipulation; and Walter Tornow examined the effects of subjects' beliefs about what constituted work inputs or work outcomes on their perceptions of equity or inequity.

For me, the most intriguing aspects of the results had to do with the manner in which tested ability was expressed in performance. The highest correlations between ability and productivity occurred under those conditions where motivational circumstances might be assumed to be ideal-namely high expectancy and feelings of equity. The median R between ability and performance for those circumstances was .75. In contrast, the least favorable circumstances for the expression of ability might be expected to be those involving low expectancy and feelings of underpayment. The median R for those conditions was only .25. These results suggested that ideal motivational circumstances are associated with maximizing the expression of ability differences in the form of job performance. The extent to which actual performance departs from what is predicted from ability differences may provide clues about the degree of involvement of motivational variables.

I was led into yet another area of research by Milt Hakel's interest in the employment interview. Milt wrote a proposal for an ambitious project focused on studying person perception in the context of the employment interview. After I added a few words here and there and an abstract, we sent it to the National Science Foundation. We had the good fortune not only to get the project funded by NSF, but we also won that year's Cattell Award. The NSF grant helped fund Milt's and Tom Hollmann's dissertation research, the publication of several journal articles, and a book containing checklists for use in research on the employment interview.

Shortly after returning to the University, in 1964, our third daughter Sheryl Jean was born. She also came close to celebrating a special day , this time Valentine's Day, but her birthday is February 15th. In contrast with Peggy's very difficult early years, Sheri's early years were quite sublime. Her period of rebellion came at a time that is presumed, I believe, to be more typical, in the stormy years of pre- and post pubescence. Her grades in high school were marginal at best, and she seemed constantly to be on the verge of rebellion. The transition for her came after high school. Surprisingly, she scored very well on college aptitude tests and graduated with honors from college five years after finishing high school.

It was during the years of Sheri's adolescence that Jean's and my marriage began to flounder. Finally, after several years of tension, indecision, pain, and sadness, we were divorced on November 8, 1978.

As must be apparent from the foregoing comments about the first decade of my career as an academic, many good things happened professionally. I had extreme good fortune during those years in being in a stimulating intellectual hotbed of eager and bright students and superb colleagues. With that stimulation, contributions continued to be made to the literature. In fact, over those years, we published an additional 65 articles, chapters, and books. My favorite accomplishment during that time was the little paperback titled Personnel Selection and Placement, which was first published in 1966 and remained in print through 1985. The years of the 60s were very heady years for other reasons too. I gave a very well-received invited address titled Fads, Fashions, and Folderol in Psychology at the APA Convention in Chicago in 1965. Even today, persons comment occasionally about the excitement they felt as members of that audience. I feel some pride too in that I advocated in that talk that psychology's fixation on testing the null hypothesis might be seen as a millstone around the neck of psychology. But, it was one of my bright graduate students at the time, Milton Hakel, who carried out what was a sort of meta-analysis when he, at my request, examined four journals2 and randomly selected studies in which either t or F had been used as the primary test of a null hypothesis. He converted the t and F values into magnitude estimates. Of 112 estimates computed by Hakel, the median value was .42, and one-third were below .30. It is sad but true that in spite of that finding and many others with similar results that it was still necessary for Cohen3 to point out in his own invited address sponsored by Division 5 at the 1990 APA Convention that null hypothesis testing has still not diminished in its widespread use.

It was at that same 1965 APA Convention that I learned I had been elected to serve as president of Division 14 in the 1966-67 year. And, in fact, 1965 also was the year that Ed Henry introduced me to Smith Richardson Senior and some of the other trustees of the Smith Richardson Foundation. Out of that meeting came an agreement that the Foundation would provide financial support for a study of managerial effectiveness. My charge specifically was to learn everything that was then known about methods of identifying, developing, and motivating managers, executives, and industrial leaders. I put together a team made up of John Campbell, Ed Lawler, Karl Weick, and me. Together, we surveyed current literature, current industrial practices, identified gaps in the current state of knowledge, and suggested the type of research that was needed. A multivolume report was submitted to the Smith Richardson Foundation in 1968 and was published in book form4 by McGraw-Hill in 1970. This book has since been identified by Current Contents as a citation classic, having been cited over 1200 times in the years since publication.

It was also in the year 1977 that I was approached by Rand McNally to prepare a Handbook of Industrial and Organizational Psychology. I signed a contract to do so only to learn shortly thereafter that the Executive Committee of Division 14 had just appointed an editorial committee to undertake the development of such a Handbook. Paul Thayer and I had a few conversations, after which it was agreed that I should push forward with my project in lieu of the Division 14 sponsored Handbook. This was a most gracious agreement on the part of the Division 14 Executive Committee. I proceeded thereby to obtain agreements from George England, John Campbell, Robert Guion, and Richard Hackman to serve as associate editors. The Handbook was published in 1976. In 1981, Rand McNally sold its College Division to another publisher, and John M. Wiley and Sons took over publication and distribution of the Handbook in 1982. The Handbook just went out of print in July of this year. Over the 14 years since publication, nearly 12,000 copies were distributed throughout the world. It apparently has had a profound influence on the direction of graduate education in Industrial and Organizational Psychology and in the area of Organizational Behavior.

A second edition to be published in four volumes is now in press and will be published over the next 18 months, with the first two volumes scheduled to appear during the early months of 1991.

The intellectual environment and enriched circumstances of those first 15 years after I returned to Minnesota's Psychology Department continued unabated and still continue to this very day. Table I lists the names of persons who have completed their Industrial and Organizational Psychology Ph.D. degrees from the Minnesota Department over the years 1961 to now. The people listed there did their dissertations with many of us at Minnesota - in particular John Campbell, Rene Dawis, Tom Bouchard, and, before his death, H. P. Longstaff. The table is intended to continue the story of my good fortune in simply "being there" with such good colleagues and our fine students over the years of my academic career. In 1984, our Industrial and Organizational Psychology faculty was enriched even more when Phil Ackerman and Ruth Kanfer joined us. In addition, the intellectual environment within which our students are working has been enhanced even further by faculty members Harold Angle, Richard Arvey, Larry Cummings, Raymond Noe, Cheri Ostroff, and Paul Sackett, who have over the last few years joined the Industrial Relations and Strategic Management Departments of the School of Management.

Stumbling into Entrepreneurship

Further evidence of the validity of my choice of Chauncey Gardner as my role model for understanding how I have come to make contributions to psychology is provided by an account of the quirks of circumstance that resulted in my founding and directing consulting and research organizations.

To begin, I ask that you recall the name Richard Hatch, my ingenious first student who invented the Forced Choice Differential Accuracy method for studying empathy. As soon as Hatch completed his degree, he moved to San Diego where he began to consult with the Marine Corps about improving the instruction and proficiency testing in their various schools for enlisted personnel. For some reason that I've since forgotten, the Marine Corps encountered administrative difficulties in paying Hatch directly for his services. The upshot of this was that he needed an organization to develop a contract with the Office of Naval Research through which he would receive payment for his activities. In order to help him out, Wayne Kirchner and I formed a corporation called Dunnette Kirchner Associates, with the corporate offices being listed as my home. Hatch was happy. The Marine Corps was happy. ONR was happy. Kirchner and I were happy. And, we even managed on a few occasions (during winter months) to visit our "research site" in San Diego.

Sometime later, after Hatch had become so busy that he established his own firm (Decision Systems, Inc.), I met with a Mr. Swanson in my University office. He was a middle-aged R & D engineer who felt stifled in his current job at the Pillsbury Company. In my usual non-directive way, I urged him to strike out on his own and be his own boss.

A few years later, in early 1967, a local consultant died suddenly from a heart attack. Interestingly, I was contacted by a member of the consultant's Board of Directors, the same Mr. Swanson, now a fulfilled and highly successful owner of a small R & D company, who asked whether or not I could take over the deceased consultant's former clients. The timing could not have been better. Kirchner and I had been moonlighting some, and we had just arranged for an advanced graduate student in Counseling Psychology, Lowell Hellervik, to spend part-time in carrying out some of those consulting activities. We struck an agreement to pay the consultant's wife a percentage of billings for a time. We inherited a top notch secretary named Marlys, and Lowell Hellervik agreed to work fulltime. We changed the name of Dunnette Kirchner Associates to Personnel Decisions, Incorporated (PDI), and we were in business. Growth was not rapid at first. Most of the first work involved in-office assessments of candidates for employment or promotion. But gradually, we began to do project work; a study that John Campbell and I worked on with Bill Byham at Penneys, attitude surveys at Ford, Caterpillar, Northern Ordinance, and IBM. We started the first cross-company multiple assessment center with design help from Rich Arvey, George Milkovich, and Leaetta Hough. Our first Center was offered in Rochester, Minnesota in January 1970. At the conclusion of the Center, everyone's car was frozen solid since the temperature had lingered for too long at 35 below zero the night before.

I found myself in Washington, DC one day around then. I had the afternoon free. I wandered into the offices of the Law Enforcement Assistance Administration and told a Dr. Epstein that we would like to develop improved methods for selecting police officers. He insisted that in order to be funded we should call the selection methods "improved psychiatric standards." So we did, and we were funded.

So it was that a chance visit led to funding of a nationwide research study on police selection to be carried out over a period of several years. This got us into the project business studies for the Navy, the Army, and the Office of Personnel Management. It became possible for us to hire some very good people, Bob Heckman who we pirated out of NCR in Dayton, Wally Borman just after he finished his Ph.D. at Berkeley, Rodney Rosse shortly before he finished his Ph.D. in statistics at Minnesota, and some topnotch graduate student: Rich Arvey, Steve Motowidlo, Dave Bownas, Dennis Groner, Ben Dowell, Leaetta Hough, Janis Houston, and Rob Silzer. During the entire time, from day one, Lowell Hellervik provided the stabilizing internal management and superb client contact skills that kept clients coming back even when they may have been ignored or perhaps even rebuffed on occasion by the more "academic types" amongst us.

The founding of Personnel Decisions Research Institute was also based on an unusual convergence of circumstances. In May of 1973, we decided to respond to a Request for Proposals issued by the National Institute on Drug Abuse. The request was intriguing because the purpose was to develop demographic and personality predictors of drug involvement and drug abuse by adolescents. Our proposal was submitted through PDI. Amazingly, we learned within a matter of days that we were funded. By early July, we were underway on the research project. But, within six weeks we received a STOP WORK order from NIDA. Funds were being curtailed throughout the federal government by President Nixon's Office of Management and the Budget.

Our contract monitor at NIDA was as unhappy about the cancellation of the project as we were. Finally, after several months, he informed us that OMB did not have the same control over grant research, as was the case for contract research, but NIDA could only provide research grant funds to nonprofit organizations. After a few more months of pondering this state of affairs, we decided to establish a non-profit research group, Personnel Decisions Research Institute (PDRI). Wally Borman, Leaetta Hough, and I were the first and founding members of this new group; we re-submitted the NIDA research proposal through PDRI and received notification that we had been funded in March of 1975, coinciding almost perfectly with the date of PDRI's official legal birth. At that same time, Lowell Hellervik was elected president of PDI.

Both organizations have prospered in the years since 1975. Under Lowell's leadership, PDI has grown to an organization of over 200 persons with offices in Minneapolis, St. Paul, New York City, and Dallas. PDI's charter states as its purpose, "to provide a full range of psychological and human resource services to enhance individual and organizational effectiveness."

PDRI has grown to an organization of 30 persons. PDRI's mission is "to conduct research and to implement research findings and products that address problems of human resource utilization in society and in organizations in the U.S. and abroad ... we are committed to advancing and influencing the science and practice of applied psychology through innovative thinking and problem-solving and disseminating our methods and findings." I wish I could say that this is all the result of shrewd planning; but, of course, shrewd planning had little to do with these organizational outcomes. As you have seen, to a great degree, these outcomes came about through fortuitous and usually surprising circumstances.

PDRI's research products and scientific contributions are documented in over 200 institute technical reports issued over the last 15 years and by many articles, chapters, and books published by research staff members. My own productivity has been buoyed on the waves of the efforts and significant contributions made by all the members of the research institute.

A glimpse of the content of research studies carried out over these years by various PDRI research teams is listed in Table 2. The list there obviously fails to capture the true flavor or detail of the many research activities. A better appreciation for their range and richness would be given by examining the technical reports, articles, chapters, and research materials prepared by such persons as Borman, Hough, Peterson, Pulakos, Bosshardt, Lammlein, Rosse, Motowidlo, McHenry, McKenna, Ashworth, Carter, Hallam, Hanson, Owens-Kurtz, Borge, Kamp, McGue, Russell, and many others who have contributed so heavily to PDRI's research activities and products. My own career has been enhanced incredibly through their excellence and by the good fortune of having them involved in these applied research activities.

Over the last 10 years, my personal life has also been wonderfully enriched by the love, warmth and companionship between my wife, Leaetta Hough, and me. We have worked together now for over 20 years, and we have been married for 10. In fact, we were married on what may be regarded as one of the lesser, but still significant, commemorative days, Groundhog's Day, February 2nd, 1980. The day was sunny; the Groundhog saw his shadow, and the remainder of the winter was thereby extended. We both have found much happiness in sharing our lives together and in the excitement and exhilaration of sharing our zest for the science/practice of Industrial and Organizational Psychology in our closely intertwined careers.

Summing Up

Having described the rather haphazard circumstances that have marked the unfolding of my career to this point let me try to tease out what the consistencies may have been. Perhaps some understanding of whatever success I may have realized to this point may be discovered amongst them. Here they are:

1. Choose and reinforce good bosses.

For me, this has almost come to mean not having bosses. At any rate, I seem to have been graced by working for persons who left me alone to do my own thing. With the exception of that sad year as a chemical engineer, I've had such bosses--especially those who served as chairmen of our Psychology Department at Minnesota--Paul Meehl, Kenneth Clark, Kenneth MacCorquodale, Jack Darley, Lloyd Lofquist and Tom Bouchard. A corollary to this is perhaps that, as a boss and as a mentor, I have given free rein to others. Almost always, persons have (eventually) responded in incredibly responsible and productive ways. But observers of my loose management style have sometimes been frustrated beyond belief. And, sadly, there have been a few instances where more defined direction and earlier guidance would perhaps have saved persons from failure and/or disenchantment about what they were being asked to do.

2. Learn to write with clarity.

I take as axiomatic that muddled writing is the mark of a muddled mind.

3. Expect change.

Don't be satisfied with the status quo nor seek stability simply for the sake of stability. Expect change in circumstances. Expect change in people. Circumstances always improve. Most people do too.

4. Take yourself with a grain of salt.

Have fun in what you do. Being serious all the time and getting bent out of shape is very taxing and hazardous to your health.

5. Live with ambiguity.

Stability is only temporary. Improvement implies motion. Don't get stuck in the rut of consistency. Build new insights out of confusion. Move ahead in spite of and within the context of chaos.

6. Expect much from others.

Let excellence be the primary value. Difficult goals result in high accomplishment. If your expectations are met by others, return the favor and show them that you will meet theirs too.

7. Don't burn bridges.

This does not mean looking back. Build new bridges too. Extend and broaden your field of endeavor instead of constraining it.

8. Be there for both yourself and others.

Grasp opportunity. Help others grasp it too. Consider which you prefer, being seen as an easy mark or as a bloodsucking opportunist.

9. Avoid pomposity.

Pomposity is the pre-cursor of much that is evil, the loss of self knowledge, cessation of humor, the blunting of achievement, and the dulling of wisdom. It could very well be that the sole usefulness of pompous asses is to educate others in what to avoid.

10. Finally, recall the wisdom of Chauncey the gardener: Prepare in the Fall and Winter for growth in the Spring.

NOTES

1. The V-12 program was a program whereby enlisted personnel in the Navy and Marine Corps, upon demonstrating high aptitude, would be sent to college to qualify for entry into Officers' Training.

2. The journals sampled were the Journal of Applied Psychology, Journal of Abnormal and Social Psychology, Journal of Personality and Social Psychology, and Journal of Experimental Psychology.

3. Cohen, J. (1990). Things I have learned (so far). American Psychologist, 45, 1304-1312.

4. Campbell, J. P., Dunnette, M. D., Lawler, E. E. III, & Weick, K. E., Jr. (1970). Managerial behavior, performance and effectiveness. New York: McGraw-Hill.